

# Appendix A: Compliance Review

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## DA Conditions

Compliant				
Non Compliant				
Mod 2 Condition No 01/01/2021 - 13/08/2021 and Compliance	Mod 4 Cond No. 14/08/2021- 13/12/2022 and Compliance	Condition Text ( <b>Mod 4</b> changes shown in <b>red text</b> - active following 14/08/2021)	Details of compliance status	Where addressed in Annual Review or other document
<b>Summary</b>		<b>Number of Conditions Non-compliant</b>		
Non Compliant		Five: Sched 2 Conds 2(b), 42, 45, 61	Not all conditions of consent complied with. PM2.5 24-hour air quality criteria exceeded during grassfire. Water Management Plan not updated annually. Conservation bond unpaid. MEG Annual Quarry Data format not available.	Section 2
<b>General</b>				
<b><i>Obligation to Prevent and Minimise Harm to the Environment</i></b>				
1		There is an obligation on the Applicant to prevent and minimise harm to the environment throughout the life of the project. This requires that all practicable measures are to be taken to prevent and minimise harm that may result from the construction, operation and, where relevant, the decommissioning of the development.	Compliant	
<b><i>Adherence to Terms of DA and EIS</i></b>				
2 (a)		The Applicant shall:(a) carry out the development generally in accordance with the EIS, Modification 1, <del>Modification 3 and Modification 2</del> <b>Modification 2, Modification 3 and Modification 4</b> ; and		
2 (b)		(b) comply with the conditions of this consent		Section 2
<b>Compliance</b>				
3		The Applicant shall comply with all reasonable requirements of the Secretary in respect of the implementation of the Conditions of this Consent, within such time as the Secretary agrees. The Secretary may order the Applicant to cease work until non-compliance has been addressed to the Secretary's satisfaction.	None required this report period	

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4		The Applicant shall ensure that all contractors and sub-contractors are aware of, and comply with, the Conditions of this Consent.	All contractors and sub-contractors are inducted to site and Induction Checklist completed	Appendix M
5		The Applicant shall comply with all relevant conditions prescribed in Part 7 of the Environmental Planning and Assessment Regulation 1994, as required by Section 80A (11) of the Act.	Buildings unchanged	Not required
6		The Applicant will submit a Conditions Compliance Report to the Secretary prior to the commencement of extraction in areas that are not currently subject to extraction. Subsequent reports will be submitted annually for the first three years of extraction in areas not currently subject to extraction. Further reports shall be submitted as required by the Secretary.	Compliance Report 2020 version F0 submitted 26/03/2021, DPIE approval response received 16/07/2021.	Appendix N
6 (a)		To enable ready comparison with the EIS's predictions, diagrams and tables, the Conditions Compliance Reports shall include, but not be limited to, the following matters:(a) a compliance audit of the performance of the project against conditions of Consent and statutory approvals		Appendix A
6 (b)		(b) a review of the effectiveness of the environmental management of the development		Section 6
6 (c)		(c) the results of environmental monitoring required under this Consent or other approvals, including interpretations and discussion by a suitably qualified person;		Section 6
6 (d)		(d) a listing of any variations obtained to approvals applicable to the DA since the last report;	Mod 4 Granted 13/08/2021	Section 4
6 (e)		(e) a record of all complaints and the actions taken to mitigate all such complaints;	No complaints were received	Section 5.3
6 (f)		(f) a report detailing the rehabilitation measures undertaken since the last report; and		Section 6.10

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6 (g)		(g) environmental management targets and strategies for stages of the development yet to be completed.		Section 7
7		The Secretary may, after considering a Conditions Compliance Report, notify the Applicant of any reasonable requirements for compliance with this Consent. The Applicant shall comply with those requirements within such time as the Secretary may direct. Note: The Applicant is obliged to ensure that all statutory requirements, including all relevant legislation, Regulations, Australian Standards, Codes, Guidelines and Notices, Conditions and Directions of the Councils and relevant government agencies are met and approvals obtained.	Compliance Report 2020 version F0 submitted 26/03/2021, DPIE approval response received 16/07/2021. Letter contained additional information request to be included in future ARs.	Section 2.2, Appendix N, Table 3
<b>Commencement and Duration</b>		<b>Limits on Approval</b>		
8 a)		No extraction shall commence in areas that are not currently subject to extraction, until the Applicant has: (a) constructed the bund walls at the corner of Roberts Road and Old Northern Road;	The relevant bundwalls have been completed.	Figures
8 b)		(b) submitted the Conditions Compliance Report required under Condition 6; and	Compliance Report 2020 version F0 submitted 26/03/2021.	Appendix A, Appendix N
8 c)		(c) obtained all licences necessary for the commencement of extraction.	EPA licence current Bore licences current	Section 4
9		The duration of extraction under this Consent is until 31 May <del>2025</del> <b>2030</b> . The Applicant shall ensure that rehabilitation of all disturbed areas is completed within six months of completion of extraction.	Extraction not yet completed	Not required
	9A	<b>(a) process or dispatch more than 480,000 tonnes of quarrying products at the site in any calendar year;</b>	Compliant	Section 5
		<b>(b) receive more than 320,000 tonnes of VENM and ENM (in total) at the site in any calendar year;</b>	Nil imported to date	Section 4.2
		<b>(c) import more than 3 million tonnes of VENM and ENM to the site; and</b>	Nil imported to date	

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		(d) import VENM and ENM beyond 31 May 2030.	Not applicable as yet	
<b>Complaints Procedures</b>				
10 a)		Prior to commencement of construction, the Applicant shall: (a) publicise a telephone number on which complaints about the subject development can be registered during the hours of operation in Condition 16; and	Complaints phone number is advertised in the white pages and signage at the front gate.	Section 5.3
10 b)		(b) publicise a postal address where written complaints may be lodged. The telephone number and postal address shall be displayed on the property where it can be read from a public road, for the duration of the development.	Address is publicised in White Pages, website and signage at the front gate.	Section 5.3
11		The Applicant shall record details of all complaints received and actions taken in response to complaints in an up-to-date log book. The log book shall be made available for inspection upon request by the Secretary, the EPA or the Council; and a summary of complaints received shall be included in the Conditions Compliance Reports under Condition 6.	Complaints log book available on site. No complaints received this report period.	Section 5.3, Appendix F
12 a)		The Applicant shall ensure that an initial response to complaints is provided to the complainant within 24 hours of receipt. The Applicant shall then: (a) investigate the concerns raised by the complainant and undertake all reasonable attempts to determine the cause of concern; and	No complaints received.	Not required
12 b)		(b) if adverse impacts are identified, undertake all practicable measures to modify the activity which may be causing the impacts.	No complaints received.	Not required

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13		If the Applicant's response does not address the complaint to the satisfaction of the complainant within six weeks, the Applicant shall inform the Secretary and take any action as directed by the Secretary. This may include a requirement to carry out independent investigations of noise and/or dust at the cost of the Applicant, in accordance with Condition 14.	Not applicable as yet	Not required
14 a)		If the Secretary is satisfied that an independent investigation is required, the Applicant shall: (a) appoint a qualified independent person or team to plan and implement an investigation to qualify the impact and determine the sources of the impact; and	Not applicable as yet	Not required
14 b)		(b) bear the cost of the independent investigation and make available plans, programs and other information necessary for the independent person to form an appreciation of the past, present and future works and their effects on dust and/or noise emissions. This investigation is to be carried out in accordance with a documented Plan. The Plan shall be designed and implemented to measure and/or compute (with appropriate calibration by measurement) the relevant noise and/or dust levels at the complainant's property, that are emitted by the development; and specify a monitoring period and reporting schedule. The independent person or team, the Plan and the timing of its implementation, shall be approved by the Secretary. The independent person or team shall report to the Secretary and the Applicant. Further independent investigations shall cease if the Secretary is satisfied that the relevant levels are not being exceeded and are unlikely to be exceeded in the future.	Not applicable as yet	Not required
<b>Dispute Resolution</b>				

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15		In the event that the Applicant, Council, the PCA, or a government authority other than the Department, cannot agree on the specification or requirements applicable under this Consent, the matter shall be referred by either party to the Secretary or, if not resolved, to the Minister, whose determination of the disagreement shall be final and binding on the parties.	Not applicable as yet	Not required
<b>Hours of Operation</b>				
16		<p>Unless prior written approval of the EPA is obtained, the hours of operation are:</p> <ul style="list-style-type: none"> <li>• construction: 7.00am to 6.00pm Monday to Friday</li> <li>• extraction and processing of material: 7.00am to 6.00pm, Monday to Friday and 7.00am to 1.00pm on Saturdays</li> <li>• vehicle loading: 6.00am to 6.00pm, Monday to Friday and 6.00am to 1.00pm on Saturdays.</li> </ul> <p>No works shall be undertaken on Sundays or Public Holidays. These restrictions do not apply to routine maintenance work, such as the repair of machinery, provided the work does not result in exceedance of the noise limits in Condition 47.</p>	Hours included in induction	Section 5.1
<b>Depth of Extraction</b>				
17		The Applicant shall ensure that extraction does not take place below a level 2 metres above the wet weather high groundwater level of the regional aquifer, as measured and mapped on the site (see Conditions 39(d) and 44).	Extraction has not progressed deeper than Wet Weather High Groundwater level	Section 6.5, Figure Seven
<b>Production Data</b>				

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	17A	The Applicant must provide MEG with annual quarry production data, covering a full calendar year, by no later than 30 January for the following calendar year	MEG requires this data be supplied on a financial year basis. It is hoped this condition can be revised in consultation with MEG prior to final consolidated Mod 4 consent conditions being issued.	2.1
	17B	The data must be provided using the relevant standard form and a copy of the data must be included in the Annual Review (required under condition 66).	MEG requires this data be supplied on a financial year basis. It is hoped this condition can be revised in consultation with MEG prior to final consolidated Mod 4 consent conditions being issued.	2.1
<b>Environmental Management Plan</b>				
18		The Applicant shall prepare a Construction Environmental Management Plan (EMP) to the satisfaction of the Secretary prior to commencement of construction. The Construction EMP shall contain appropriate measures which demonstrate how the environmental objectives for the project will be achieved, including objectives stated in this Consent; and contain a monitoring, reporting and response program. The Applicant shall implement the approved management plan as approved from time to time by the Secretary.	Construction Environmental Management Plan updated July 2016. Approved 9/12/16	



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19		The Applicant shall prepare an Operational Environmental Management Plan (EMP) in consultation with the relevant authorities and to the satisfaction of the Secretary, prior to the commencement of extraction under this Consent. The EMP shall incorporate and integrate environmental management for the existing extraction areas, as well as the areas approved under this Consent.	Operational Environmental Management Plan was updated as required by Condition 67 (d) and submitted to Secretary in July 2016. Response received October 2016; draft 2 submitted November 2016. Approval received 9/12/16	
20		The Operational EMP shall include, but not be limited to: (a) environmental objectives for the site; (b) the Air Quality Management Plan (Condition 29); (c) the Water Management Plan (Condition 42); (d) the Noise Management Plan (Condition 46); (e) the Road Noise Management Plan (Condition 48); (f) <b>The Traffic Management Plan (Conditions 50A)</b> (f) (g) the Flora and Fauna Management Plan (Condition 55); and (g) (h) the Rehabilitation Plan (Condition 58).	Operational Environmental Management Plan was updated as required by Condition 67 (d) and submitted to Secretary in July 2016. Response received October 2016; draft 2 submitted November 2016. Approval received 9/12/16. The TMP has been submitted 2nd March 2022 to DPIE and is awaiting consultation with Transport NSW.	Section 8
21		The Applicant shall make copies of both EMPs available to Council, EPA and <del>DPI Water</del> ( <b>DPIE Water</b> ) within 14 days of approval by the Secretary. The Applicant shall also make a current copy of the EMPs available for inspection by the public or these agencies, for the duration of the Consent.	2016 OEMP approved 9/12/16, sent to all other agencies on 16/12/16. Available at <a href="http://www.vgt.com.au/hodgsons">www.vgt.com.au/hodgsons</a> TMP yet to be approved.	Section 8

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22		The Applicant shall, in consultation with the Secretary, the EPA and the <del>DPI Water</del> (DPIE Water), update the Operational EMP from time to time in order to ensure continuing compliance with the Conditions of this Consent and all relevant approvals and licenses. The EMR shall be responsible for determining if any significant changes to the Operational EMP should be referred to the Secretary for approval. The Applicant shall implement the approved management plan as approved from time to time by the Secretary.	The OEMP was updated in 2016. Input was sought from DPE, then DPI-Water, OEH, EPA, and Council. The second draft approved by the Secretary on 9/12/16.	
23		Deleted		
24		Deleted		
25		Deleted		
26	26	<del>Deleted</del> (a) ensure only verified VENM and ENM is received at the site;	Nil imported to date	Section 4.3
		(b) collect data on the VENM and ENM received including details of the origin, date, and quantity received; and	Nil imported to date	Not required
		(c) include a copy of this data in the Annual Review.	Nil imported to date	Not required
Waste				

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27		<p>The Applicant must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal, or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997. This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the Protection of the Environment Operations Act 1997.1 <b>No other materials classified as waste under the EPA's Waste Classification Guidelines 2009 (or its latest version) may be received or processed on the site, except as expressly permitted in an applicable EPL, specific resource recovery order or exemption under the Protection of the Environment Operations (Waste) Regulation 2014.</b></p>	<p>No waste has been received by the premises. Waste is managed on site through the use of bins (removed by contractor) and waste oil is removed from the site as required.</p>	<p>Not required</p>
Air Quality				
Air Quality Criteria				

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28		<p>The Applicant shall take all practical steps to manage the development so that the ambient air quality goals for total suspended particles (TSP) of 90 µg/m<sup>3</sup> (annual average), particulate matter (PM10) of 50 µg/m<sup>3</sup> (24 hours average) and 30 µg/m<sup>3</sup> (annual average) and the dust deposition goal of 4gm/m<sup>2</sup> (annual average) are not exceeded as a result of the development, when measured at any monitoring location specified in the Air Quality Management Plan.</p> <p>The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the c</p> <p><b>Table 1: Air quality criteria</b></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>Annual</td> <td><sup>a, c</sup> 25 µg/m<sup>3</sup></td> </tr> <tr> <td>24 hour</td> <td><sup>b</sup> 50 µg/m<sup>3</sup></td> </tr> <tr> <td rowspan="2">Particulate matter &lt; 2.5 µm (PM<sub>2.5</sub>)</td> <td>Annual</td> <td><sup>a, c</sup> 8 µg/m<sup>3</sup></td> </tr> <tr> <td>24 hour</td> <td><sup>b</sup> 25 µg/m<sup>3</sup></td> </tr> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td><sup>a, c</sup> 90 µg/m<sup>3</sup></td> </tr> <tr> <td><sup>d</sup> Deposited dust</td> <td>Annual</td> <td><sup>b</sup> 2 g/m<sup>2</sup>/month    <sup>a</sup> 4 g/m<sup>2</sup>/month</td> </tr> </tbody> </table> <p><b>Notes:</b>  <sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).  <sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the development on its own).  <sup>c</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Secretary.  <sup>d</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.</p>	Pollutant	Averaging period	Criterion	Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a, c</sup> 25 µg/m <sup>3</sup>	24 hour	<sup>b</sup> 50 µg/m <sup>3</sup>	Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	<sup>a, c</sup> 8 µg/m <sup>3</sup>	24 hour	<sup>b</sup> 25 µg/m <sup>3</sup>	Total suspended particulate (TSP) matter	Annual	<sup>a, c</sup> 90 µg/m <sup>3</sup>	<sup>d</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month <sup>a</sup> 4 g/m <sup>2</sup> /month	24 hour PM2.5 exceeded 25 µg/m <sup>3</sup> on one occasion during the reporting period. In October 2021 the high reading was due to a local grass fire, not due to development operations therefore not a non-compliance.	Section 6.3
Pollutant	Averaging period	Criterion																					
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a, c</sup> 25 µg/m <sup>3</sup>																					
	24 hour	<sup>b</sup> 50 µg/m <sup>3</sup>																					
Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	<sup>a, c</sup> 8 µg/m <sup>3</sup>																					
	24 hour	<sup>b</sup> 25 µg/m <sup>3</sup>																					
Total suspended particulate (TSP) matter	Annual	<sup>a, c</sup> 90 µg/m <sup>3</sup>																					
<sup>d</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month <sup>a</sup> 4 g/m <sup>2</sup> /month																					
	28A	The air quality criteria in Table 1 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or infrastructure to exceed the air quality criteria, and the Applicant has advised the Department in writing of the terms of this agreement.	Not applicable as yet																				
<b>Air Quality Management</b>																							

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29		The Applicant shall prepare an Air Quality Management Plan as part of the EMP. The Air Quality Management Plan shall:	Air Quality Management Plan was submitted as part of the 2016 OEMP	
29 a)		(a) identify existing and potential sources of dust deposition, TSP and fine particulates (PM10 and PM2.5) and specify appropriate monitoring intervals and locations. The purpose of the monitoring is to evaluate, assess and report on these emissions and the ambient impacts with the objective of understanding the development's contribution to levels of dust deposition, TSP and fine particulates in ambient air around the site;	Section 6.3	Section 6.3
29 (b)		(b) provide a monitoring plan having regard to local meteorology and the relevant Australian Standards, identifying the methodologies to be used, including justification for monitoring intervals, weather conditions, seasonal variations, selecting locations, periods and times of measurements;	AQMP 2016	Section 6.3
29 c)		(c) provide details of dust suppression measures for all sources of dust from the development, including a planting and watering regime to ensure that areas <b>of the site which are exposed and active at any one time are minimised to the greatest extent practicable.</b> <del>no more than 3 hectares of the site are exposed and active at any one time.</del> The use of a polymer in the water to minimise dust impacts shall be investigated as part of this Plan	Section 4 of AQMP. Unused areas of the site are fenced off to prevent dust impacts.	Section 6.10
29 d)		(d) provide details of actions to ameliorate impacts if they exceed the relevant criteria; and	Section 5 of AQMP 2016	Section 6.3
29 e)		(e) provide the design of the reactive management system intended to reduce the day-to-day impacts of dust and fine particulates due to the development. The Applicant shall implement the approved management plan as approved from time to time by the Secretary	Section 4 of AQMP 16.	

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29		The Applicant shall implement the approved management plan as approved from time to time by the Secretary	Plan has been implemented	
	29A	The Applicant must commission an expert review of the air quality monitoring system at the site. This review must: (a) be undertaken by a suitably qualified and experience person(s) whose appointment has been approved by the Secretary;	Expert has been approved March 2022, review to be undertaken in 2022 reporting period.	Section 6.3.4, Appendix N
		(b) review the accuracy of the air quality monitoring system at the site over a 12 month period, in general accordance with the <i>Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2007)</i> and with a particular focus on PM2.5 monitoring;	Not undertaken to date	Section 6.3.4
		(c) provide recommendations (where required) to improve the accuracy of air quality monitoring system at the site; and	Not undertaken to date	Section 6.3.4
		(d) be undertaken in consultation with the EPA.	Not undertaken to date	Section 6.3.4
	29B	A copy of the expert review report along with a timetable for implementing any recommendations arising from the review required under condition 29A of this Schedule, must be submitted by 30 November 2022, or as otherwise agreed by the Planning Secretary. The Applicant must implement the recommendations of the expert review to the satisfaction of the Secretary.	Not undertaken to date, due date within next AR period	Section 6.3.4
30		Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises	Plan has been implemented	
31		The Applicant shall cease offending work at such times when the operations are resulting in visible dust emissions blowing in a direction so as to cross onto public roads or lands not owned by the Applicant.	Work ceases when visible dust crossing public roads or lands not owned by the applicant.	Not applicable this report period

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32		The Applicant shall install, operate and maintain a sprinkler system to adequately water all cleared areas and stockpiles so as to minimise dust emissions to acceptable levels.	Mobile sprinkler installed over stockpiles and used over disturbed areas if/when visible dust is generated.	Section 6.3
33		The Applicant shall ensure that all vehicular movements on unsealed areas are restricted to specific routes and that all vehicles within the subject site keep to a speed limit of 30 km/h.	Speed limit on site is 5km/hr or walking pace. Truck drivers also informed in induction.	Appendix M
34		The Applicant shall ensure that trucks are covered when entering and leaving the premises carrying loads of potentially dust generating material.	Trucks are covered when entering and leaving premises	Appendix M
<b>Air Quality Monitoring</b>				
35		All monitoring equipment is to be installed and operational prior to commencement of construction.	Dust and HVAS monitoring equipment is installed and operating	Section 6.3
36 (a)		Operation of dust deposition gauges and monitoring must be carried out in accordance with; (a) Australian Standard 3580.10. 01 (1991) Particulates – Deposited Matter – Gravimetric Method. Approved method AM-19 referred to in Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales, December 1999.	Most updated AS for monitoring Particulates = AS3580.10.1 2016. Scope of Accreditation of laboratory proves testing to this standard	Section 6.3
36 (b)		(b) Australian Standard 2724.3 (1984) Particulate Matter – Determination of Total Suspended Particulates (TSP) - High Volume Sampler Gravimetric Method. Approved method AM 15 referred to in Approved Methods for the sampling and Analysis of Air Pollutants in New South Wales, December 1999.	Most updated AS for monitoring TSP = AS3580.9.3 2015. NATA accredited method based on this standard	Section 6.3

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## DA Conditions

Compliant

Non Compliant

Mod 2 Condition No 01/01/2021 - 13/08/2021 and Compliance	Mod 4 Cond No. 14/08/2021- 13/12/2022 and Compliance	Condition Text ( <b>Mod 4</b> changes shown in <b>red text</b> - active following 14/08/2021)	Details of compliance status	Where addressed in Annual Review or other document
36 (c)		(c) Australian Standard 3580.9.6 (1990) for Suspended Particulate Matter – PM10 High Volume Sampler with Size Selective Inlet-Gravimetric Method. Approved method AM-18 referred to in Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales, December 1999.	Most updated AS for monitoring PM10 = AS3580.9.6 2015. NATA accredited method based on this standard	Section 6.3
37		A meteorological station measuring wind speed and direction must be installed and operated by the Applicant at a site determined in consultation with the EPA.	Approval obtained from NSW EPA for location of weather station and air monitoring locations	AQMP
<b>Soil and Water</b>				
<b>Limits on Extraction</b>				
38(a)		The Applicant shall not extract: (a) below a depth of 182 m AHD in the footprint of the Process Water Dam, if not already extracted as at the date of Modification 2; and	Survey of Process Water Dam shows max depth at 186m AHD	Figure 4
38(b)		(b) below a depth of 186.1 m AHD in all other areas of the site; unless in accordance with Condition 17, and following written notification to the Secretary and <del>DPI Water</del> ( <b>DPIE Water</b> ).	Recent surveys show the site to be compliant	Figure 4



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<b>Groundwater Study and Remediation Works</b>				
39(a)		Within six weeks of the date of approval of Modification 2, the Applicant shall commission a comprehensive groundwater study of the site. This study must: (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary and <del>DPI Water</del> (DPIE Water);	Peter Dundon engaged 30/3/16, approved by <del>then</del> DPI-W 10/5/16, approved by DPE 5/4/16.	
39(b)		(b) consult with <del>DPI Water</del> (DPIE Water)		GW Study
39(c)		(c) examine all existing records of groundwater levels at the site;		GW Study
39(d)		(d) develop an interim contour map of the wet weather high groundwater level of the regional aquifer, based on all available records (see also Condition 44); and	Contour map included in GW Study approved Aug 2018	GW Study
39(e)		(e) provide advice and recommendations on the Groundwater Monitoring Program as set out in Condition 43.	Groundwater Monitoring Program approved Aug 2018	GW Study, Monitoring Program
40		Unless otherwise agreed by the Secretary, the Applicant shall submit a report of the study to the Secretary and <del>DPI Water</del> (DPIE Water) within six months of commissioning the study. The report must be accompanied by a Groundwater Management Improvement Program, based on the study's findings and recommendations which includes a program of proposed timeframes for implementation. Should the Applicant propose not to implement any of the report's recommendations, it must provide detailed justification to this effect. The Groundwater Management Improvement Program must be prepared and implemented to the satisfaction of the Secretary. Progress against the Program shall be reported through Annual Reviews and considered as part of the Independent Environmental Audit.	Comments on Groundwater Study, Water Management Plan and Groundwater Monitoring Program approved Aug 2018	GW Study

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41		<p>Within six months of the submission of the Groundwater Study and accompanying documents (see Conditions 39 and 40), the Applicant must infill any area of the site identified as being below the wet weather high groundwater level to at least that level as mapped (see Condition 39(d)).</p> <p>Within six months of any update of the groundwater level contour map, the Applicant must infill any area of the site identified as being below the wet weather high groundwater level to at least that level as mapped (see Condition 44).</p>	No areas below the groundwater level yet identified.	Not required
<b>Water Management Plan</b>				
42		<p>The Applicant shall prepare a Water Management Plan for the development to the satisfaction of the Secretary. This plan must be prepared in consultation with <del>DPI-Water</del> (<b>DPIE Water</b>) by suitably qualified and experienced person/s whose appointment has been approved by the Secretary, and be submitted to the Secretary for approval by 31 December 2016. The plan must be updated on an annual basis in consultation with DPI-Water for three years from the date of approval of Modification 2 and thereafter as agreed with by the Secretary.</p>	Water Management Plan approved Aug 2018. Update not undertaken in 2021.	Section 6.3 to 6.6

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42(a)		In addition to the standard requirements for management plans (see Condition 65), this plan must include a: (a) Site Water Balance that: • includes details of: o sources and security of water supply, including contingency planning; o water use on site; o water management on site, including groundwater inflows to the quarry voids and site discharges; and o audit and reporting procedures, including comparisons of the site water balance each calendar year; and o describes the measures that would be implemented to minimise clean water use on site and maximise recycling opportunities;	Water Management Plan approved Aug 2018	Section 6.6
42(b)		(b) Surface Water Management Plan, that includes: • a detailed description of the surface water management system on site, including the: o clean water diversion systems; o erosion and sediment controls; o effluent irrigation system; o water transfers from the extraction areas; o water storages; and o discharge points;	Water Management Plan approved Aug 2018	WMP
42(b)		• design objectives and performance criteria for proposed: o erosion and sediment control structures; o water storages, including quarry voids; o site discharges; and o control of water pollution from rehabilitated areas of the site;	Water Management Plan approved Aug 2018	WMP
42(b)		• performance criteria, including trigger levels for investigating any potentially adverse impacts for surface water quality;	Water Management Plan approved Aug 2018	WMP
42(b)		• a program to monitor: o the effectiveness of the water management system; o site discharge water quality; and o surface water level and quality in the Process Water Dam, including the quantification of rainfall inflow, groundwater inflow and evaporation;	Water Management Plan approved Aug 2018	WMP

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42(b)		<ul style="list-style-type: none"> <li>• a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project;</li> </ul>	Water Management Plan approved Aug 2018	WMP
42(b)		<ul style="list-style-type: none"> <li>• long term water quality management objectives and the measures to achieve these objectives;</li> </ul>	Water Management Plan approved Aug 2018	WMP
42(b)		<ul style="list-style-type: none"> <li>• a plan that ensures surface stormwater runoff from the disturbed areas is directed to the sedimentation dam(s);</li> </ul>	Water Management Plan approved Aug 2018	WMP
42(b)		<ul style="list-style-type: none"> <li>• a plan that ensures tailgate drainage does not discharge into or onto any adjoining public or Crown road, any other persons land, any Crown land, any river, creek or watercourse, any groundwater aquifer, any native vegetation as described under the Native Vegetation Conservation Act 1997 and any wetlands of environmental significance;</li> </ul>	Water Management Plan approved Aug 2018	WMP
42(b)		<ul style="list-style-type: none"> <li>• a detailed description of design and construction criteria for the Process Water Dam based on a feasibility study of:                             <ul style="list-style-type: none"> <li>o capacity to construct multiple cells within the overall dam footprint (ie a two stage or three stage dam);</li> <li>o whether the dam floor and walls are able to be effectively lined with compacted clay (especially for multiple cells);</li> <li>o whether effective hydraulic separation can be achieved between such cells;</li> </ul> </li> </ul>	Process Dam construction no longer required. WMP awaiting DPIE approval.	Section 6.7
42(b)		<ul style="list-style-type: none"> <li>• a strategy for the decommissioning of water management structures, including storage, sedimentation and leachate dams once extraction is complete; and</li> </ul>	Water Management Plan approved Aug 2018	WMP
42(b)		<ul style="list-style-type: none"> <li>• audit and reporting procedures, including comparisons of the monitoring results each calendar year and quarterly reporting of surface water monitoring results;</li> </ul>	Water Management Plan approved Aug 2018	WMP, Sections 6.4, 6.5

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42(c)		Groundwater Management Plan that takes into account the Web-based Reporting Guideline (DPE 2015) and Groundwater Monitoring and Modelling Plans – Information for Prospective Mining and Petroleum Exploration Activities (then DPI 2014), and includes: • detailed baseline data on groundwater yield and quality in groundwater bores on privately-owned land, that could be affected by the project;	Water Management Plan approved Aug 2018	GW Management Plan
42(c)		• a program to undertake surveyed probe testing of all extracted areas where clay fines have been deposited to: o accurately determine the depth of extraction and depth of clay fines; o identify any ongoing intersection or other interaction between clay fines and the regional groundwater aquifer; o identify any geotechnical characteristics of the emplaced clay fines which may pose risks to workplace safety or implementation of the process water dam design or the final landform; and o identify measures which can be successfully used in rehabilitating these areas;	Process Dam investigation undertaken in Sept 2017. Water Management Plan approved Aug 2018	GW Management Plan
42(c)		• a program to monitor potential groundwater quality impacts to the regional aquifer from receiving off-site runoff water in the Process Water Dam;	Water Management Plan approved Aug 2018, monitoring program undertaken since Jan 2018	GW Management Plan
42(c)		• groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts, in accordance with the NSW Aquifer Interference Policy;	Water Management Plan approved Aug 2018, monitoring program undertaken since Jan 2018	GW Management Plan

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42(c)		<ul style="list-style-type: none"> <li>• a program to monitor:               <ul style="list-style-type: none"> <li>o the impacts of the project on:                   <ul style="list-style-type: none"> <li>- groundwater inflows to water storages;</li> <li>- any groundwater bores on privately-owned land that could be affected by the project; and</li> <li>o seepage from water storages or backfilled voids on site;</li> </ul> </li> </ul> </li> </ul>	Water Management Plan approved Aug 2018, monitoring program undertaken since Jan 2018	GW Management Plan
42(c)		<ul style="list-style-type: none"> <li>• a plan to respond to any exceedances of the groundwater assessment criteria;</li> </ul>	Water Management Plan approved Aug 2018	GW Management Plan
42(c)		<ul style="list-style-type: none"> <li>• emergency contingency plans for implementation in the event that the groundwater is encountered during excavation; and</li> </ul>	Water Management Plan approved Aug 2018	GW Management Plan
42(c)		<ul style="list-style-type: none"> <li>• audit and reporting procedures, including comparisons of the monitoring results each calendar year and quarterly reporting of groundwater monitoring results, The Applicant shall implement the approved management plan as approved from time to time by the Secretary.</li> </ul>	Water Management Plan approved Aug 2018	GW Management Plan
<b>Groundwater Monitoring</b>				
43		The Applicant shall prepare a Groundwater Monitoring Program for the development to the satisfaction of the Secretary. This program must:	GW Monitoring Program approved Aug 2018	GW Monitoring Program
43(a)		(a) be prepared in consultation with DPI-Water and be submitted to the Secretary for approval within four months of the date of approval of Modification 2;	First submitted 23rd August 2016. Approved Aug 2018	
43(b)		(b) include proposed construction of a network of at least five active monitoring bores around the south-eastern, southern, western and north-western boundaries of the extraction area (but outside of the overall extraction footprint) in proximity to extraction Phases 1 to 6 as identified in Modification 2, to collect continuous groundwater level monitoring data from the regional aquifer;	Groundwater level monitored continuously at 9 locations	Section 6.5, Figure 3

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43(c)		(c) include proposed construction to deepen (or replace) PT84MW1 in order that a bore in that general location monitors the regional aquifer; and	MW7	Figure 3
43(d)		(d) include proposed construction of active monitoring bores within the largest components of at least the two forthcoming extraction Phases (on a rolling basis), each to collect at least 2 years of continuous baseline groundwater monitoring data prior to extraction commencing with that Phase.	MW9, MW13, MW12	Figure 3
44		The results of the Groundwater Monitoring Program shall be reported the Department and <del>DPI Water</del> (DPIE Water), using contour plans depicting the surface topography, updated contour maps of the wet weather high groundwater level of the regional aquifer and proposed depth of extraction for each extraction Phase. Reporting is to occur on a six monthly basis for the duration of extractive operations, and throughout rehabilitation of the site, unless otherwise agreed with the Secretary. The Applicant shall implement the Groundwater Monitoring Program as approved from time to time by the Secretary.	GW Monitoring Program approved Aug 2018.	Section 6.5
<b>Process Water Dam Design and Construction</b>				
45		The Applicant must ensure that the Process Water Dam is designed and constructed in a manner that satisfies the design and construction criteria for the Process Water Dam as developed under the Surface Water Management Plan (see condition 42(b) above).	Process Dam construction no longer required. WMP awaiting approval from DPIE.	Section 6.7
<b>Noise</b>				
<b>Noise Management Plan</b>				
46		The Applicant shall prepare a Noise Management Plan as part of the EMP	A Noise Management Plan has been prepared as part of the OEMP and updated in 2016.	NMP

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46 (a)		The Noise Management Plan shall: (a) identify existing and potential noise sources and their relative contribution to noise impacts from the development;	Approved 9/12/16	NMP
46 (b)		(b) specify appropriate intervals for noise monitoring to evaluate, assess and report noise emission levels due to construction and normal operations of the development under prevailing weather conditions;	Approved 9/12/16	NMP
46 (c )		(c) outline the methodologies to be used, including justification for monitoring intervals, weather conditions, seasonal variations, selecting locations, periods and times of measurements, the design of any noise modelling or other studies, including the means for determining the noise levels emitted by the development;	NMP 2016 approved 9/12/16	NMP
46 (d)		(d) specify measures to be taken to document any higher level of impacts or patterns of temperature inversions, and detail actions to quantify and ameliorate enhanced impacts if they occur;	Approved 9/12/16	NMP
46 (e )		(e) provide details of noise amelioration measures, including measures to be used to reduce the impact of intermittent, low frequency and tonal noise (including truck reversing alarms) and reactive management responses for particular noise sources; and	Approved 9/12/16	NMP
46 (f)		(f) contingency measures to be implemented should noise complaints be received.	Approved 9/12/16	NMP
46 (g)		(g) provision for the notification of adjoining property owners of the commencement and duration of works adjoining the boundary;	Approved 9/12/16	NMP
46 (h)		(h) construction of temporary noise shielding to residences affected by short-term noise impacts, including the bund recommended under Modification 2, and include an assessment of the effectiveness of this measure in reducing noise levels; and	Noise monitoring shows compliance with required noise criteria.	Section 6.8



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46(i)		(i) include a noise reduction strategy for typical operations to ensure the noise levels from these operations do not exceed the noise criteria specified in Condition 47. The Applicant shall implement the approved management plan as approved from time to time by the Secretary.	Noise monitoring shows compliance with required noise criteria.	NMP												
47		<p>For typical operations, noise from the premises must not exceed:</p> <ul style="list-style-type: none"> <li>an LAeq,15 min noise emission criterion of 43 dB(A) (7am to 6pm) Monday to Saturday;</li> <li>an LAeq,15 min noise emission criterion of 40 dB(A) (6am to 7am) Monday to Saturday; and</li> <li>an LA1,1 minute noise emission criterion of 50 dB(A) (6am to 7am) Monday to Saturday.</li> </ul> <p>Noise generated by the development is to be measured in accordance with the relevant requirements of the NSW Industrial Noise Policy (as may be updated or replaced from time to time).</p> <p>However, these criteria do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement."</p>	Noise monitoring shows compliance with required noise criteria.	Section 6.8, Appendix J												
	47	<p><b>Noise Operating Conditions</b></p> <p>47. 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.</p> <p>Table 2: Operational noise criteria dB(A)</p> <table border="1"> <thead> <tr> <th>Receiver</th> <th>Day (7am-6pm) Monday to Saturday LAeq (15 min)</th> <th>6am-7am Monday to Saturday LAeq (15 min)</th> <th>6am-7am Monday to Saturday LA1 (1 min)</th> </tr> </thead> <tbody> <tr> <td>Receiver B</td> <td>44</td> <td>40</td> <td>50</td> </tr> <tr> <td>All other receivers</td> <td>43</td> <td>40</td> <td>50</td> </tr> </tbody> </table> <p><small>*The Noise Assessment Locations referred to in Table 2 are shown in Appendix 2</small></p>	Receiver	Day (7am-6pm) Monday to Saturday LAeq (15 min)	6am-7am Monday to Saturday LAeq (15 min)	6am-7am Monday to Saturday LA1 (1 min)	Receiver B	44	40	50	All other receivers	43	40	50	Noise monitoring shows compliance with required noise criteria.	Section 6.8, Appendix J
Receiver	Day (7am-6pm) Monday to Saturday LAeq (15 min)	6am-7am Monday to Saturday LAeq (15 min)	6am-7am Monday to Saturday LA1 (1 min)													
Receiver B	44	40	50													
All other receivers	43	40	50													

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47(a)		The excavator to be used is to be fitted with acoustic mufflers to achieve a noise level of approximately 76dB(A) when measured at 7 metres.	No new equipment this report period	Section 6.8, Appendix J
47(b)		47(b)The on-site generator is to be fitted with an acoustic enclosure to ensure that noise levels less than 44dB(A) at 30m are achieved.	Noise monitoring undertaken November 2020 shows compliance with required noise criteria.	Section 6.8, Appendix J
47(c)		A noise compliance investigation is to undertaken within one month of the installation of the equipment to demonstrate compliance with the noise level limits stated in Conditions 47(a) and 47(b). The results of the compliance investigation are to be provided for the approval of the Secretary within 14 days of the completion of the investigations.	No new equipment this report period	Section 6.8
47(d)		The Applicant must ensure works associated with atypical operations, as described in Modification 2, only occur: (a) for a maximum of 24 days in a year, and only between 8 am to 5 pm on those days, Monday to Saturday; (b) after an investigation of options for avoiding multiple atypical operations at any one time so as to limit noise levels at affected receptors, and the outcomes of this investigation are detailed in the Noise Management Plan; and (c) at least 24 hours after notifying potentially affected receptors, with such notification to include information on the duration and extent of works, the likely noise to be experienced, and a contact telephone number.	No atypical works this report period	Not required

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<b>Traffic and Transport</b>				
<b>Road Noise Management Plan</b>				
48		The Applicant shall ensure that traffic noise from the development does not exceed (L Aeq(1 hr)) 55 dB(A) between 7 am and 10 pm and 50 dB(A) between 10 pm and 7 am at any affected residence under adverse weather conditions. Where ambient Leq levels already exceed these criteria, the Applicant shall ensure that traffic noise from the development does not result in an increase of more than 2 dB(A). Note: Adverse weather conditions means in the presence of winds up to 3 metres per second and/or temperature inversions of up to 4 degrees Centigrade per 100 metres.	Noise monitoring undertaken October 2021 shows compliance with required noise criteria.	Section 6.8, Appendix J
49		The Applicant shall prepare a Road Noise Management Plan as part of the EMP. The Plan shall document measures to be taken to meet the criteria, including a monitoring, reporting and response program; and methods for educating drivers in the reduction of road noise impacts. The Applicant shall implement the approved management plan as approved from time to time by the Secretary.	Road Noise Management Plan has been prepared and approved in 2016.	NMP
50	50	<del>The Applicant shall ensure that truck movements associated with the development do not exceed 100 movements per day (50 laden truck movements) or 20 (10 laden truck movements) movements per hour, during construction or operation.</del> <b>The Applicant must ensure that truck movements associated with the development do not exceed 70 outbound and 70 inbound per day and does not exceed 10 outbound and 10 inbound per hour.</b>	Maximum laden trucks per day was 34, which equates to an average of 3.1 movements per hour.	Section 5.2

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	50A	The Applicant must prepare a Traffic Management Plan that must: (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;	TMP has been submitted for consultation with Council, DPIE and TfNSW as of March 2022.	Section 8
		(b) be prepared in consultation with TfNSW and Council;	TMP has been submitted for consultation with Council, DPIE and TfNSW as of March 2022.	Section 8
		(c) include a Drivers' Code of Conduct that contains procedures to ensure that drivers: (i) adhere to posted speed limits or other required travelling speeds; (ii) adhere to designated transport routes; (iii) implement safe and quiet driving practices; and (iv) minimise potential conflict with school buses.	TMP has been submitted for consultation with Council, DPIE and TfNSW as of March 2022.	Section 8
		(d) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct; and	TMP has been submitted for consultation with Council, DPIE and TfNSW as of March 2022.	Section 8
		(e) propose measures to minimise the transmission of dust and tracking of material onto the surface of public roads from vehicles exiting the site. The Applicant must submit the Traffic Management Plan for the approval of the Secretary by the 31 October 2021, or as otherwise agreed by the Secretary. The Applicant must implement the Traffic Management Plan as approved.	TMP has been submitted for consultation with Council, DPIE and TfNSW as of March 2022.	Section 8

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51		<p>The Applicant shall pay to Council a contribution under Section 94A of the Act at the rate of \$0.65 per tonne of all extracted/ processed material transported from the subject site.</p> <p>The following conditions apply to the payment of this contribution:</p> <p>(A) The contribution will be calculated and paid monthly from the date of this Consent;</p> <p>(b) The contribution will be indexed and adjusted annually as from the date of Consent, in accordance with the Consumer Price Index. This adjustment will be applicable to each financial year for the duration of this Consent and shall take effect from and including July each year, commencing 1 July 2000;</p> <p>(c) On or before the fourteenth day of each month for the duration of the Consent, the Applicant shall deliver to Council weighbridge records showing the true quantities of extracted/processed material transported from the property during the immediately proceeding month and the Council will then, as soon as it can conveniently do so, issue an invoice to the Applicant, to be paid within fourteen days;</p> <p>(d) The Council has the right to inspect and have the original records relating to any extraction/processing material, including numbers and types of laden trucks, trailers and load quantities transported from the property audited, at any time when Council makes a written request to do so;</p> <p>(e) The Council will pay all the said contribution payments into a specially identified account for payment towards the rehabilitation, restoration, repair and/or maintenance of Old Northern and Wisemans Ferry Roads within the Baulkham Hills Shire boundary.</p>	Records indicate Section 94 contributions are paid.	

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<b>Flora and Fauna</b>				
52		Deleted		
53		The Applicant shall not clear the strip of remnant vegetation along the southern fence line (Old Northern Road) and the vegetation to the north of the site entrance (Roberts Road) containing Blue Mountains Mahogany ( <i>Eucalyptus notabilis</i> ). This area shall be fenced off to prevent vehicles entering the area.	The areas have been maintained. The vegetation to the north of the site entrance is fenced off using electric fence and there is evidence that the access road is rehabilitating	Section 6.9
54		In construction of the bund walls at the corner of Roberts Road and Old Northern Road, the Applicant shall minimise disturbance to existing native vegetation.	Bundwalls have been constructed with minimal disturbance.	
<b>Flora and Fauna Management Plan</b>				
55		The Applicant shall prepare a Flora and Fauna Management Plan as part of the EMP. The Plan shall be prepared in consultation with <del>National Parks and Wildlife Service</del> <b>Heritage NSW</b> and Council, and shall:	Flora and Fauna Management Plan has been prepared and updated in 2016. <del>OEH (NPWS)</del> <b>Heritage NSW</b> was consulted but declined to make comments. Council comments have been included in report. Report approved 9/12/16	FFMP
55 a)		(a) describe the characteristics and location of species, populations and communities that the proposal may impact upon;	Flora and Fauna Management Plan has been prepared and updated in 2016. Report approved 9/12/16	FFMP

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## DA Conditions

Compliant

Non Compliant

Mod 2 Condition No 01/01/2021 - 13/08/2021 and Compliance	Mod 4 Cond No. 14/08/2021- 13/12/2022 and Compliance	Condition Text (Mod 4 changes shown in red text - active following 14/08/2021)	Details of compliance status	Where addressed in Annual Review or other document
55 b)		(b) consider the feasibility and practicality of salvaging trees removed for the development for relocation to conserved or rehabilitated areas, for the purposes of reconstructing habitat for ground fauna	Flora and Fauna Management Plan has been prepared and updated in 2016. Report approved 9/12/16	FFMP
55 c)		(c) contain a program for the active management and maintenance of all conserved and rehabilitated vegetation (as detailed in the EIS and required under this Consent) including consideration of: <ul style="list-style-type: none"> <li>• post-extraction land use objectives for the site;</li> <li>• utilisation of local endemic species or species naturally occurring in the Maroota area;</li> <li>• planting around the conservation area to further buffer this area and enhance its long term viability as a bushland ecosystem;</li> <li>• connection of existing areas and future areas of revegetation to form a network of wildlife corridors throughout site and to adjoining lands to facilitate species recruitment through natural immigration;</li> <li>• provision of rocks of varying sizes to provide refuge and basking sites for herpetofauna;</li> <li>• fencing of revegetated areas to prohibit grazing by stock; and</li> <li>• provision of artificial nest boxes for a range of arboreal fauna.</li> </ul>	Flora and Fauna Management Plan has been prepared and updated in 2016. Report approved 9/12/16	FFMP
55 d)		(d) mitigation measures to be implemented should operations compromise the significant flora and fauna communities identified in the EIS;	Flora and Fauna Management Plan has been prepared and updated in 2016. Report approved 9/12/16	FFMP
55 e)		(e) an ongoing monitoring program of the existing and proposed revegetated areas to assess their floristical structure and diversity, resilience and robustness to disturbance, and fauna species diversity. The information obtained from the monitoring shall be used to guide future revegetation and management efforts; and	Flora and Fauna Management Plan has been prepared and updated in 2016. Report approved 9/12/16	FFMP

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Non Compliant

Mod 2 Condition No 01/01/2021 - 13/08/2021 and Compliance	Mod 4 Cond No. 14/08/2021- 13/12/2022 and Compliance	Condition Text ( <b>Mod 4</b> changes shown in <b>red text</b> - active following 14/08/2021)	Details of compliance status	Where addressed in Annual Review or other document
55 f)		(f) include detailed performance and completion criteria for evaluating the performance of the flora and fauna management measures and rehabilitation of the site, including triggers for any necessary remedial action.	Flora and Fauna Management Plan has been prepared and updated in 2016. Report approved 9/12/16	FFMP
56		The Applicant shall maintain the revegetated areas for the duration of the Consent. Maintenance may include: <ul style="list-style-type: none"> <li>• replanting failed or unsatisfactory areas</li> <li>• repairing erosion problems</li> <li>• fire management – fire suppression or fire encouragement</li> <li>• pest and weed control</li> <li>• control of feral animal populations</li> <li>• maintain and repair fencing</li> <li>• fertiliser application</li> <li>• watering plants in drier areas, especially in the establishment phase</li> <li>• application of lime or gypsum to control pH and improve soil structure.</li> </ul>	Monitoring of the remnant vegetation was undertaken in October 2021	Sections 6.9 and 6.10
<b>Heritage</b>				
57		If, during the development, the Applicant becomes aware of any heritage or archaeological material, all work likely to affect the material shall cease immediately and the relevant authorities consulted about an appropriate course of action prior to recommencement of work. The relevant authorities may include <del>NPWS, the Heritage Office</del> <b>Heritage NSW</b> , and the Local Aboriginal Land Councils. Any necessary permits or consents shall be obtained and complied with prior to recommencement of work.	No heritage or archaeological sites have been located	Not required
<b>Landscape and Rehabilitation</b>				
<b>Rehabilitation Objectives</b>				



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Non Compliant

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58		The Applicant shall rehabilitate the site <b>in a manner that is consistent with the final landform designs in Appendix 1</b> to the satisfaction of the Secretary. <b>This All</b> rehabilitation must comply with the objectives in Table 1:	Rehabilitation Plan approved August 2018	Section 6.10
Table 1		Site (as a whole) <ul style="list-style-type: none"> <li>• Safe, stable and non-polluting</li> <li>• Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and minimising visual impacts when viewed from surrounding land</li> </ul>	Rehabilitation Plan approved August 2018	Section 6.10
Table 1		Surface Infrastructure <ul style="list-style-type: none"> <li>• Decommissioned and removed, unless the Secretary agrees otherwise</li> </ul>	Rehabilitation Plan approved August 2018	Section 6.10
Table 1		Quarry Benches <ul style="list-style-type: none"> <li>• <del>Landscaped and vegetated using native tree and understorey species</del></li> </ul>	Rehabilitation Plan approved August 2018	Section 6.10
Table 1		Quarry Pit Floor <ul style="list-style-type: none"> <li>• Landscaped and revegetated using improved pasture species, native trees and understorey species</li> </ul>	Rehabilitation Plan approved August 2018	Section 6.10
Table 1		Final Void <ul style="list-style-type: none"> <li>• Minimise the height and slope of batters</li> <li>• Minimise the drainage catchment</li> </ul>	Rehabilitation Plan approved August 2018	Section 6.10
Table 1		Community <ul style="list-style-type: none"> <li>• Ensure public safety</li> <li>• Minimise the adverse socio-economic effects of quarry closure</li> </ul>	Rehabilitation Plan approved August 2018	Section 6.10
	Table 1	<b>Water Quality</b> <ul style="list-style-type: none"> <li>• <b>Water retained on the site is fit for the intended post-mining land use/s</b></li> <li>• <b>Water discharged from the site is suitable for receiving water and fit for aquatic ecology and riparian vegetation</b></li> </ul>	Testing of dam water will confirm that it meets ANZECC Guidelines for 90% protection level for fresh ecosystems.	WMP
<b>Progressive Rehabilitation</b>				

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59		<p>The Applicant shall 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.</p> <p>Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to further disturbance in future.</p>	Dust monitoring indicates compliance with required levels. High reading during the reporting period was caused by local grassfire.	Section 6.3 and 6.10
<b><i>Landscape and Rehabilitation Management Plan</i></b>				
60(a)		<p>The Applicant shall prepare a Landscape and Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be submitted to the Secretary for approval by 30 June 2017, unless otherwise agreed by the Secretary;</p>	Rehabilitation Plan approved August 2018	
60(b)		(b) provide details of the conceptual final landform and associated land uses for the site;	Rehabilitation Plan approved August 2018	LRMP
60(c)		(c) describe the short, medium and long-term measures that would be implemented to ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent;	Rehabilitation Plan approved August 2018	LRMP

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60(d)		(d) include a detailed description of the measures that would be implemented over the next 3 years (to be updated for each 3 year period following the 3 years covered by the initial approval of the plan) including the procedures to be implemented for: <ul style="list-style-type: none"> <li>• maximising the salvage of environmental resources within the approved disturbance area for beneficial reuse;</li> <li>• protecting vegetation and fauna habitat outside the approved disturbance area on-site;</li> <li>• minimising the impacts on native fauna;</li> <li>• landscaping the site to minimise visual and lighting impacts;</li> <li>• reviewing improved pasture species and application rates;</li> <li>• controlling weeds and feral pests;</li> <li>• controlling erosion;</li> <li>• controlling access; and</li> <li>• bushfire management;</li> </ul>	Rehabilitation Plan approved August 2018	LRMP
60(e)		(e) include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;	Rehabilitation Plan approved August 2018	Sections 6.9 and 6.10
60(f)		(f) include a mass balance calculation to ensure that appropriate volumes of material are available to implement the final landform as described in this plan;	Rehabilitation Plan approved August 2018	LRMP
60(g)		(g) provide for the construction and maintenance of the process water dam in accordance with the approved design and construction criteria (see Condition 42(b));	Rehabilitation Plan approved August 2018	LRMP
60(h)		(h) identify the potential risks to the successful rehabilitation of the site, and include a description of the contingency measures that would be implemented to mitigate these risks; and	Rehabilitation Plan approved August 2018	LRMP

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Mod 2 Condition No 01/01/2021 - 13/08/2021 and Compliance	Mod 4 Cond No. 14/08/2021- 13/12/2022 and Compliance	Condition Text (Mod 4 changes shown in red text - active following 14/08/2021)	Details of compliance status	Where addressed in Annual Review or other document
60(i)		(i) include details of who would be responsible for monitoring, reviewing, and implementing the plan. The Applicant shall implement the management plan as approved from time to time by the Secretary	Rehabilitation Plan approved August 2018	LRMP
61		By 31 December 2017, the Applicant shall lodge a Conservation and Rehabilitation Bond with the Department to ensure that the management of biodiversity and the rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the Flora and Fauna Management Plan and Landscape and Rehabilitation Plan. The sum of the bond shall be determined by:	Approval of expert received 2nd November 2021, and the expert engaged in January 2022. Calculation to be submitted in 2022.	Section 8.3, Table 4
61(a)		(a) calculating the cost of rehabilitating the site taking into account the likely surface disturbance over the following 3 years of quarrying operations; and	Approval of expert received 2nd November 2021, and the expert engaged in January 2022. Calculation to be submitted in 2022.	Not required
61(b)		(b) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary. Note: If the rehabilitation of the site is completed to the satisfaction of the Secretary, then the Secretary will release the bond. If the rehabilitation of the site is not completed to the satisfaction of the Secretary, then the Secretary will call in all or part of the bond, and arrange for the completion of the relevant works.	Approval of expert received 2nd November 2021, and the expert engaged in January 2022. Calculation to be submitted in 2022.	Not required
62		Within 3 months of each Independent Environmental Audit (see Condition 70), the Applicant shall review, and if necessary revise, the sum of the Conservation and Rehabilitation Bond to the satisfaction of the Secretary. This review must consider the:	Approval of expert received 2nd November 2021, and the expert engaged in January 2022. Calculation to be submitted in 2022.	Section 8.3, Table 4
62(a)		(a) effects of inflation;		

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62(b)		(b) likely cost of rehabilitating the site (taking into account the likely surface disturbance over the next 3 years of the development); and		
62(c)		(c) performance of the implementation of the rehabilitation of the site to date.		
<b>Environmental Management</b>				
<b><i>Environmental Management Strategy</i></b>				
63		The Applicant shall 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 by 30 June 2016;	Revised Strategy submitted 25/11/2016, approved 9/12/16	EMS
63 (b)		(b) provide the strategic framework for environmental management of the development;	Revised Strategy submitted 25/11/2016, approved 9/12/16	EMS
63 (c)		(c) identify the statutory approvals that apply to the development;	Revised Strategy submitted 25/11/2016, approved 9/12/16	EMS
63 (d)		(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Revised Strategy submitted 25/11/2016, approved 9/12/16	EMS
63 (e)		(e) describe the procedures that would be implemented to: <ul style="list-style-type: none"> <li>• keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>• receive, handle, respond to, and record complaints;</li> <li>• resolve any disputes that may arise during the course of the development;</li> <li>• respond to any non-compliance;</li> <li>• respond to emergencies; and</li> </ul>	Revised Strategy submitted 25/11/2016, approved 9/12/16	EMS

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63 (f)		(f) include: <ul style="list-style-type: none"> <li>• copies of any strategies, plans and programs approved under the conditions of this consent; and</li> <li>• a clear plan depicting all the monitoring required to be carried out in relation to the development.</li> </ul>	Revised Strategy submitted 25/11/2016, approved 9/12/16	EMS

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<b>Adaptive Management</b>				
64		<p>The Applicant shall assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in this Consent. 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&amp;A Act or EP&amp;A Regulation.</p> <p>Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:</p> <p>(a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;</p> <p>(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</p> <p>(c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.</p>	Exceedances of PM2.5 24 hour criteria were caused by local grassfire. Investigation revealed no actions required.	Section 6.3
<b>Management Plan Requirements</b>				
65 (a)		<p>The Applicant shall ensure that the management plans required under this Consent are prepared in accordance with any relevant guidelines, and include:</p> <p>(a) detailed baseline data;</p>	Revised plans submitted 25/11/16, approved 6/12/16	EMP
65 (b)		<p>(b) a description of:</p> <ul style="list-style-type: none"> <li>• the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> <li>• any relevant limits or performance measures/criteria;</li> <li>• 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;</li> </ul>	Revised plans submitted 25/11/16, approved 6/12/16	EMP

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Mod 2 Condition No 01/01/2021 - 13/08/2021 and Compliance	Mod 4 Cond No. 14/08/2021- 13/12/2022 and Compliance	Condition Text (Mod 4 changes shown in red text - active following 14/08/2021)	Details of compliance status	Where addressed in Annual Review or other document
65 (c)		(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;	Revised plans submitted 25/11/16, approved 6/12/16	EMP
65 (d)		(d) a program to monitor and report on the: • impacts and environmental performance of the development; • effectiveness of any management measures (see c above);	Revised plans submitted 25/11/16, approved 6/12/16	EMP
65 (e)		(e) a contingency plan to manage any unpredicted impacts and their consequences;	Revised plans submitted 25/11/16, approved 6/12/16	EMP
65 (f)		(f) a program to investigate and implement ways to improve the environmental performance of the development over time;	Revised plans submitted 25/11/16, approved 6/12/16	EMP
65 (g)		(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	Revised plans submitted 25/11/16, approved 6/12/16	EMP
65 (h)		(h) a protocol for periodic review of the plan.	Revised plans submitted 25/11/16, approved 6/12/16	EMP



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Mod 2 Condition No 01/01/2021 - 13/08/2021 and Compliance	Mod 4 Cond No. 14/08/2021- 13/12/2022 and Compliance	Condition Text (Mod 4 changes shown in red text - active following 14/08/2021)	Details of compliance status	Where addressed in Annual Review or other document
<b>Annual Review</b>				
66		By the end of March each year (or as otherwise agreed by the Secretary), the Applicant shall review the environmental performance of the development for the previous calendar year to the satisfaction of the Secretary. This review must:		
66 (a)		(a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;		Section 5
66 (b)		(b) include a comprehensive review of the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the: <ul style="list-style-type: none"> <li>• relevant statutory requirements, limits or performance measures/criteria;</li> <li>• monitoring results of previous years; and</li> <li>• relevant predictions in the EIS, Modification 1 and Modification 2;</li> </ul>		Section 6
66 (c)		(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;		Section 2, 5 and Appendix A
66 (d)		(d) identify any trends in the monitoring data over the life of the development;		Section 6
66 (e)		(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and		Section 6
66 (f)		(f) describe what measures will be implemented over the next year to improve the environmental performance of the development.		Sections 6, 7, and 8

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<b>Revision of Strategies, Plans and Programs</b>				
67		<p>Within 3 months of the submission of:</p> <ul style="list-style-type: none"> <li>(a) an annual review under Condition 66 above;</li> <li>(b) an incident report under Condition 68 below;</li> <li>(c) an audit report under Condition 70 below; or</li> <li>(d) any modification to the conditions of this Consent (unless the conditions require otherwise),</li> </ul> <p>the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this Consent to the satisfaction of the Secretary.</p> <p>Where this review leads to revisions in any such document, then within 4 weeks of the review, unless the Secretary agrees otherwise, the revised document must be submitted to the Secretary for approval.</p> <p>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</p>		Due 3 months from approval of this report
<b>Reporting</b>				
<b>Incident Reporting Notification</b>				
68		<p><del>The Applicant shall immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.</del> <b>The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.</b></p>	PM2.5 24-hr exceedence not reported to EPA and DPIE. Local grassfire during sample period. Incident not reported since high reading not caused by site operations.	6.3.3

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Non Compliant

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	68A	Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.	PM2.5 24-hr exceedence not reported to EPA and DPIE. Local grassfire during sample period.	6.3.3

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Non Compliant

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<b>Regular Reporting</b>				
69		The Applicant shall 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.	<a href="http://www.vgt.com.au/hodgsons">www.vgt.com.au/hodgsons</a>	Section 5.3
<b>Independent Environmental Audit</b>				
70		Every 3 years from the date of this consent and at the completion of works under this consent, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:	Independent Environmental Audit was conducted in 2020 by RPS AUSTRALIA EAST PTY LTD	Section 8
70 (a)		(a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; Note: This audit team must be led by a suitably qualified auditor and include experts in any field specified by the Secretary.	RPS approved 19/5/2020	IEA
70 (b)		(b) include consultation with the relevant agencies;		IEA
70 (c)		(c) assess the environmental performance of the development and assess whether it is complying with the requirements in this Consent and any relevant EPL (including any assessment, plan or program required under these approvals);		IEA
70 (d)		(d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and		IEA
70 (e)		(e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals.		IEA

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71		Within 6 weeks of the completion of this audit, unless the Secretary agrees otherwise, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.		IEA
<b>Access to Information</b>				
72		By 30 June 2016 the Applicant shall: (a) make copies of the following publicly available on its website: <ul style="list-style-type: none"> <li>• the documents identified in Condition 2(a) above;</li> <li>• current statutory approvals for the development;</li> <li>• approved strategies, plans and programs required under the conditions of this Consent;</li> <li>• 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;</li> <li>• a complaints register, which is to be updated monthly;</li> <li>• the annual reviews of the development (for the last 5 years, if applicable);</li> <li>• any independent environmental audit of the development, and the Applicant's response to the recommendations in any audit;</li> <li>• any other matter required by the Secretary; and</li> </ul> (b) keep this information up-to-date, to the satisfaction of the Secretary.	<a href="http://www.vgt.com.au/hodgsons">www.vgt.com.au/hodgsons</a>	

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## EPL Licence no. 6535

Compliant

Non Compliant

Compliance Summary Number of Conditions Non-compliant		Details of compliance status
Non Compliant	Nil.	
Condition	Condition Text	Details of compliance status
<b>Administrative Conditions</b>		
<b>A1.1</b>	Crushing Grinding or Separating not to exceed 100000-500000T processed p/a. Extractive Activities no to exceed 100000-500000T extracted, processed or stored.	Crushing grinding or separating does not exceed this limit.
<b>A2.1</b>	Licence applies to the following premises: HB Maroota Pty Ltd, Cnr Roberts & Old Northern Roads, Maroota, NSW 2756, Lot 1 DP 228308, Lot 2 DP 228308, Lot 2 DP 313327	Compliant
<b>A3.1</b>	Licence applies to all other activities carried on at the premises, including agricultural produce industries and aircraft (helicopter) facilities	Compliant
<b>A4.1</b>	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; 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.	Compliant
<b>Discharges to Air and Water and Applications to Land</b>		
<b>P1.1</b>	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 (no table included)	N/A

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## EPL Licence no. 6535

Compliant

Non Compliant

Compliance Summary Number of Conditions Non-compliant		Details of compliance status
Non Compliant	Nil.	
Condition	Condition Text	Details of compliance status
<b>Limit Conditions</b>		
L1.1	(Pollution of Water) 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	No waters have been polluted
L2.1	Noise from the premises must not exceed the sound pressure level expressed as LA10 (15 minute) of 45 dB(A), except as expressly provided by this licence	Noise monitoring indicates compliance
L2.2	Noise from the premises is to be measured or computed at any point within one metre of any residential boundary, or at any point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise level limits in Condition L2.1	Noise monitoring indicates compliance
<b>Operating Conditions</b>		
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.	Compliant
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.	Drums of oils stored in the workshop were banded with rolls in October 2020
O3.1	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	Dust monitoring results illustrate compliance
O3.2	All loaded trucks entering or leaving the premises must have their loads covered.	Trucks are covered when entering and leaving premises
O4.1	The licensee must prevent any tracking of mud on to public roads by vehicles leaving the premises.	Haul road is sealed from road to weighbridge. Water used to clean off road area as required.
<b>Monitoring and Recording Conditions</b>		
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.	All required monitoring has been recorded and retained.

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## EPL Licence no. 6535

Compliant

Non Compliant

Compliance Summary Number of Conditions Non-compliant		Details of compliance status
Non Compliant	Nil.	
Condition	Condition Text	Details of compliance status
<b>M1.2</b>	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.	All required monitoring has been recorded and retained.
<b>M1.3</b>	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.	"Samples" not required by this licence. Date, time, location and technician undertaking noise monitoring has been included in the noise monitoring report.
<b>M2.1</b>	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.	No complaints have been made. Log book is maintained on site and reported on website
<b>M2.2</b>	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.	Complaints register
<b>M2.3</b>	The record of a complaint must be kept for at least 4 years after the complaint was made.	Complaints Register
<b>M2.4</b>	The record must be produced to any authorised officer of the EPA who asks to see them.	No complaints have been made. Log book is maintained on site and reported on website
<b>M3.1</b>	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.	Complaints phone number is advertised in the white pages and signage at the front gate.



# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## EPL Licence no. 6535

Compliant

Non Compliant

Compliance Summary Number of Conditions Non-compliant		Details of compliance status
Non Compliant	Nil.	
Condition	Condition Text	Details of compliance status
<b>M3.2</b>	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.	Complaints phone number is advertised in the white pages, website and signage at the front gate.
<b>M3.3</b>	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence	N/A

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## EPL Licence no. 6535

Compliant

Non Compliant

Compliance Summary Number of Conditions Non-compliant		Details of compliance status
Non Compliant	Nil.	
Condition	Condition Text	Details of compliance status
<b>Reporting Conditions</b>		
<b>R1.1</b>	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: a) a Statement of Compliance; and b) a Monitoring and Complaints Summary. 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	Completed annually. Reporting period ends 11 March
<b>R1.2</b>	An Annual Return must be prepared in respect of each reporting period, except as provided below	Completed annually. Reporting period ends 11 March
<b>R1.3</b>	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.	N/A
<b>R1.4</b>	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.	N/A
<b>R1.5</b>	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').	Lodged 8th April 2021.
<b>R1.6</b>	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	Digital copies retained

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## EPL Licence no. 6535

Compliant

Non Compliant

Compliance Summary Number of Conditions Non-compliant		Details of compliance status
Non Compliant	Nil.	
Condition	Condition Text	Details of compliance status
<b>R1.7</b>	Within the Annual Return, the Statement 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.	Completed annually. Reporting period ends 11 March
<b>Notification of Environmental Harm</b>		
<b>R2.1</b>	Notifications must be made by telephoning the Environment Line service on 131 555	PIRMP
<b>R2.2</b>	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	PIRMP
<b>Written Report</b>		
<b>R3.1</b>	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.	N/A
<b>R3.2</b>	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	N/A

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## EPL Licence no. 6535

Compliant

Non Compliant

Compliance Summary Number of Conditions Non-compliant		Details of compliance status
Non Compliant	Nil.	
Condition	Condition Text	Details of compliance status
<b>R3.3</b>	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.	N/A
<b>R3.4</b>	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.	N/A
<b>General Conditions</b>		
<b>G1.1</b>	A copy of this licence must be kept at the premises to which the licence applies.	Printed copy is in the site office
<b>G1.2</b>	The licence must be produced to any authorised officer of the EPA who asks to see it.	Printed copy is in the site office
<b>G1.3</b>	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Printed copy is in the site office

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## Monitoring Bore Licences

Compliant

Non Compliant

Bore Name	Licence Number	Date Commenced	Valid to	Purpose	Cond #	Condition Text	Details of compliance status
<b>Compliance Summary</b>						<b>Number of Conditions Non-compliant</b>	
Non Compliant						Nil	
PT84MW1	10BL158808	12/11/1998	Perpetuity	Monitoring Bore		All works licences have the same conditions	Compliant
PT84MW5	10BL158808	12/11/1998	Perpetuity	Monitoring Bore			
PT84MW6	10BL605696	13/01/2015	Perpetuity	Monitoring Bore			
PT84MW7	10BL605799	29/08/2016	Perpetuity	Monitoring Bore			
PT84MW8	10BL605795	29/08/2016	Perpetuity	Monitoring Bore			
PT84MW9	10BL605799	29/08/2016	Perpetuity	Monitoring Bore			
PT84MW10	10BL605798	29/08/2016	Perpetuity	Monitoring Bore			
PT84MW11	10BL605797	29/08/2016	Perpetuity	Monitoring Bore			
PT84MW12	10BL605799	29/08/2016	Perpetuity	Monitoring Bore			
PT84MW13	10BL605799	29/08/2016	Perpetuity	Monitoring Bore			

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## Monitoring Bore Licences

Compliant

Non Compliant

Bore Name	Licence Number	Date Commenced	Valid to	Purpose	Cond #	Condition Text	Details of compliance status
					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	Latest works commenced December 2016
					2	The licensee shall within two months of completion or after the issue of the licence if the work is existing, furnish to NSW Office of Water:-	Mar-17
					a	Details of the work set out in the attached for "A" (must be completed by the driller)	Forms received from driller and sent NOW March 2017
					b	A plan accurately showing the location of the work, in relation to portion and property boundaries	Sent to NOW March 2017
					c	A one litre sample for all licences other than those for stock, domestic, test bores and farming purposes	Test bore, therefore not required
					d	Details of any water analysis and/or pumping tests	N/A
					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.	Access available
					4	If during the construction of the work, saline or polluted water is encountered above the producing aquifer, such water shall be sealed off.	Not encountered
					5a	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	Not flowing
					5b	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.	Not flowing
					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 the aquifer.	In use
					7	The licensee shall not allow any tailwater / drainage to discharge into or onto:- any adjoining property; any other persons land; any Crown land; any river, creek or watercourse; any native vegetation as described under the Native Vegetation Conservation Act; any Wetlands of environmental significance	Compliant

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## Monitoring Bore Licences

Compliant

Non Compliant

Bore Name	Licence Number	Date Commenced	Valid to	Purpose	Cond #	Condition Text	Details of compliance status
					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.	No conveying, distributing or storing water applicable
					9	If the bore authorised by this license is lined with steel or plastic casing the inside diameter of that casing shall not exceed 2200mm	Casing 65mm plastic
					10	Water shall not be pumped from the bore authorised by this license for any purpose other than groundwater investigation	Compliant
					11	Subject to condition (12) the licensee shall within two months of the date of completion of the bore authorised by the license: Backfill it with clay or cement to groundlevel, after withdrawing any casing (lining) or render it ineffective by any other means acceptable to the department	See condition 12
					12	Condition (11) shall have no force or effect if: 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 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.	Test bore, casing 65mm

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## Work Approval 10WA114817 Water Access Licence WAL 24163 for PT84PB1: Plant Usage Bore

Compliant

Non Compliant

### Work Approval 10WA114817 and Water Access Licence WAL 24163 Ref 10AL114816 Conditions

Number	Text	Compliance Status
<b>Compliance Summary</b>	<b>Number of Conditions Non-compliant</b>	
Non Compliant	Nil	
<b>Information</b>		
Source	Maroota Tertiary Sands Groundwater Source	
Tenure Type	Continuing	
Share	45.00 ML	Take for 2021 = 10.4ML
<b>Take of water</b>		
MW092900001	From 1 July 2018, if the water supply work nominated on this access licence is located at or less than 40 m from the top of the high bank of a river then: A. water must not be taken in this groundwater source when flows are in the Very Low Flow Class for an unregulated river access licence in that river. B. This restriction will only apply when the system that confirms when water can be taken is available on DPI Water website. C. DPI Water will inform the licence holder in writing of the applicable restrictions and how to access the information on its website when this system becomes operative.	Not located within 40m of a river
MW060400001	Water allocations remaining in the account for this access licence must not be carried over from one water year to the next water year.	
MW060500001	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.	
MW060300001	The total volume of water taken under this access licence in any water year must not exceed a volume equal to: A. the sum of water in the account from the available water determination for the current year, plus B. the net amount of water assigned to or from the account under a water allocation assignment, plus C. any water recredited by the Minister to the account.	
<b>Monitoring and recording</b>		
MW233800001	The completed logbook must be retained for five (5) years from the last date recorded in the logbook.	
MW233600001	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.	



# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## Work Approval 10WA114817 Water Access Licence WAL 24163 for PT84PB1: Plant Usage Bore

Compliant

Non Compliant

### Work Approval 10WA114817 and Water Access Licence WAL 24163 Ref 10AL114816 Conditions

Number	Text	Compliance Status
MW233700001	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.	
MW060600001	The volume of water taken in the water year must be recorded in the logbook at the end of each water year. The maximum volume of water permitted to be taken in that water year must also be recorded in the logbook.	
MW233900001	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 DPI Water.	

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## Work Approval 10WA114817 Water Access Licence WAL 24163 for PT84PB1: Plant Usage Bore

Compliant

Non Compliant

### Work Approval 10WA114817 and Water Access Licence WAL 24163 Ref 10AL114816 Conditions

Number	Text	Compliance Status
<b>Reporting</b>		
MW005100002	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.	
<b>Take of Water</b>		
MW065500001	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.	
<b>Water management works</b>		
MW009700001	If contaminated water is found above the production aquifer during the construction of the water supply work authorised by this approval, the licensed driller must: A. notify DPI Water in writing within 48 hours of becoming aware of the contaminated water, and B. adhere to the Minimum Construction Requirements for Water Bores in Australia (2012), as amended or replaced from time to time.	No contamination found
MW048700001	The water supply work authorised by this approval must be constructed within three (3) years from the date this approval is granted.	Constructed 6/7/1999
MW004400001	When a water supply work authorised by this approval is to be abandoned or replaced, the approval holder must contact DPI Water in writing to verify whether the work must be decommissioned.	In use
<b>Monitoring and recording</b>		
MW048100001	A logbook must be kept and maintained at the authorised work site or on the property for each water supply work authorised by this approval, unless the work is metered and fitted with a data logger.	Logbook kept
MW048200001	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.	Logbook kept
<b>Reporting</b>		

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## Work Approval 10WA114817 Water Access Licence WAL 24163 for PT84PB1: Plant Usage Bore

Compliant

Non Compliant

### Work Approval 10WA114817 and Water Access Licence WAL 24163 Ref 10AL114816 Conditions

Number	Text	Compliance Status
MW005100001	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.	N/A
MK048500001	Within sixty (60) days of completing construction of the water supply work authorised by this approval, the approval holder must provide a completed Form A for that work to DPI Water.	Constructed 6/7/1999
<b>Take of water</b>		
DK031600128	The approval holder must not take water from the approved work at a rate that exceeds 3.0 L/second (180L/min).	Compliant
<b>Water management works</b>		
DK136300001	The approval holder must not construct or install works used for the purpose of conveying, distributing or storing water from the works authorised by this approval, that obstruct the reasonable passage of floodwaters flowing in, to, or from a river or lake.	No obstruction to floodwaters, rivers or natural lake
DK120200001	The approval holder must allow DPI Water or any person authorised by it, full and free access to the approved works, either during or after construction, for the purpose of carrying out inspection or test of the approved works and its fittings and must carry out any work or alterations deemed necessary by the department for the protection or proper maintenance of the approved works, or the control of the water extracted and for the protection of the quality and the prevention from pollution or contamination of subsurface water.	

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## Water Access Licence WAL 26163 for PT84PB2: Land Owners Bore, not used for quarry operations

Compliant

Non Compliant

Number	Text	Compliance Status
<b>Compliance Summary</b>	<b>Number of Conditions Non-compliant</b>	
Non Compliant	Nil	
<b>Information</b>		
Source	Maroota Tertiary Sands Groundwater Source	
Tenure Type	Continuing	
Share	264.00 ML	
<b>Take of water</b>		
MW092900001	From 1 July 2018, if the water supply work nominated on this access licence is located at or less than 40 m from the top of the high bank of a river then: A. water must not be taken in this groundwater source when flows are in the Very Low Flow Class for an unregulated river access licence in that river. B. This restriction will only apply when the system that confirms when water can be taken is available on DPI Water website. C. DPI Water will inform the licence holder in writing of the applicable restrictions and how to access the information on its website when this system becomes operative.	Not located within 40m of a river
MW060400001	Water allocations remaining in the account for this access licence must not be carried over from one water year to the next water year.	
MW060500001	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.	
MW060300001	The total volume of water taken under this access licence in any water year must not exceed a volume equal to: A. the sum of water in the account from the available water determination for the current year, plus B. the net amount of water assigned to or from the account under a water allocation assignment, plus C. any water recredited by the Minister to the account.	
<b>Monitoring and recording</b>		
MW233800001	The completed logbook must be retained for five (5) years from the last date recorded in the logbook.	
MW233600001	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.	

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## Water Access Licence WAL 26163 for PT84PB2: Land Owners Bore, not used for quarry operations

Compliant

Non Compliant

Number	Text	Compliance Status
MW233700001	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.	
MW060600001	The volume of water taken in the water year must be recorded in the logbook at the end of each water year. The maximum volume of water permitted to be taken in that water year must also be recorded in the logbook.	
MW233900001	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 DPI Water.	

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## Water Access Licence WAL 26163 for PT84PB2: Land Owners Bore, not used for quarry operations

Compliant

Non Compliant

Number	Text	Compliance Status
<b>Reporting</b>		
MW005100002	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.	
<b>Take of Water</b>		
MW065500001	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.	
<b>Water management works</b>		
MW009700001	If contaminated water is found above the production aquifer during the construction of the water supply work authorised by this approval, the licensed driller must: A. notify DPI Water in writing within 48 hours of becoming aware of the contaminated water, and B. adhere to the Minimum Construction Requirements for Water Bores in Australia (2012), as amended or replaced from time to time.	No contamination found
MW048700001	The water supply work authorised by this approval must be constructed within three (3) years from the date this approval is granted.	Constructed 6/7/1999
MW004400001	When a water supply work authorised by this approval is to be abandoned or replaced, the approval holder must contact DPI Water in writing to verify whether the work must be decommissioned.	In use
<b>Monitoring and recording</b>		
MW048100001	A logbook must be kept and maintained at the authorised work site or on the property for each water supply work authorised by this approval, unless the work is metered and fitted with a data logger.	Logbook kept - site owner, not quarry
MW048200001	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.	Logbook kept - site owner, not quarry
<b>Reporting</b>		

# Hodgsons Roberts Rd Sand Quarry Condition Compliance Summary January to December 2021

## Water Access Licence WAL 26163 for PT84PB2: Land Owners Bore, not used for quarry operations

Compliant

Non Compliant

Number	Text	Compliance Status
MW005100001	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: <a href="mailto:water.enquiries@dpi.nsw.gov.au">water.enquiries@dpi.nsw.gov.au</a> , 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.	N/A
MK048500001	Within sixty (60) days of completing construction of the water supply work authorised by this approval, the approval holder must provide a completed Form A for that work to DPI Water.	Constructed 6/7/1999
<b>Take of water</b>		
DK031600128	The approval holder must not take water from the approved work at a rate that exceeds 3.0 L/second (180L/min).	Compliant
<b>Water management works</b>		
DK136300001	The approval holder must not construct or install works used for the purpose of conveying, distributing or storing water from the works authorised by this approval, that obstruct the reasonable passage of floodwaters flowing in, to, or from a river or lake.	No obstruction to floodwaters, rivers or natural lake
DK120200001	The approval holder must allow DPI Water or any person authorised by it, full and free access to the approved works, either during or after construction, for the purpose of carrying out inspection or test of the approved works and its fittings and must carry out any work or alterations deemed necessary by the department for the protection or proper maintenance of the approved works, or the control of the water extracted and for the protection of the quality and the prevention from pollution or contamination of subsurface water.	

# **Appendix B**

## **Consolidated Development Consent Conditions**



## ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

## DETERMINATION OF A DEVELOPMENT APPLICATION UNDER SECTION 80(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

I, the Minister for Urban Affairs and Planning, under Section 80(1) of the Environmental Planning and Assessment Act, 1979 (the Act), determine the Development Application referred to in Schedule 1 by granting consent to the Application, subject to the conditions set out in Schedule 2.

The reason for the imposition of conditions is to minimise any adverse environmental effects of the development, consistent with the objectives of the Act.

Andrew Refshauge MP  
Minister for Urban Affairs and Planning

Sydney

2000

File No. S98/00772

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**SCHEDULE 1**

Application made by: Dr L. S. Martin ("the Applicant").

To: The Minister for Urban Affairs and Planning ("the Minister").

In respect of: Lots 1 and 2 DP 228308, Lot 2 DP 312327, Roberts Road, Maroota, in the Baulkham Hills Local Government Area.

For the following: Extraction and on-site processing of sand, clay and pebble; construction of a bund wall.

Development Application: DA No. 267-11-99 lodged with the Department of Urban Affairs and Planning on 22 November 1999, accompanied by a Environmental Impact Statement prepared by Nexus Environmental Planning Pty Ltd. and dated November 1999.

Determination: 1) To ascertain the date upon which the consent becomes effective, refer to Section 83 of the Act.  
2) To ascertain the date upon which the consent is liable to lapse, refer to Section 95 of the Act.  
3) Section 97 of the Act confers on an applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court exercisable within 12 months after receipt of notice.

**This instrument includes changes made by DA 267-11-99 Mod 1 in 29 November 2000 (marked red).**

**This instrument includes changes made by DA 267-11-99 Mod 3 in 18 August 2015 (marked blue).**

**This instrument includes changes made by DA 267-11-99 Mod 2 in 18 March 2016 (marked green).**

Schedule 2Conditions of Development ConsentDEFINITIONS

The Act	<i>Environmental Planning and Assessment Act 1979</i> , as amended
Approval from EPA	means approved in writing by the EPA or as specified as a condition of a licence
BCA	Building Code of Australia
Conditions of this consent	The conditions set out in this Schedule
Construction	Construction of the bund wall
Council	The Hills Shire Council
DA	Development Application
DCP 500	Baulkham Hills Shire Council Development Control Plan No. 500 – Extractive Industry
Department	Department of Planning and Environment
DPI-Water	Department of Primary Industries - Water
EIS	Development application DA 267-11-99 and supporting documentation including the Environmental Impact Statement prepared by Nexus Environmental Planning Pty Ltd, dated November 1999, including the attached landscaping plan; the fax from Holmes Air Sciences dated 21 December 1999; the letter from Nexus Environmental Planning Pty Ltd dated 21 December 1999 and attachments; the letter from Woodward-Clyde dated 21 December 1999; the letter from Woodward-Clyde dated 16 December 1999; the letter from Dick Benbow and Associates Pty Ltd dated 5 January 2000 and attachments; the letter from Dick Benbow and Associates Pty Ltd dated 27 January 2000; and the two faxes from Dick Benbow and Associates Pty Ltd dated 17 February 2000 and attachments, except as modified by the report of Dick Benbow and Associates (Report No 10065 Issue 1) dated 26 June 2000
EMP	Environmental Management Plan
EPA	Environment Protection Authority
GTA	General Term of Approval
LA10(15 minute)	is the sound pressure level that is exceeded for 10% of the time when measured over a 15 minute period
m AHD	metres Australian Height Datum
Modification 1	Modification application 07-00M1 to DA 267-11-99 and supporting SEE titled Amendment to Method of Extraction and Related Acoustic Bund Wall, dated 17 July 2000 and prepared by Nexus Environmental Planning Pty Ltd
Modification 2	Modification application DA 267-11-99 Mod 2 and supporting documentation titled: <i>Environmental Assessment Section 75W Modification (2): DA 267-11-99, Hodgson Quarries and Plant Pty Ltd: Roberts Road: Maroota</i> (Volumes 1 and 2), dated 23 September 2015 and prepared by Nexus Environmental Planning Pty Ltd; Response to Submissions 75W Modification (2): DA 267-11-99, Hodgson Quarries and Plant Pty Ltd: Roberts Road: Maroota, dated 3 December 2015 and prepared by Nexus Environmental Planning Pty Ltd; and email correspondence from Nexus Environmental Planning Pty Ltd to the Department, dated 12 February 2016, 16 February 2016 and 24 February
Modification 3	Modification application DA 267-11-99 Mod 3 and supporting documentation titled Environmental Assessment Section 75W Modification (3): DA 267-11-99, Hodgson Quarry Products Pty Ltd: Roberts Road: Maroota, dated 17 May 2015 and prepared by Nexus Environmental

NPWS	Planning Pty Ltd
PCA	National Parks and Wildlife Service
Process Water Dam	Principal Certifying Authority
Secretary	The process water dam located in the north-eastern corner of the site
Subject Site	Secretary of the Department, or nominee
	Lots 1 and 2 DP 228308, Lot 2 DP 312327, Roberts Road, Maroota, in the Baulkham Hills Local Government Area
Wet weather high groundwater level	The rolling average of all recorded groundwater level measurements at any monitoring location on the site, as first recorded following any rainfall event of at least 50 mm over any 24-hour period, and as contour mapped using this data

## INTEGRATED DEVELOPMENT

Integrated development is development (not being complying development) that, in order for it to be carried out, requires development consent and one or more of the approvals set out in the Act. The subject proposal is integrated development, as it requires development consent and the approval of the Environment Protection Authority under the *Protection of the Environment Operations Act 1997* and, the approval of the Department of Land and Water Conservation under Parts 2 and 5 of the *Water Act 1912*. The general terms of approval of both the EPA and the [DPI-Water](#) therefore form part of this Consent.

## GENERAL

### *Obligation to Prevent and Minimise Harm to the Environment*

1. There is an obligation on the Applicant to prevent and minimise harm to the environment throughout the life of the project. This requires that all practicable measures are to be taken to prevent and minimise harm that may result from the construction, operation and, where relevant, the decommissioning of the development.

### *Adherence to Terms of DA and EIS*

2. The Applicant shall:
  - (a) carry out the development generally in accordance with the EIS, Modification 1, Modification 3 and Modification 2; and
  - (b) comply with the conditions of this consent.

If there is any inconsistency between the documents in Condition 2(a), the most recent documents shall prevail to the extent of the inconsistency. The conditions of this consent shall prevail over documents in Condition 2(a) to the extent of any inconsistency.

### *Compliance*

3. The Applicant shall comply with all reasonable requirements of the [Secretary](#) in respect of the implementation of the Conditions of this Consent, within such time as the [Secretary](#) agrees. The [Secretary](#) may order the Applicant to cease work until non-compliance has been addressed to the [Secretary's](#) satisfaction.
4. The Applicant shall ensure that all contractors and sub-contractors are aware of, and comply with, the Conditions of this Consent.
5. The Applicant shall comply with all relevant conditions prescribed in Part 7 of the *Environmental Planning and Assessment Regulation 1994*, as required by Section 80A (11) of the Act.
6. The Applicant will submit a Conditions Compliance Report to the [Secretary](#) prior to the commencement of extraction in areas that are not currently subject to extraction. Subsequent reports will be submitted annually for the first three years of extraction in areas not currently subject to extraction. Further reports shall be submitted as required by the [Secretary](#).

To enable ready comparison with the EIS's predictions, diagrams and tables, the Conditions Compliance Reports shall include, but not be limited to, the following matters:

- (a) a compliance audit of the performance of the project against conditions of Consent and statutory approvals;
- (b) a review of the effectiveness of the environmental management of the development;
- (c) the results of environmental monitoring required under this Consent or other approvals, including interpretations and discussion by a suitably qualified person;
- (d) a listing of any variations obtained to approvals applicable to the DA since the last report;

- (e) a record of all complaints and the actions taken to mitigate all such complaints;
- (f) a report detailing the rehabilitation measures undertaken since the last report; and
- (g) environmental management targets and strategies for stages of the development yet to be completed.

7. The [Secretary](#) may, after considering a Conditions Compliance Report, notify the Applicant of any reasonable requirements for compliance with this Consent. The Applicant shall comply with those requirements within such time as the [Secretary](#) may direct.

*Note: The Applicant is obliged to ensure that all statutory requirements, including all relevant legislation, Regulations, Australian Standards, Codes, Guidelines and Notices, Conditions and Directions of the Councils and relevant government agencies are met and approvals obtained.*

### **Commencement and duration**

8. No extraction shall commence in areas that are not currently subject to extraction, until the Applicant has:
- (a) **constructed the bund walls at the corner of Roberts Road and Old Northern Road;**
  - (b) submitted the Conditions Compliance Report required under Condition 6; and
  - (c) obtained all licences necessary for the commencement of extraction.
9. The duration of extraction under this Consent is **until 31 May 2025**. The Applicant shall ensure that rehabilitation of all disturbed areas is completed within six months of completion of extraction.

### **Complaints Procedures**

10. Prior to commencement of construction, the Applicant shall:
- (a) publicise a telephone number on which complaints about the subject development can be registered during the hours of operation in Condition 16; and
  - (b) publicise a postal address where written complaints may be lodged.
- The telephone number and postal address shall be displayed on the property where it can be read from a public road, for the duration of the development.
11. The Applicant shall record details of all complaints received and actions taken in response to complaints in an up-to-date log book. The log book shall be made available for inspection upon request by the [Secretary](#), the EPA or the Council; and a summary of complaints received shall be included in the Conditions Compliance Reports under Condition 6.
12. The Applicant shall ensure that an initial response to complaints is provided to the complainant within 24 hours of receipt. The Applicant shall then:
- (a) investigate the concerns raised by the complainant and undertake all reasonable attempts to determine the cause of concern; and
  - (b) if adverse impacts are identified, undertake all practicable measures to modify the activity which may be causing the impacts.
13. If the Applicant's response does not address the complaint to the satisfaction of the complainant within six weeks, the Applicant shall inform the [Secretary](#) and take any action as directed by the [Secretary](#). This may include a requirement to carry out independent investigations of noise and/or dust at the cost of the Applicant, in accordance with Condition 14.
14. If the [Secretary](#) is satisfied that an independent investigation is required, the Applicant shall:
- (a) appoint a qualified independent person or team to plan and implement an investigation to qualify the impact and determine the sources of the impact; and

- (b) bear the cost of the independent investigation and make available plans, programs and other information necessary for the independent person to form an appreciation of the past, present and future works and their effects on dust and/or noise emissions.

This investigation is to be carried out in accordance with a documented Plan. The Plan shall be designed and implemented to measure and/or compute (with appropriate calibration by measurement) the relevant noise and/or dust levels at the complainant's property, that are emitted by the development; and specify a monitoring period and reporting schedule.

The independent person or team, the Plan and the timing of its implementation, shall be approved by the [Secretary](#). The independent person or team shall report to the [Secretary](#) and the Applicant.

Further independent investigations shall cease if the [Secretary](#) is satisfied that the relevant levels are not being exceeded and are unlikely to be exceeded in the future.

### *Dispute Resolution*

15. In the event that the Applicant, Council, the PCA, or a government authority other than the Department, cannot agree on the specification or requirements applicable under this Consent, the matter shall be referred by either party to the [Secretary](#) or, if not resolved, to the Minister, whose determination of the disagreement shall be final and binding on the parties.

### **HOURS OF OPERATION**

16. Unless prior written approval of the EPA is obtained, the hours of operation are:
- construction: 7.00am to 6.00pm Monday to Friday
  - extraction and processing of material: 7.00am to 6.00pm, Monday to Friday and 7.00am to 1.00pm on Saturdays
  - vehicle loading: 6.00am to 6.00pm, Monday to Friday and 6.00am to 1.00pm on Saturdays.
- No works shall be undertaken on Sundays or Public Holidays.

These restrictions do not apply to routine maintenance work, such as the repair of machinery, provided the work does not result in exceedance of the noise limits in Condition 47.

### **DEPTH OF EXTRACTION**

17. The Applicant shall ensure that extraction does not take place below a level 2 metres above the wet weather high groundwater level of the regional aquifer, as measured and mapped on the site (see Conditions 39(d) and 44).

### **ENVIRONMENTAL MANAGEMENT PLAN**

18. The Applicant shall prepare a Construction Environmental Management Plan (EMP) to the satisfaction of the [Secretary](#) prior to commencement of construction. The Construction EMP shall contain appropriate measures which demonstrate how the environmental objectives for the project will be achieved, including objectives stated in this Consent; and contain a monitoring, reporting and response program.

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

19. The Applicant shall prepare an Operational Environmental Management Plan (EMP) in consultation with the relevant authorities and to the satisfaction of the [Secretary](#), prior to the commencement of extraction under this Consent. The EMP shall incorporate and integrate environmental management for the existing extraction areas, as well as the areas approved under this Consent.

20. The Operational EMP shall include, but not be limited to:
- (a) environmental objectives for the site;
  - (b) the Air Quality Management Plan (Condition 29);
  - (c) the [Water Management Plan \(Condition 42\)](#);
  - (d) the Noise Management Plan (Condition 46);
  - (e) the Road Noise Management Plan (Condition 48);
  - (f) the Flora and Fauna Management Plan (Condition 55); and
  - (g) the Rehabilitation Plan (Condition 58).
21. The Applicant shall make copies of both EMPs available to Council, EPA and [DPI-Water](#) within 14 days of approval by the [Secretary](#). The Applicant shall also make a current copy of the EMPs available for inspection by the public or these agencies, for the duration of the Consent.
22. The Applicant shall, in consultation with the [Secretary](#), the EPA and the [DPI-Water](#), update the Operational EMP from time to time in order to ensure continuing compliance with the Conditions of this Consent and all relevant approvals and licenses. The EMR shall be responsible for determining if any significant changes to the Operational EMP should be referred to the [Secretary](#) for approval.

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

23. *Deleted.*
24. *Deleted.*
25. *Deleted.*
26. *Deleted.*

## WASTE

27. The Applicant must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal, or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*. This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the *Protection of the Environment Operations Act 1997*.<sup>1</sup>

## AIR QUALITY

### *Air Quality Criteria*

28. The Applicant shall take all practical steps to manage the development so that the ambient air quality goals for total suspended particles (TSP) of [90 µg/m³ \(annual average\)](#), [particulate matter \(PM10\) of 50 µg/m³ \(24 hours average\)](#) and [30 µg/m³ \(annual average\)](#) and the dust deposition goal of 4gm/m2 (annual average) are not exceeded as a result of the development, when measured at any monitoring location specified in the Air Quality Management Plan.

### *Air Quality Management*

29. The Applicant shall prepare an Air Quality Management Plan as part of the EMP. The Air Quality Management Plan shall:

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<sup>1</sup> Environment Protection Authority General Term of Approval

- (a) identify existing and potential sources of dust deposition, TSP and fine particulates (PM10 and PM2.5) and specify appropriate monitoring intervals and locations. The purpose of the monitoring is to evaluate, assess and report on these emissions and the ambient impacts with the objective of understanding the development's contribution to levels of dust deposition, TSP and fine particulates in ambient air around the site;
- (b) provide a monitoring plan having regard to local meteorology and the relevant Australian Standards, identifying the methodologies to be used, including justification for monitoring intervals, weather conditions, seasonal variations, selecting locations, periods and times of measurements;
- (c) provide details of dust suppression measures for all sources of dust from the development, including a planting and watering regime to ensure that no more than 3 hectares of the site are exposed and active at any one time. The use of a polymer in the water to minimise dust impacts shall be investigated as part of this Plan;
- (d) provide details of actions to ameliorate impacts if they exceed the relevant criteria; and
- (e) provide the design of the reactive management system intended to reduce the day-to-day impacts of dust and fine particulates due to the development.

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

- 30. Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises.<sup>2</sup>
- 31. The Applicant shall cease offending work at such times when the operations are resulting in visible dust emissions blowing in a direction so as to cross onto public roads or lands not owned by the Applicant.
- 32. The Applicant shall install, operate and maintain a sprinkler system to adequately water all cleared areas and stockpiles so as to minimise dust emissions to acceptable levels.
- 33. The Applicant shall ensure that all vehicular movements on unsealed areas are restricted to specific routes and that all vehicles within the subject site keep to a speed limit of 30 km/h.
- 34. The Applicant shall ensure that trucks are covered when entering and leaving the premises carrying loads of potentially dust generating material.

### ***Air Quality Monitoring***

- 35. All monitoring equipment is to be installed and operational prior to commencement of construction.
- 36. Operation of dust deposition gauges and monitoring must be carried out in accordance with;
  - (a) Australian Standard 3580.10. 01 (1991) Particulates – Deposited Matter – Gravimetric Method. Approved method AM-19 referred to in *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*, December 1999.
  - (b) Australian Standard 2724.3 (1984) Particulate Matter – Determination of Total Suspended Particulates (TSP) - High Volume Sampler Gravimetric Method. Approved method AM 15 referred to in *Approved Methods for the sampling and Analysis of Air Pollutants in New South Wales*, December 1999.
  - (c) Australian Standard 3580.9.6 (1990) for Suspended Particulate Matter – PM10 High Volume Sampler with Size Selective Inlet-Gravimetric Method. Approved method AM-18 referred to in *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*, December 1999.<sup>3</sup>

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<sup>2</sup> Environment Protection Authority General Term of Approval

<sup>3</sup> Environment Protection Authority General Term of Approval



37. A meteorological station measuring wind speed and direction must be installed and operated by the Applicant at a site determined in consultation with the EPA.<sup>4</sup>

## SOIL AND WATER

*Note: The Applicant is required to obtain the necessary water licences for the development under the Water Act 1912 and/or Water Management Act 2000.*

### *Limits on Extraction*

38. The Applicant shall not extract:
- (a) below a depth of 182 m AHD in the footprint of the Process Water Dam, if not already extracted as at the date of Modification 2; and
  - (b) below a depth of 186.1 m AHD in all other areas of the site;
- unless in accordance with Condition 17, and following written notification to the Secretary and DPI-Water.

### *Groundwater Study and Remediation Works*

39. Within six weeks of the date of approval of Modification 2, the Applicant shall commission a comprehensive groundwater study of the site. This study must:
- (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary and DPI-Water;
  - (b) consult with DPI-Water;
  - (c) examine all existing records of groundwater levels at the site;
  - (d) develop an interim contour map of the wet weather high groundwater level of the regional aquifer, based on all available records (see also Condition 44); and
  - (e) provide advice and recommendations on the Groundwater Monitoring Program as set out in Condition 43.
40. Unless otherwise agreed by the Secretary, the Applicant shall submit a report of the study to the Secretary and DPI-Water within six months of commissioning the study. The report must be accompanied by a Groundwater Management Improvement Program, based on the study's findings and recommendations which includes a program of proposed timeframes for implementation. Should the Applicant propose not to implement any of the report's recommendations, it must provide detailed justification to this effect.

The Groundwater Management Improvement Program must be prepared and implemented to the satisfaction of the Secretary. Progress against the Program shall be reported through Annual Reviews and considered as part of the Independent Environmental Audit.

41. Within six months of the submission of the Groundwater Study and accompanying documents (see Conditions 39 and 40), the Applicant must infill any area of the site identified as being below the wet weather high groundwater level to at least that level as mapped (see Condition 39(d)).

Within six months of any update of the groundwater level contour map, the Applicant must infill any area of the site identified as being below the wet weather high groundwater level to at least that level as mapped (see Condition 44).

### *Water Management Plan*

42. The Applicant shall prepare a Water Management Plan for the development to the satisfaction of the Secretary. This plan must be prepared in consultation with DPI-Water by suitably qualified and

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<sup>4</sup> Environment Protection Authority General Term of Approval

experienced person/s whose appointment has been approved by the Secretary, and be submitted to the Secretary for approval by 31 December 2016. The plan must be updated on an annual basis in consultation with DPI-Water for three years from the date of approval of Modification 2 and thereafter as agreed with by the Secretary.

In addition to the standard requirements for management plans (see Condition 65), this plan must include a:

- (a) Site Water Balance that:
  - includes details of:
    - sources and security of water supply, including contingency planning;
    - water use on site;
    - water management on site, including groundwater inflows to the quarry voids and site discharges; and
    - audit and reporting procedures, including comparisons of the site water balance each calendar year; and
    - describes the measures that would be implemented to minimise clean water use on site and maximise recycling opportunities;
- (b) Surface Water Management Plan, that includes:
  - a detailed description of the surface water management system on site, including the:
    - clean water diversion systems;
    - erosion and sediment controls;
    - effluent irrigation system;
    - water transfers from the extraction areas;
    - water storages; and
    - discharge points;
  - design objectives and performance criteria for proposed:
    - erosion and sediment control structures;
    - water storages, including quarry voids;
    - site discharges; and
    - control of water pollution from rehabilitated areas of the site;
  - performance criteria, including trigger levels for investigating any potentially adverse impacts for surface water quality;
  - a program to monitor:
    - the effectiveness of the water management system;
    - site discharge water quality; and
    - surface water level and quality in the Process Water Dam, including the quantification of rainfall inflow, groundwater inflow and evaporation;
  - a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project;
  - long term water quality management objectives and the measures to achieve these objectives;
  - a plan that ensures surface stormwater runoff from the disturbed areas is directed to the sedimentation dam(s);
  - a plan that ensures tailgate drainage does not discharge into or onto any adjoining public or Crown road, any other persons land, any Crown land, any river, creek or watercourse, any groundwater aquifer, any native vegetation as described under the *Native Vegetation Conservation Act 1997* and any wetlands of environmental significance;
  - a detailed description of design and construction criteria for the Process Water Dam based on a feasibility study of:
    - capacity to construct multiple cells within the overall dam footprint (ie a two stage or three stage dam);
    - whether the dam floor and walls are able to be effectively lined with compacted clay (especially for multiple cells);
    - whether effective hydraulic separation can be achieved between such cells;

- rehabilitating such cells to create a single dam within the final landform; and
  - the appropriateness of diverting runoff received from off-site around the dam;
  - a strategy for the decommissioning of water management structures, including storage, sedimentation and leachate dams once extraction is complete; and
  - audit and reporting procedures, including comparisons of the monitoring results each calendar year and quarterly reporting of surface water monitoring results;
- (c) Groundwater Management Plan that takes into account the *Web-based Reporting Guideline* (DPE 2015) and *Groundwater Monitoring and Modelling Plans – Information for Prospective Mining and Petroleum Exploration Activities* (DPI 2014), and includes:
- detailed baseline data on groundwater yield and quality in groundwater bores on privately-owned land, that could be affected by the project;
  - a program to undertake surveyed probe testing of all extracted areas where clay fines have been deposited to:
    - accurately determine the depth of extraction and depth of clay fines;
    - identify any ongoing intersection or other interaction between clay fines and the regional groundwater aquifer;
    - identify any geotechnical characteristics of the emplaced clay fines which may pose risks to workplace safety or implementation of the process water dam design or the final landform; and
    - identify measures which can be successfully used in rehabilitating these areas;
  - a program to monitor potential groundwater quality impacts to the regional aquifer from receiving off-site runoff water in the Process Water Dam;
  - groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts, in accordance with the *NSW Aquifer Interference Policy*;
  - a program to monitor:
    - the impacts of the project on:
      - groundwater inflows to water storages;
      - any groundwater bores on privately-owned land that could be affected by the project; and
    - seepage from water storages or backfilled voids on site;
  - a plan to respond to any exceedances of the groundwater assessment criteria;
  - emergency contingency plans for implementation in the event that the groundwater is encountered during excavation; and
  - audit and reporting procedures, including comparisons of the monitoring results each calendar year and quarterly reporting of groundwater monitoring results,

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

### ***Groundwater Monitoring***

43. The Applicant shall prepare a Groundwater Monitoring Program for the development to the satisfaction of the Secretary. This program must:
- (a) be prepared in consultation with DPI-Water and be submitted to the Secretary for approval within four months of the date of approval of Modification 2;
  - (b) include proposed construction of a network of at least five active monitoring bores around the south-eastern, southern, western and north-western boundaries of the extraction area (but outside of the overall extraction footprint) in proximity to extraction Phases 1 to 6 as identified in Modification 2, to collect continuous groundwater level monitoring data from the regional aquifer;
  - (c) include proposed construction to deepen (or replace) PT84MW1 in order that a bore in that general location monitors the regional aquifer; and
  - (d) include proposed construction of active monitoring bores within the largest components of at least the two forthcoming extraction Phases (on a rolling basis), each to collect at least 2 years of continuous baseline groundwater monitoring data prior to extraction commencing with that Phase.

44. The results of the Groundwater Monitoring Program shall be reported the Department and DPI-Water, using contour plans depicting the surface topography, updated contour maps of the wet weather high groundwater level of the regional aquifer and proposed depth of extraction for each extraction Phase. Reporting is to occur on a six monthly basis for the duration of extractive operations, and throughout rehabilitation of the site, unless otherwise agreed with the Secretary.

The Applicant shall implement the Groundwater Monitoring Program as approved from time to time by the Secretary.

### *Process Water Dam Design and Construction*

45. The Applicant must ensure that the Process Water Dam is designed and constructed in a manner that satisfies the design and construction criteria for the Process Water Dam as developed under the Surface Water Management Plan (see condition 42(b) above).

## **NOISE**

### *Noise Management Plan*

46. The Applicant shall prepare a Noise Management Plan as part of the EMP.

The Noise Management Plan shall:

- (a) identify existing and potential noise sources and their relative contribution to noise impacts from the development;
- (b) specify appropriate intervals for noise monitoring to evaluate, assess and report noise emission levels due to construction and normal operations of the development under prevailing weather conditions;
- (c) outline the methodologies to be used, including justification for monitoring intervals, weather conditions, seasonal variations, selecting locations, periods and times of measurements, the design of any noise modelling or other studies, including the means for determining the noise levels emitted by the development;
- (d) specify measures to be taken to document any higher level of impacts or patterns of temperature inversions, and detail actions to quantify and ameliorate enhanced impacts if they occur;
- (e) provide details of noise amelioration measures, including measures to be used to reduce the impact of intermittent, low frequency and tonal noise (including truck reversing alarms) and reactive management responses for particular noise sources; and
- (f) contingency measures to be implemented should noise complaints be received.
- (g) provision for the notification of adjoining property owners of the commencement and duration of works adjoining the boundary;
- (h) construction of temporary noise shielding to residences affected by short-term noise impacts, including the bund recommended under Modification 2, and include an assessment of the effectiveness of this measure in reducing noise levels; and
- (i) include a noise reduction strategy for typical operations to ensure the noise levels from these operations do not exceed the noise criteria specified in Condition 47.

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

47. For typical operations, noise from the premises must not exceed:
- an  $L_{Aeq,15 \text{ min}}$  noise emission criterion of 43 dB(A) (7am to 6pm) Monday to Saturday;
  - an  $L_{Aeq,15 \text{ min}}$  noise emission criterion of 40 dB(A) (6am to 7am) Monday to Saturday; and
  - an  $L_{A1,1 \text{ minute}}$  noise emission criterion of 50 dB(A) (6am to 7am) Monday to Saturday.

Noise generated by the development is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy* (as may be updated or replaced from time-to-time).

However, these criteria do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement."

- 47(a) The excavator to be used is to be fitted with acoustic mufflers to achieve a noise level of approximately 76dB(A) when measured at 7 metres.
- 47(b) The on-site generator is to be fitted with an acoustic enclosure to ensure that noise levels less than 44dB(A) at 30m are achieved.
- 47(c) A noise compliance investigation is to undertaken within one month of the installation of the equipment to demonstrate compliance with the noise level limits stated in Conditions 47(a) and 47(b). The results of the compliance investigation are to be provided for the approval of the Secretary within 14 days of the completion of the investigations.
- 47(d) The Applicant must ensure works associated with atypical operations, as described in Modification 2, only occur:
- (a) for a maximum of 24 days in a year, and only between 8 am to 5 pm on those days, Monday to Saturday;
  - (b) after an investigation of options for avoiding multiple atypical operations at any one time so as to limit noise levels at affected receptors, and the outcomes of this investigation are detailed in the Noise Management Plan; and
  - (c) at least 24 hours after notifying potentially affected receptors, with such notification to include information on the duration and extent of works, the likely noise to be experienced, and a contact telephone number.

## TRAFFIC AND TRANSPORT

### *Road Noise Management Plan*

48. The Applicant shall ensure that traffic noise from the development does not exceed (L Aeq(1 hr)) 55 dB(A) between 7 am and 10 pm and 50 dB(A) between 10 pm and 7 am at any affected residence under adverse weather conditions. Where ambient Leq levels already exceed these criteria, the Applicant shall ensure that traffic noise from the development does not result in an increase of more than 2 dB(A).

*Note: Adverse weather conditions means in the presence of winds up to 3 metres per second and/or temperature inversions of up to 4 degrees Centigrade per 100 metres.*

49. The Applicant shall prepare a Road Noise Management Plan as part of the EMP. The Plan shall document measures to be taken to meet the criteria, including a monitoring, reporting and response program; and methods for educating drivers in the reduction of road noise impacts.

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

### *Truck movements*

50. The Applicant shall ensure that truck movements associated with the development do not exceed 100 movements per day (50 laden truck movements) or 20 (10 laden truck movements) movements per hour, during construction or operation.

### Section 94A Contributions

51. The Applicant shall pay to Council a contribution under Section 94A of the Act at the rate of \$0.65 per tonne of all extracted/ processed material transported from the subject site.

The following conditions apply to the payment of this contribution:

- (A) The contribution will be calculated and paid monthly from the date of this Consent;
- (b) The contribution will be indexed and adjusted annually as from the date of Consent, in accordance with the Consumer Price Index. This adjustment will be applicable to each financial year for the duration of this Consent and shall take effect from and including July each year, commencing 1 July 2000;
- (c) On or before the fourteenth day of each month for the duration of the Consent, the Applicant shall deliver to Council weighbridge records showing the true quantities of extracted/processed material transported from the property during the immediately preceding month and the Council will then, as soon as it can conveniently do so, issue an invoice to the Applicant, to be paid within fourteen days;
- (d) The Council has the right to inspect and have the original records relating to any extraction/processing material, including numbers and types of laden trucks, trailers and load quantities transported from the property audited, at any time when Council makes a written request to do so;
- (e) The Council will pay all the said contribution payments into a specially identified account for payment towards the rehabilitation, restoration, repair and/or maintenance of Old Northern and Wisemans Ferry Roads within the Baulkham Hills Shire boundary.

Note: This condition has been imposed in accordance with Council's Contributions Plan No. 6 – Extractive Industries. A copy of this plan may be inspected at the Customer Service Centre, Council's Administration Complex, corner of Carrington and Showground Roads, Castle Hill, between the hours of 8:30 am and 4:30 pm weekdays.

### FLORA AND FAUNA

52. *Deleted.*

53. The Applicant shall not clear the strip of remnant vegetation along the southern fence line (Old Northern Road) and the vegetation to the north of the site entrance (Roberts Road) containing Blue Mountains Mahogany (*Eucalyptus notabilis*). This area shall be fenced off to prevent vehicles entering the area.

54. **In construction of the bund walls at the corner of Roberts Road and Old Northern Road, the Applicant shall minimise disturbance to existing native vegetation.**

### *Flora and Fauna Management Plan*

55. The Applicant shall prepare a Flora and Fauna Management Plan as part of the EMP. The Plan shall be prepared in consultation with National Parks and Wildlife Service and Council, and shall:
- (a) describe the characteristics and location of species, populations and communities that the proposal may impact upon;
  - (b) consider the feasibility and practicality of salvaging trees removed for the development for relocation to conserved or rehabilitated areas, for the purposes of reconstructing habitat for ground fauna
  - (c) contain a program for the active management and maintenance of all conserved and rehabilitated vegetation (as detailed in the EIS and required under this Consent) including consideration of:
    - post-extraction land use objectives for the site;

- utilisation of local endemic species or species naturally occurring in the Maroota area;
  - planting around the conservation area to further buffer this area and enhance its long term viability as a bushland ecosystem;
  - connection of existing areas and future areas of revegetation to form a network of wildlife corridors throughout site and to adjoining lands to facilitate species recruitment through natural immigration;
  - provision of rocks of varying sizes to provide refuge and basking sites for herpetofauna;
  - fencing of revegetated areas to prohibit grazing by stock; and
  - provision of artificial nest boxes for a range of arboreal fauna.
- (d) mitigation measures to be implemented should operations compromise the significant flora and fauna communities identified in the EIS;
- (e) an ongoing monitoring program of the existing and proposed revegetated areas to assess their floristical structure and diversity, resilience and robustness to disturbance, and fauna species diversity. The information obtained from the monitoring shall be used to guide future revegetation and management efforts; and
- (f) include detailed performance and completion criteria for evaluating the performance of the flora and fauna management measures and rehabilitation of the site, including triggers for any necessary remedial action.
56. The Applicant shall maintain the revegetated areas for the duration of the Consent. Maintenance may include:
- replanting failed or unsatisfactory areas
  - repairing erosion problems
  - fire management – fire suppression or fire encouragement
  - pest and weed control
  - control of feral animal populations
  - maintain and repair fencing
  - fertiliser application
  - watering plants in drier areas, especially in the establishment phase
  - application of lime or gypsum to control pH and improve soil structure.

## HERITAGE

57. If, during the development, the Applicant becomes aware of any heritage or archaeological material, all work likely to affect the material shall cease immediately and the relevant authorities consulted about an appropriate course of action prior to recommencement of work. The relevant authorities may include NPWS, the Heritage Office, and the Local Aboriginal Land Councils. Any necessary permits or consents shall be obtained and complied with prior to recommencement of work.

## LANDSCAPE AND REHABILITATION

### *Rehabilitation Objectives*

58. The Applicant shall rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must comply with the objectives in Table 1:

*Table 1: Rehabilitation Objectives*

<i>Feature</i>	<i>Objective</i>
Site (as a whole)	<ul style="list-style-type: none"> <li>• Safe, stable and non-polluting</li> <li>• Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and minimising visual impacts when viewed from surrounding land</li> </ul>
Surface Infrastructure	<ul style="list-style-type: none"> <li>• Decommissioned and removed, unless the Secretary agrees otherwise</li> </ul>

Quarry Benches	<ul style="list-style-type: none"> <li>• Landscaped and vegetated using native tree and understorey species</li> </ul>
Quarry Pit Floor	<ul style="list-style-type: none"> <li>• Landscaped and revegetated using improved pasture species, native trees and understorey species</li> </ul>
Final Void	<ul style="list-style-type: none"> <li>• Minimise the height and slope of batters</li> <li>• Minimise the drainage catchment</li> </ul>
Community	<ul style="list-style-type: none"> <li>• Ensure public safety</li> <li>• Minimise the adverse socio-economic effects of quarry closure</li> </ul>

### *Progressive Rehabilitation*

59. The Applicant shall 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.

*Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to further disturbance in future.*

### *Landscape and Rehabilitation Management Plan*

60. The Applicant shall prepare a Landscape and Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be submitted to the Secretary for approval by 30 June 2017, unless otherwise agreed by the Secretary;
  - provide details of the conceptual final landform and associated land uses for the site;
  - describe the short, medium and long-term measures that would be implemented to ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent;
  - include a detailed description of the measures that would be implemented over the next 3 years (to be updated for each 3 year period following the 3 years covered by the initial approval of the plan) including the procedures to be implemented for:
    - maximising the salvage of environmental resources within the approved disturbance area for beneficial reuse;
    - protecting vegetation and fauna habitat outside the approved disturbance area on-site;
    - minimising the impacts on native fauna;
    - landscaping the site to minimise visual and lighting impacts;
    - reviewing improved pasture species and application rates;
    - controlling weeds and feral pests;
    - controlling erosion;
    - controlling access; and
    - bushfire management;
  - include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;
  - include a mass balance calculation to ensure that appropriate volumes of material are available to implement the final landform as described in this plan;
  - provide for the construction and maintenance of the process water dam in accordance with the approved design and construction criteria (see Condition 42(b));
  - identify the potential risks to the successful rehabilitation of the site, and include a description of the contingency measures that would be implemented to mitigate these risks; and
  - include details of who would be responsible for monitoring, reviewing, and implementing the plan.

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



### ***Conservation and Rehabilitation Bond***

61. By 31 December 2017, the Applicant shall lodge a Conservation and Rehabilitation Bond with the Department to ensure that the management of biodiversity and the rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the Flora and Fauna Management Plan and Landscape and Rehabilitation Plan. The sum of the bond shall be determined by:
- (a) calculating the cost of rehabilitating the site taking into account the likely surface disturbance over the following 3 years of quarrying operations; and
  - (b) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary.
- Note: If the rehabilitation of the site is completed to the satisfaction of the Secretary, then the Secretary will release the bond. If the rehabilitation of the site is not completed to the satisfaction of the Secretary, then the Secretary will call in all or part of the bond, and arrange for the completion of the relevant works.*
62. Within 3 months of each Independent Environmental Audit (see Condition 70), the Applicant shall review, and if necessary revise, the sum of the Conservation and Rehabilitation Bond to the satisfaction of the Secretary. This review must consider the:
- (a) effects of inflation;
  - (b) likely cost of rehabilitating the site (taking into account the likely surface disturbance over the next 3 years of the development); and
  - (c) performance of the implementation of the rehabilitation of the site to date.

## **ENVIRONMENTAL MANAGEMENT**

### ***Environmental Management Strategy***

63. The Applicant shall 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 by 30 June 2016;
  - (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 in relation to the development.

The Environmental Management Strategy is to include a copy of the sequence of extraction as updated under Modification 2, with all dam areas on the site clearly labelled and described.

The Applicant shall implement the approved strategy as approved from time to time by the Secretary.

### *Adaptive Management*

64. The Applicant shall assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in this Consent. 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 steps 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*

65. The Applicant shall 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;
    - 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;
    - 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*

66. By the end of March each year (or as otherwise agreed by the Secretary), the Applicant shall review the environmental performance of the development for the previous calendar year to the satisfaction of the Secretary. This review must:
- (a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the:

- relevant statutory requirements, limits or performance measures/criteria;
  - monitoring results of previous years; and
  - relevant predictions in the EIS, Modification 1 and Modification 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 next year to improve the environmental performance of the development.

### ***Revision of Strategies, Plans and Programs***

67. Within 3 months of the submission of:
- (a) an annual review under Condition 66 above;
  - (b) an incident report under Condition 68 below;
  - (c) an audit report under Condition 70 below; or
  - (d) any modification to the conditions of this Consent (unless the conditions require otherwise), the Applicant shall review, and if necessary revise, 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, unless the Secretary agrees otherwise, the revised document must be submitted to the Secretary for approval.

*Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.*

## **REPORTING**

### ***Incident Reporting***

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

### ***Regular Reporting***

69. The Applicant shall 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**

70. Every 3 years from the date of this consent and at the completion of works under this consent, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
- (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
  - (b) include consultation with the relevant agencies;
  - (c) assess the environmental performance of the development and assess whether it is complying with the requirements in this Consent and any relevant EPL (including any assessment, plan or program required under these approvals);

- (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and
- (e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals.

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

71. Within 6 weeks of the completion of this audit, unless the Secretary agrees otherwise, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

## **ACCESS TO INFORMATION**

72. By 30 June 2016 the Applicant shall:
- (a) make copies of the following publicly available on its website:
    - the documents identified in Condition 2(a) above;
    - 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;
    - the annual reviews of the development (for the last 5 years, if applicable);
    - 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 C**

## **Notice of Modification and draft Consolidated Consent Conditions Mod 4**

# Notice of Modification

## Section 4.55(2) of the *Environmental Planning and Assessment Act 1979*

As delegate for the Minister for Planning and Public Spaces, I modify the development consent referred to in Schedule 1, as set out in Schedule 2.



Carl Dumbleton  
A/Director Resource Assessments

Sydney

13 August 2021

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### SCHEDULE 1

The Development Consent (DA 267-11-99) for the Roberts Road Quarry, granted by the Minister for Urban Affairs and Planning on 31 May 2000.

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### SCHEDULE 2

1. In the list of definitions, delete "Department", "DPI Water", "National Parks and Wildlife Service" and insert the following in alphabetical order:

BCD	Biodiversity and Conservation Division within the Department
Calendar year	A period of 12 months from 1 January to 31 December
Department	Department of Planning, Industry and Environment
DPIE Water	The Water Group within the Department
ENM	Excavated Natural Material, as defined in the EPA's resource recovery orders and exemptions clauses 91, 92 and 93 of the <i>Protection of the Environment Operations (Waste) Regulation 2014</i>
EPL	Environment Protection Licence under the POEO Act
Heritage NSW	Heritage NSW within the Department of Premier and Cabinet
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance
INP	<i>NSW Industrial Noise Policy (NSW EPA, 2000)</i>
Laden Trucks	Trucks transporting quarry products from the site and/or trucks transporting VENM/ENM to the site
MEG	Regional NSW – Mining, Exploration and Geoscience
Minister	NSW Minister for Planning and Public Spaces, or delegate
Modification 4	Modification application DA 267-11-99 MOD 4 and Statement of Environmental Effects titled: <i>Roberts Road Quarry Modification 4</i> , dated December 2019 prepared by Umwelt Environmental Consulting and Submissions Report titled: <i>Roberts Road Quarry Modification 4, Response to Submissions</i> , dated March 2020 prepared by Umwelt Environmental Consulting, and additional information supporting the Response to Submissions, including: <ul style="list-style-type: none"><li>revised noise assessment titled: <i>Noise Impact Assessment Rev 1</i>, dated May 2020 prepared by Umwelt Environmental Consulting;</li><li>letter from Umwelt Environmental Consulting, dated 20 May 2020; and</li><li>letter from Benbow Environmental, dated 10 September 2020.</li></ul>
Non-compliance	An occurrence, set of circumstances or development that is a breach of this consent
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Quarrying products	Includes all saleable quarry products, but excludes tailings, other wastes and material needed for rehabilitation
Secretary	Planning Secretary under the EP&A Act, or nominee
TfNSW	Transport for NSW

VENM  
Waste

Virgin Excavated Natural Material, as defined in the POEO Act  
Has the same meaning as the definition of the term in the Dictionary to the  
POEO Act

2. Delete all references to "DPI-Water" and replace with "DPIE Water".
3. Delete all references to "National Parks and Wildlife Service", "NPWS" and "Heritage Office" and replace with "Heritage NSW".
4. In condition 2(a) of Schedule 2, delete "Modification 3 and Modification 2" and replace with "Modification 2, Modification 3 and Modification 4".
5. In the heading of condition 8 of Schedule 2, delete "Commencement and duration" and replace with "Limits on Approval".
6. In condition 9 of Schedule 2 delete "2025" and replace with "2030".
7. After condition 9, of Schedule 2 insert the following:

9A. The Applicant must not:

- (a) process or dispatch more than 480,000 tonnes of quarrying products at the site in any calendar year;
- (b) receive more than 320,000 tonnes of VENM and ENM (in total) at the site in any calendar year;
- (c) import more than 3 million tonnes of VENM and ENM to the site; and
- (d) import VENM and ENM beyond 31 May 2030.

8. After condition 17 insert the following:

**PRODUCTION DATA**

17A. The Applicant must provide MEG with annual quarry production data, covering a full calendar year, by no later than 30 January for the following calendar year.

17B. The data must be provided using the relevant standard form and a copy of the data must be included in the Annual Review (required under condition 66).

9. In condition 20 of Schedule 2:
  - a. delete the "g" in clause 20(g) and replace with "h";
  - b. delete the "f" in clause 20(f) and replace with "g"; and
  - c. after condition 20(e), insert "(f) the Traffic Management Plan (Condition 50A)".
10. Before condition 27 insert the following:

**Importation of VENM and ENM**

26. The applicant must:

- (a) ensure only verified VENM and ENM is received at the site;
- (b) collect data on the VENM and ENM received including details of the origin, date, and quantity received; and
- (c) include a copy of this data in the Annual Review.

11. In condition 27, delete the contents of the condition and replace with:

27. No other materials classified as waste under the EPA's *Waste Classification Guidelines 2009* (or its latest version) may be received or processed on the site, except as expressly permitted in an applicable EPL, specific resource recovery order or exemption under the *Protection of the Environment Operations (Waste) Regulation 2014*.

12. In condition 28 of Schedule 2, delete the contents of the condition and replace with:

28. The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 1 at any residence on privately-owned land.

**Table 1:** Air quality criteria

<b>Pollutant</b>	<b>Averaging period</b>	<b>Criterion</b>
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a, c</sup> 25 µg/m <sup>3</sup>
	24 hour	<sup>b</sup> 50 µg/m <sup>3</sup>
Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	<sup>a, c</sup> 8 µg/m <sup>3</sup>
	24 hour	<sup>b</sup> 25 µg/m <sup>3</sup>
Total suspended particulate (TSP) matter	Annual	<sup>a, c</sup> 90 µg/m <sup>3</sup>
<sup>d</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month <sup>a</sup> 4 g/m <sup>2</sup> /month

**Notes:**

<sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).

<sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the development on its own).

<sup>c</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Secretary.

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

13. After condition 28 of Schedule 2, insert the following:

28A. The air quality criteria in Table 1 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or infrastructure to exceed the air quality criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

14. In condition 29(c) of Schedule 2, after “to ensure that areas”, insert “of the site which are exposed and active at any one time are minimised to the greatest extent practicable”.

15. After condition 29 of Schedule 2, insert the following:

29A. The Applicant must commission an expert review of the air quality monitoring system at the site. This review must:

- be undertaken by a suitably qualified and experience person(s) whose appointment has been approved by the Secretary;
- review the accuracy of the air quality monitoring system at the site over a 12 month period, in general accordance with the *Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2007)* and with a particular focus on PM<sub>2.5</sub> monitoring;
- provide recommendations (where required) to improve the accuracy of air quality monitoring system at the site; and
- be undertaken in consultation with the EPA.

29B. A copy of the expert review report along with a timetable for implementing any recommendations arising from the review required under condition 29A of this Schedule, must be submitted by 30 November 2022, or as otherwise agreed by the Planning Secretary.

The Applicant must implement the recommendations of the expert review to the satisfaction of the Secretary.

16. Delete the contents of condition 47 of Schedule 2 and insert the following:

**Noise Operating Conditions**

47. 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:** Operational noise criteria dB(A)

<b>Receiver</b>	<b>Day (7am-6pm) Monday to Saturday L<sub>Aeq</sub> (15 min)</b>	<b>6am-7am Monday to Saturday L<sub>Aeq</sub> (15 min)</b>	<b>6am-7am Monday to Saturday L<sub>A1</sub> (1 min)</b>
Receiver B	44	40	50
All other receivers	43	40	50

<sup>a</sup>The Noise Assessment Locations referred to in Table 2 are shown in Appendix 2



17. Delete the contents of Condition 50 of Schedule 2 and insert the following:

The Applicant must ensure that truck movements associated with the development do not exceed 70 outbound and 70 inbound per day and does not exceed 10 outbound and 10 inbound per hour.

18. After Condition 50 of Schedule 2, Insert the following:

**Traffic Management Plan**

50A. The Applicant must prepare a Traffic Management Plan that must:

- (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;
- (b) be prepared in consultation with TfNSW and Council;
- (c) include a Drivers' Code of Conduct that contains procedures to ensure that drivers:
  - (i) adhere to posted speed limits or other required travelling speeds;
  - (ii) adhere to designated transport routes;
  - (iii) implement safe and quiet driving practices; and
  - (iv) minimise potential conflict with school buses.
- (d) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct; and
- (e) propose measures to minimise the transmission of dust and tracking of material onto the surface of public roads from vehicles exiting the site.

The Applicant must submit the Traffic Management Plan for the approval of the Secretary by the 31 October 2021, or as otherwise agreed by the Secretary. The Applicant must implement the Traffic Management Plan as approved.

19. In condition 58 of Schedule 2:

- after "rehabilitate the site", insert "in a manner that is consistent with the final landform designs in Appendix 1,";
- After "satisfaction of the Secretary." delete "This" and replace with "All"; and
- In Table 1: Rehabilitation Objectives, delete the row and contents for "Quarry Benches".
- In Table 1: Rehabilitation Objectives, add the following row as the last row:

Water Quality	<ul style="list-style-type: none"><li>• Water retained on the site is fit for the intended post-mining land use/s</li><li>• Water discharged from the site is suitable for receiving waters and fit for aquatic ecology and riparian vegetation</li></ul>
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20. In condition 68 of Schedule 2, delete the contents of the condition and replace with:

**REPORTING AND AUDITING**

**Incident Notification**

68. The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.

21. After condition 68 of Schedule 2, insert the following:

**Non-Compliance Notification**

68A. Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

22. After condition 72 of Schedule 2 insert the following:

# APPENDIX 1 FINAL LANDFORM DESIGN

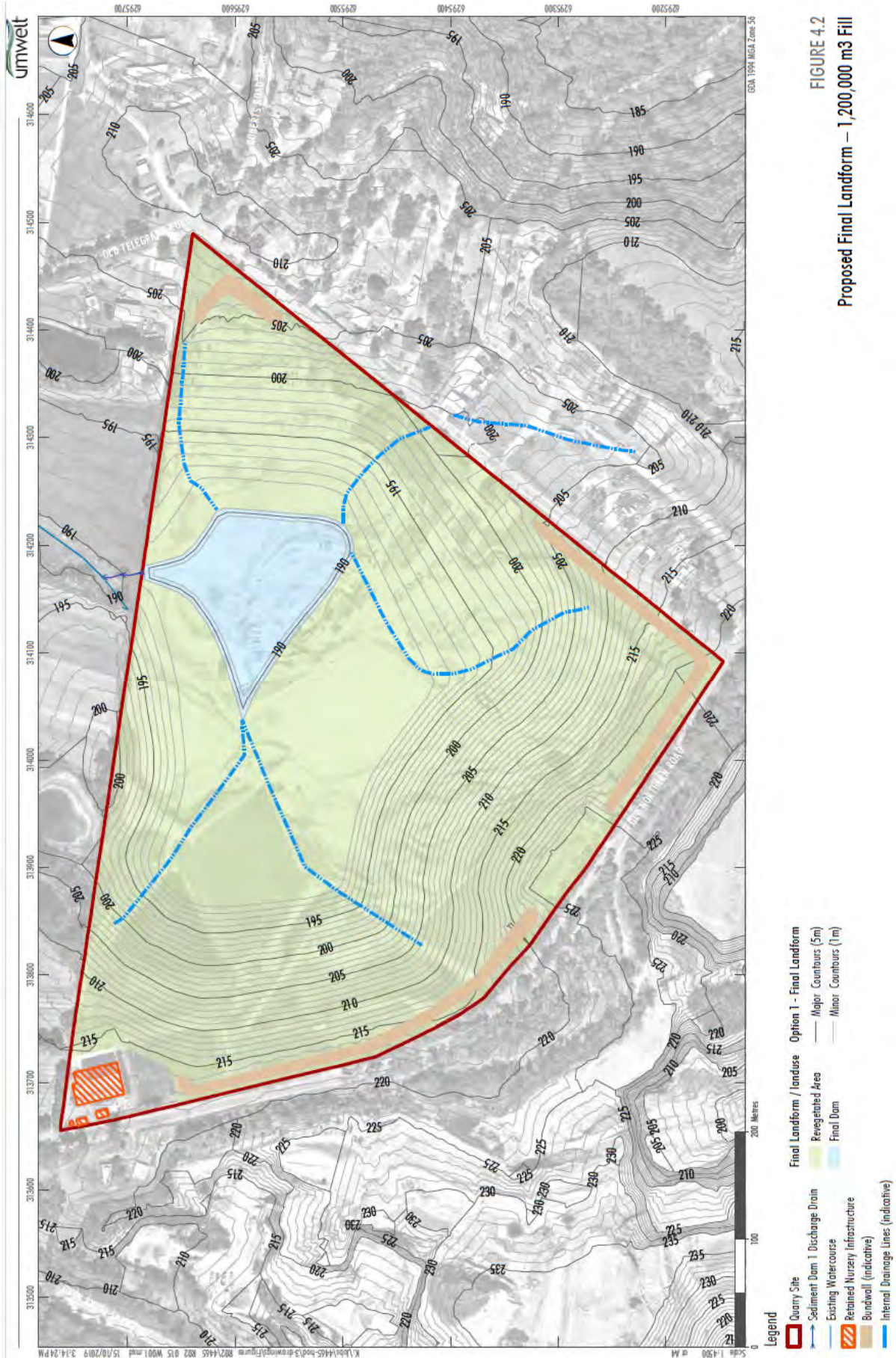


Figure 1: Final Landform Concept 1

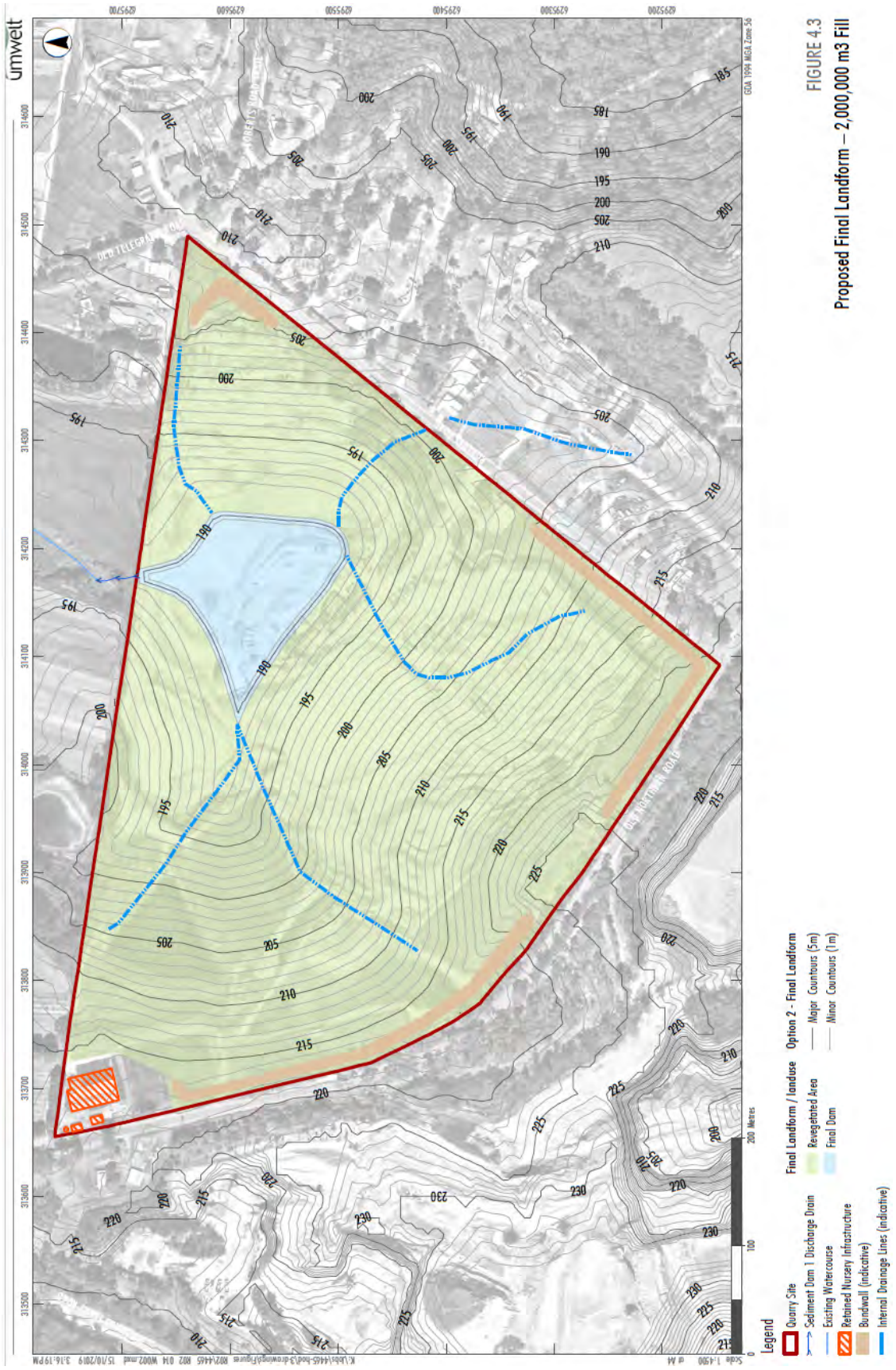


FIGURE 4.3  
Proposed Final Landform – 2,000,000 m3 Fill

Figure 2: Final Landform Concept 2

## APPENDIX 2 RECEIVER LOCATION PLAN



FIGURE 3.1  
Noise Assessment Receivers

End of Modification

**ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979**

**DETERMINATION OF A DEVELOPMENT APPLICATION UNDER SECTION 80(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979**

I, the Minister for Urban Affairs and Planning, under Section 80(1) of the Environmental Planning and Assessment Act, 1979 (the Act), determine the Development Application referred to in Schedule 1 by granting consent to the Application, subject to the conditions set out in Schedule 2.

The reason for the imposition of conditions is to minimise any adverse environmental effects of the development, consistent with the objectives of the Act.

Andrew Refshauge MP  
**Minister for Urban Affairs and Planning**

Sydney 2000 File No. S98/00772

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**SCHEDULE 1**

Application made by: Dr L. S. Martin ("the Applicant").

To: The Minister for Urban Affairs and Planning ("the Minister").

In respect of: Lots 1 and 2 DP 228308, Lot 2 DP 312327, Roberts Road, Maroota, in the Baulkham Hills Local Government Area.

For the following: Extraction and on-site processing of sand, clay and pebble; construction of a bund wall.

Development Application: DA No. 267-11-99 lodged with the Department of Urban Affairs and Planning on 22 November 1999, accompanied by a Environmental Impact Statement prepared by Nexus Environmental Planning Pty Ltd. and dated November 1999.

Determination:

- 1) To ascertain the date upon which the consent becomes effective, refer to Section 83 of the Act.
- 2) To ascertain the date upon which the consent is liable to lapse, refer to Section 95 of the Act.
- 3) Section 97 of the Act confers on an applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court exercisable within 12 months after receipt of notice.

*This instrument includes changes made by DA 267-11-99 Mod 1 in 29 November 2000 (marked red).*

*This instrument includes changes made by DA 267-11-99 Mod 3 in 18 August 2015 (marked blue).*

*This instrument includes changes made by DA 267-11-99 Mod 2 in 18 March 2016 (marked green).*

*This instrument includes changes made by DA 267-11-99 Mod 4 in 13 August 2021 (marked purple).*

**SCHEDULE 2****Conditions of Development Consent****DEFINITIONS**

The Act	<i>Environmental Planning and Assessment Act 1979</i> , as amended
Approval from EPA	means approved in writing by the EPA or as specified as a condition of a licence
BCA	Building Code of Australia
BCD	Biodiversity and Conservation Division within the Department
Calendar year	A period of 12 months from 1 January to 31 December
Conditions of this consent	The conditions set out in this Schedule
Construction	Construction of the bund wall
Council	The Hills Shire Council
DA	Development Application
DCP 500	Baulkham Hills Shire Council Development Control Plan No. 500 – Extractive Industry
Department	Department of Planning, Industry and Environment
DPIE Water	The Water Group within the Department
EIS	Development application DA 267-11-99 and supporting documentation including the Environmental Impact Statement prepared by Nexus Environmental Planning Pty Ltd, dated November 1999, including the attached landscaping plan; the fax from Holmes Air Sciences dated 21 December 1999; the letter from Nexus Environmental Planning Pty Ltd dated 21 December 1999 and attachments; the letter from Woodward-Clyde dated 21 December 1999; the letter from Woodward-Clyde dated 16 December 1999; the letter from Dick Benbow and Associates Pty Ltd dated 5 January 2000 and attachments; the letter from Dick Benbow and Associates Pty Ltd dated 27 January 2000; and the two faxes from Dick Benbow and Associates Pty Ltd dated 17 February 2000 and attachments, except as modified by the report of Dick Benbow and Associates (Report No 10065 Issue 1) dated 26 June 2000
EMP	Environmental Management Plan
ENM	Excavated Natural Material, as defined in the EPAs resource recovery orders and exemptions clauses 91, 92 and 93 of the <i>Protection of the Environment Operations (Waste) Regulation 2014</i> .
EPA	Environment Protection Authority
EPL	Environment Protection Licence under the POEO Act
GTA	General Term of Approval
Heritage NSW	Heritage NSW within the Department of Premier and Cabinet
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance
INP	<i>NSW Industrial Noise Policy (NSW EPA, 2000)</i>
LA <sub>10</sub> (15 minute)	is the sound pressure level that is exceeded for 10% of the time when measured over a 15 minute period
Laden Trucks	Trucks transporting quarry products from the site and/or trucks transporting VENM/ENM to the site
m AHD	metres Australian Height Datum
MEG	Regional NSW – Mining, Exploration and Geoscience
Minister	NSW Minister for Planning and Public Spaces, or delegate
Modification 1	Modification application 07-00M1 to DA 267-11-99 and supporting SEE titled Amendment to Method of Extraction and Related Acoustic Bund

	Wall, dated 17 July 2000 and prepared by Nexus Environmental Planning Pty Ltd
Modification 2	Modification application DA 267-11-99 Mod 2 and supporting documentation titled: <i>Environmental Assessment Section 75W Modification (2): DA 267-11-99, Hodgson Quarries and Plant Pty Ltd: Roberts Road: Maroota</i> (Volumes 1 and 2), dated 23 September 2015 and prepared by Nexus Environmental Planning Pty Ltd; Response to Submissions <i>75W Modification (2): DA 267-11-99, Hodgson Quarries and Plant Pty Ltd: Roberts Road: Maroota</i> , dated 3 December 2015 and prepared by Nexus Environmental Planning Pty Ltd; and email correspondence from Nexus Environmental Planning Pty Ltd to the Department, dated 12 February 2016, 16 February 2016 and 24 February
Modification 3	Modification application DA 267-11-99 Mod 3 and supporting documentation titled <i>Environmental Assessment Section 75W Modification (3): DA 267-11-99, Hodgson Quarry Products Pty Ltd: Roberts Road: Maroota</i> , dated 17 May 2015 and prepared by Nexus Environmental Planning Pty Ltd
Modification 4	Modification application DA 267-11-99 MOD 4 and Statement of Environmental Effects titled: <i>Roberts Road Quarry Modification 4</i> , dated December 2019 prepared by Umwelt Environmental Consulting and Submissions Report titled: <i>Roberts Road Quarry Modification 4, Response to Submissions</i> , dated March 2020 prepared by Umwelt Environmental Consulting, and additional information supporting the Response to Submissions, including: <ul style="list-style-type: none"> <li>• Revised noise assessment titled: <i>Noise Impact Assessment Rev 1</i>, dated May 2020 prepared by Umwelt Environmental Consulting;</li> <li>• Letter from Umwelt Environmental Consulting, dated 20 May 2020; and</li> <li>• Letter from Benbow Environmental, dated 10 September 2020.</li> </ul>
Non-compliance	An occurrence, set of circumstances or development that is a breach of this consent
PCA	Principal Certifying Authority
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Process Water Dam	The process water dam located in the north-eastern corner of the site
Quarrying products	Includes all saleable quarry products, but excludes tailings and other wastes and rehabilitation material
Secretary	Planning Secretary under the EP&A Act, or nominee
Subject Site	Lots 1 and 2 DP 228308, Lot 2 DP 312327, Roberts Road, Maroota, in the Baulkham Hills Local Government Area
TfNSW	Transport for NSW
VENM	Virgin Excavated Natural Material, as defined in the POEO Act
Waste	Has the same meaning as the definition of the term in the Dictionary to the POEO Act
Wet weather high groundwater level	The rolling average of all recorded groundwater level measurements at any monitoring location on the site, as first recorded following any rainfall event of at least 50 mm over any 24-hour period, and as contour mapped using this data

## INTEGRATED DEVELOPMENT

Integrated development is development (not being complying development) that, in order for it to be carried out, requires development consent and one or more of the approvals set out in the Act. The subject proposal is integrated development, as it requires development consent and the approval of the Environment Protection Authority under the *Protection of the Environment Operations Act 1997* and, the approval of the Department of Land and Water Conservation under Parts 2 and 5 of the *Water Act 1912*. The general terms of approval of both the EPA and the [DPIE Water](#) therefore form part of this Consent.

## GENERAL

### ***Obligation to Prevent and Minimise Harm to the Environment***

1. There is an obligation on the Applicant to prevent and minimise harm to the environment throughout the life of the project. This requires that all practicable measures are to be taken to prevent and minimise harm that may result from the construction, operation and, where relevant, the decommissioning of the development.

### ***Adherence to Terms of DA and EIS***

2. The Applicant shall:
  - (a) carry out the development generally in accordance with the EIS, [Modification 1](#), [Modification 2](#), [Modification 3](#) and [Modification 4](#); and
  - (b) comply with the conditions of this consent.

If there is any inconsistency between the documents in [Condition 2\(a\)](#), the most recent documents shall prevail to the extent of the inconsistency. The conditions of this consent shall prevail over documents in [Condition 2\(a\)](#) to the extent of any inconsistency.

### ***Compliance***

3. The Applicant shall comply with all reasonable requirements of the [Secretary](#) in respect of the implementation of the Conditions of this Consent, within such time as the [Secretary](#) agrees. The [Secretary](#) may order the Applicant to cease work until non-compliance has been addressed to the [Secretary's](#) satisfaction.
4. The Applicant shall ensure that all contractors and sub-contractors are aware of, and comply with, the Conditions of this Consent.
5. The Applicant shall comply with all relevant conditions prescribed in Part 7 of the *Environmental Planning and Assessment Regulation 1994*, as required by Section 80A (11) of the Act.
6. The Applicant SHALL submit a Conditions Compliance Report to the [Secretary](#) prior to the commencement of extraction in areas that are not currently subject to extraction. Subsequent reports will be submitted annually for the first three years of extraction in areas not currently subject to extraction. Further reports SHALL be submitted as required by the [Secretary](#).

To enable ready comparison with the EIS's predictions, diagrams and tables, the Conditions Compliance Reports shall include, but not be limited to, the following matters:

- (a) a compliance audit of the performance of the project against conditions of Consent and statutory approvals;
- (b) a review of the effectiveness of the environmental management of the development;
- (c) the results of environmental monitoring required under this Consent or other approvals, including interpretations and discussion by a suitably qualified person;



- (d) a listing of any variations obtained to approvals applicable to the DA since the last report;
  - (e) a record of all complaints and the actions taken to mitigate all such complaints;
  - (f) a report detailing the rehabilitation measures undertaken since the last report; and
  - (g) environmental management targets and strategies for stages of the development yet to be completed.
7. The **Secretary** may, after considering a Conditions Compliance Report, notify the Applicant of any reasonable requirements for compliance with this Consent. The Applicant SHALL comply with those requirements within such time as the **Secretary** may direct.

*Note: The Applicant is obliged to ensure that all statutory requirements, including all relevant legislation, Regulations, Australian Standards, Codes, Guidelines and Notices, Conditions and Directions of the Councils and relevant government agencies are met and approvals obtained.*

### **Limits on Approval**

8. No extraction shall commence in areas that are not currently subject to extraction, until the Applicant has:
- (a) **constructed the bund walls at the corner of Roberts Road and Old Northern Road;**
  - (b) submitted the Conditions Compliance Report required under Condition 6; and
  - (c) obtained all licences necessary for the commencement of extraction.
9. The duration of extraction under this Consent is **until 31 May 2030**. The Applicant shall ensure that rehabilitation of all disturbed areas is completed within six months of completion of extraction.
- 9A. The Applicant must not:
- (a) process or dispatch more than 480,000 tonnes of quarrying products at the site in any calendar year;
  - (b) receive more than 320,000 tonnes of VENM and ENM (in total) at the site in any calendar year;
  - (c) import more than 3 million tonnes of VENM and ENM to the site; and
  - (d) import VENM and ENM beyond 31 May 2030.

### **Complaints Procedures**

10. Prior to commencement of construction, the Applicant shall:
- (a) publicise a telephone number on which complaints about the subject development can be registered during the hours of operation in Condition 16; and
  - (b) publicise a postal address where written complaints may be lodged.
- The telephone number and postal address shall be displayed on the property where it can be read from a public road, for the duration of the development.
11. The Applicant shall record details of all complaints received and actions taken in response to complaints in an up-to-date log book. The log book shall be made available for inspection upon request by the **Secretary**, the EPA or the Council; and a summary of complaints received shall be included in the Conditions Compliance Reports under Condition 6.
12. The Applicant shall ensure that an initial response to complaints is provided to the complainant within 24 hours of receipt. The Applicant shall then:
- (a) investigate the concerns raised by the complainant and undertake all reasonable attempts to determine the cause of concern; and
  - (b) if adverse impacts are identified, undertake all practicable measures to modify the activity which may be causing the impacts.
13. If the Applicant's response does not address the complaint to the satisfaction of the complainant within six weeks, the Applicant shall inform the **Secretary** and take any action as directed by the **Secretary**.

This may include a requirement to carry out independent investigations of noise and/or dust at the cost of the Applicant, in accordance with Condition 14.

14. If the **Secretary** is satisfied that an independent investigation is required, the Applicant shall:
- appoint a qualified independent person or team to plan and implement an investigation to qualify the impact and determine the sources of the impact; and
  - bear the cost of the independent investigation and make available plans, programs and other information necessary for the independent person to form an appreciation of the past, present and future works and their effects on dust and/or noise emissions.

This investigation is to be carried out in accordance with a documented Plan. The Plan shall be designed and implemented to measure and/or compute (with appropriate calibration by measurement) the relevant noise and/or dust levels at the complainant's property, that are emitted by the development; and specify a monitoring period and reporting schedule.

The independent person or team, the Plan and the timing of its implementation, shall be approved by the **Secretary**. The independent person or team shall report to the **Secretary** and the Applicant.

Further independent investigations shall cease if the **Secretary** is satisfied that the relevant levels are not being exceeded and are unlikely to be exceeded in the future.

### **Dispute Resolution**

15. In the event that the Applicant, Council, the PCA, or a government authority other than the Department, cannot agree on the specification or requirements applicable under this Consent, the matter shall be referred by either party to the **Secretary** or, if not resolved, to the Minister, whose determination of the disagreement shall be final and binding on the parties.

### **HOURS OF OPERATION**

16. Unless prior written approval of the EPA is obtained, the hours of operation are:
- construction: 7.00am to 6.00pm Monday to Friday
  - extraction and processing of material: 7.00am to 6.00pm, Monday to Friday and 7.00am to 1.00pm on Saturdays
  - vehicle loading: 6.00am to 6.00pm, Monday to Friday and 6.00am to 1.00pm on Saturdays.
- No works shall be undertaken on Sundays or Public Holidays.

These restrictions do not apply to routine maintenance work, such as the repair of machinery, provided the work does not result in exceedance of the noise limits in Condition 47.

### **DEPTH OF EXTRACTION**

17. The Applicant shall ensure that extraction does not take place below a level 2 metres above the wet weather high groundwater level of the regional aquifer, as measured and mapped on the site (see Conditions 39(d) and 44).

### **PRODUCTION DATA**

- 17A. Each year the Applicant must provide MEG with annual quarry production data, covering a full calendar year, by no later than 30 January the following calendar year.
- 17B. The data must be provided using the relevant standard form and a copy of the data must be included in the Annual Review (required under condition 66).

## ENVIRONMENTAL MANAGEMENT PLAN

18. The Applicant shall prepare a Construction Environmental Management Plan (EMP) to the satisfaction of the [Secretary](#) prior to commencement of construction. The Construction EMP shall contain appropriate measures which demonstrate how the environmental objectives for the project will be achieved, including objectives stated in this Consent; and contain a monitoring, reporting and response program.

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

19. The Applicant shall prepare an Operational Environmental Management Plan (EMP) in consultation with the relevant authorities and to the satisfaction of the [Secretary](#), prior to the commencement of extraction under this Consent. The EMP shall incorporate and integrate environmental management for the existing extraction areas, as well as the areas approved under this Consent.

20. The Operational EMP shall include, but not be limited to:
- (a) environmental objectives for the site;
  - (b) the Air Quality Management Plan (Condition 29);
  - (c) the [Water Management Plan \(Condition 42\)](#);
  - (d) the Noise Management Plan (Condition 46);
  - (e) the Road Noise Management Plan (Condition 48);
  - (f) [the Traffic Management Plan \(Condition 50A\)](#);
  - (g) [the Flora and Fauna Management Plan \(Condition 55\)](#); and
  - (h) [the Rehabilitation Plan \(Condition 58\)](#).

21. The Applicant shall make copies of both EMPs available to Council, EPA and [DPIE Water](#) within 14 days of approval by the [Secretary](#). The Applicant shall also make a current copy of the EMPs available for inspection by the public or these agencies, for the duration of the Consent.

22. The Applicant shall, in consultation with the [Secretary](#), the EPA and the [DPIE Water](#), update the Operational EMP from time to time in order to ensure continuing compliance with the Conditions of this Consent and all relevant approvals and licenses. The EMP shall be responsible for determining if any significant changes to the Operational EMP should be referred to the [Secretary](#) for approval.

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

23. *Deleted.*

24. *Deleted.*

25. *Deleted.*

### Importation of VENM and ENM

26. The applicant must:
- (a) ensure only verified VENM and ENM is received at the site
  - (b) collect data on the VENM and ENM received including detail of the origin, date, and quantity received; and
  - (c) include a copy of this data in the Annual Review.

## WASTE

27. No other materials classified as waste under the EPA's *Waste Classification Guidelines 2009* (or its latest version) may be received or processed on the site, except as expressly permitted in an applicable EPL, specific resource recovery order or exemption under the *Protection of the Environment Operations (Waste) Regulation 2014*.

## AIR QUALITY

### *Air Quality Criteria*

28. The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria in
- 29.
30. TABLE at any residence on privately-owned land.

**Table 1:** *Air quality criteria*

<i>Pollutant</i>	<i>Averaging period</i>	<i>Criterion</i>
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a, c</sup> 25 µg/m <sup>3</sup>
	24 hour	<sup>b</sup> 50 µg/m <sup>3</sup>
Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	<sup>a, c</sup> 8 µg/m <sup>3</sup>
	24 hour	<sup>b</sup> 25 µg/m <sup>3</sup>
Total suspended particulate (TSP) matter	Annual	<sup>a, c</sup> 90 µg/m <sup>3</sup>
<sup>d</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month   <sup>a</sup> 4 g/m <sup>2</sup> /month

**Notes:**

<sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).

<sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the development on its own).

<sup>c</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Secretary.

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

- 28A. The air quality criteria in

A1.

Table do not apply if the Applicant has an agreement with the owner/s of the relevant residence or infrastructure to exceed the air quality criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

### *Air Quality Management*

31. The Applicant shall prepare an Air Quality Management Plan as part of the EMP. The Air Quality Management Plan shall:
- (a) identify existing and potential sources of dust deposition, TSP and fine particulates (PM<sub>10</sub> and PM<sub>2.5</sub>) and specify appropriate monitoring intervals and locations. The purpose of the monitoring is to evaluate, assess and report on these emissions and the ambient impacts with the objective of understanding the development's contribution to levels of dust deposition, TSP and fine particulates in ambient air around the site;

- (b) provide a monitoring plan having regard to local meteorology and the relevant Australian Standards, identifying the methodologies to be used, including justification for monitoring intervals, weather conditions, seasonal variations, selecting locations, periods and times of measurements;
- (c) provide details of dust suppression measures for all sources of dust from the development, including a planting and watering regime to ensure that areas of the site which are exposed and active at any one time are minimised to the greatest extent practicable. The use of a polymer in the water to minimise dust impacts shall be investigated as part of this Plan;
- (d) provide details of actions to ameliorate impacts if they exceed the relevant criteria; and
- (e) provide the design of the reactive management system intended to reduce the day-to-day impacts of dust and fine particulates due to the development.

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

- 29A. The Applicant must commission an expert review of air quality monitoring at the site. This review must:
- (a) be undertaken by a suitably qualified and experience person(s) whose appointment has been endorsed by the Secretary;
  - (b) review the accuracy of air quality monitoring at the site over a 12 month period, in general accordance with the *Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2007)* and with a particular focus on PM<sub>2.5</sub> monitoring;
  - (c) provide recommendations (where required) to improve the accuracy of air quality monitoring at the site; and
  - (d) be undertaken in consultation with the EPA.

- 29B. A copy of the expert review report along with a timetable for implementing any recommendations arising from the review required under condition 29A of this Schedule, must be submitted by 1 October 2022, or as otherwise agreed by the Planning Secretary.

The Applicant must implement the recommendations of the expert review to the satisfaction of the Secretary.

- 32. Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises.<sup>1</sup>
- 33. The Applicant shall cease offending work at such times when the operations are resulting in visible dust emissions blowing in a direction so as to cross onto public roads or lands not owned by the Applicant.
- 34. The Applicant shall install, operate and maintain a sprinkler system to adequately water all cleared areas and stockpiles so as to minimise dust emissions to acceptable levels.
- 35. The Applicant shall ensure that all vehicular movements on unsealed areas are restricted to specific routes and that all vehicles within the subject site keep to a speed limit of 30 km/h.
- 36. The Applicant shall ensure that trucks are covered when entering and leaving the premises carrying loads of potentially dust generating material.

### ***Air Quality Monitoring***

- 37. All monitoring equipment is to be installed and operational prior to commencement of construction.
- 38. Operation of dust deposition gauges and monitoring must be carried out in accordance with;

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<sup>1</sup> Environment Protection Authority General Term of Approval

- (a) Australian Standard 3580.10. 01 (1991) Particulates – Deposited Matter – Gravimetric Method. Approved method AM-19 referred to in *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*, December 1999.
  - (b) Australian Standard 2724.3 (1984) Particulate Matter – Determination of Total Suspended Particulates (TSP) - High Volume Sampler Gravimetric Method. Approved method AM 15 referred to in *Approved Methods for the sampling and Analysis of Air Pollutants in New South Wales*, December 1999.
  - (c) Australian Standard 3580.9.6 (1990) for Suspended Particulate Matter – PM10 High Volume Sampler with Size Selective Inlet-Gravimetric Method. Approved method AM-18 referred to in *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*, December 1999.<sup>2</sup>
39. A meteorological station measuring wind speed and direction must be installed and operated by the Applicant at a site determined in consultation with the EPA.<sup>3</sup>

## SOIL AND WATER

*Note: The Applicant is required to obtain the necessary water licences for the development under the Water Act 1912 and/or Water Management Act 2000.*

### Limits on Extraction

40. The Applicant shall not extract:
- (a) below a depth of 182 m AHD in the footprint of the Process Water Dam, if not already extracted as at the date of Modification 2; and
  - (b) below a depth of 186.1 m AHD in all other areas of the site; unless in accordance with Condition 17, and following written notification to the Secretary and DPIE Water.

### Groundwater Study and Remediation Works

41. Within six weeks of the date of approval of Modification 2, the Applicant shall commission a comprehensive groundwater study of the site. This study must:
- (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary and DPIE Water;
  - (b) consult with DPIE Water;
  - (c) examine all existing records of groundwater levels at the site;
  - (d) develop an interim contour map of the wet weather high groundwater level of the regional aquifer, based on all available records (see also Condition 44); and
  - (e) provide advice and recommendations on the Groundwater Monitoring Program as set out in Condition 43.
42. Unless otherwise agreed by the Secretary, the Applicant shall submit a report of the study to the Secretary and DPIE Water within six months of commissioning the study. The report must be accompanied by a Groundwater Management Improvement Program, based on the study's findings and recommendations which includes a program of proposed timeframes for implementation. Should the Applicant propose not to implement any of the report's recommendations, it must provide detailed justification to this effect.

<sup>2</sup> Environment Protection Authority General Term of Approval

<sup>3</sup> Environment Protection Authority General Term of Approval

The Groundwater Management Improvement Program must be prepared and implemented to the satisfaction of the Secretary. Progress against the Program shall be reported through Annual Reviews and considered as part of the Independent Environmental Audit.

43. Within six months of the submission of the Groundwater Study and accompanying documents (see Conditions 39 and 40), the Applicant must infill any area of the site identified as being below the wet weather high groundwater level to at least that level as mapped (see Condition 39(d)).

Within six months of any update of the groundwater level contour map, the Applicant must infill any area of the site identified as being below the wet weather high groundwater level to at least that level as mapped (see Condition 44).

### **Water Management Plan**

44. The Applicant shall prepare a Water Management Plan for the development to the satisfaction of the Secretary. This plan must be prepared in consultation with **DPIE Water** by suitably qualified and experienced person/s whose appointment has been approved by the Secretary, and be submitted to the Secretary for approval by 31 December 2016. The plan must be updated on an annual basis in consultation with **DPIE Water** for three years from the date of approval of Modification 2 and thereafter as agreed with by the Secretary.

In addition to the standard requirements for management plans (see Condition 65), this plan must include a:

- (a) Site Water Balance that:
- includes details of:
    - sources and security of water supply, including contingency planning;
    - water use on site;
    - water management on site, including groundwater inflows to the quarry voids and site discharges; and
    - audit and reporting procedures, including comparisons of the site water balance each calendar year; and
    - describes the measures that would be implemented to minimise clean water use on site and maximise recycling opportunities;
- (b) Surface Water Management Plan, that includes:
- a detailed description of the surface water management system on site, including the:
    - clean water diversion systems;
    - erosion and sediment controls;
    - effluent irrigation system;
    - water transfers from the extraction areas;
    - water storages; and
    - discharge points;
  - design objectives and performance criteria for proposed:
    - erosion and sediment control structures;
    - water storages, including quarry voids;
    - site discharges; and
    - control of water pollution from rehabilitated areas of the site;
  - performance criteria, including trigger levels for investigating any potentially adverse impacts for surface water quality;
  - a program to monitor:
    - the effectiveness of the water management system;
    - site discharge water quality; and
    - surface water level and quality in the Process Water Dam, including the quantification of rainfall inflow, groundwater inflow and evaporation;

- a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project;
  - long term water quality management objectives and the measures to achieve these objectives;
  - a plan that ensures surface stormwater runoff from the disturbed areas is directed to the sedimentation dam(s);
  - a plan that ensures tailgate drainage does not discharge into or onto any adjoining public or Crown road, any other persons land, any Crown land, any river, creek or watercourse, any groundwater aquifer, any native vegetation as described under the *Native Vegetation Conservation Act 1997* and any wetlands of environmental significance;
  - a detailed description of design and construction criteria for the Process Water Dam based on a feasibility study of:
    - capacity to construct multiple cells within the overall dam footprint (ie a two stage or three stage dam);
    - whether the dam floor and walls are able to be effectively lined with compacted clay (especially for multiple cells);
    - whether effective hydraulic separation can be achieved between such cells;
    - rehabilitating such cells to create a single dam within the final landform; and
    - the appropriateness of diverting runoff received from off-site around the dam;
  - a strategy for the decommissioning of water management structures, including storage, sedimentation and leachate dams once extraction is complete; and
  - audit and reporting procedures, including comparisons of the monitoring results each calendar year and quarterly reporting of surface water monitoring results;
- (c) Groundwater Management Plan that takes into account the *Web-based Reporting Guideline* (DPE 2015) and *Groundwater Monitoring and Modelling Plans – Information for Prospective Mining and Petroleum Exploration Activities* (DPI 2014), and includes:
- detailed baseline data on groundwater yield and quality in groundwater bores on privately-owned land, that could be affected by the project;
  - a program to undertake surveyed probe testing of all extracted areas where clay fines have been deposited to:
    - accurately determine the depth of extraction and depth of clay fines;
    - identify any ongoing intersection or other interaction between clay fines and the regional groundwater aquifer;
    - identify any geotechnical characteristics of the emplaced clay fines which may pose risks to workplace safety or implementation of the process water dam design or the final landform; and
    - identify measures which can be successfully used in rehabilitating these areas;
  - a program to monitor potential groundwater quality impacts to the regional aquifer from receiving off-site runoff water in the Process Water Dam;
  - groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts, in accordance with the *NSW Aquifer Interference Policy*;
  - a program to monitor:
    - the impacts of the project on:
      - groundwater inflows to water storages;
      - any groundwater bores on privately-owned land that could be affected by the project;
 and
    - seepage from water storages or backfilled voids on site;
  - a plan to respond to any exceedances of the groundwater assessment criteria;
  - emergency contingency plans for implementation in the event that the groundwater is encountered during excavation; and
  - audit and reporting procedures, including comparisons of the monitoring results each calendar year and quarterly reporting of groundwater monitoring results,



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

### **Groundwater Monitoring**

45. The Applicant shall prepare a Groundwater Monitoring Program for the development to the satisfaction of the Secretary. This program must:
- be prepared in consultation with **DPIE Water** and be submitted to the Secretary for approval within four months of the date of approval of Modification 2;
  - include proposed construction of a network of at least five active monitoring bores around the south-eastern, southern, western and north-western boundaries of the extraction area (but outside of the overall extraction footprint) in proximity to extraction Phases 1 to 6 as identified in Modification 2, to collect continuous groundwater level monitoring data from the regional aquifer;
  - include proposed construction to deepen (or replace) PT84MW1 in order that a bore in that general location monitors the regional aquifer; and
  - include proposed construction of active monitoring bores within the largest components of at least the two forthcoming extraction Phases (on a rolling basis), each to collect at least 2 years of continuous baseline groundwater monitoring data prior to extraction commencing with that Phase.
46. The results of the Groundwater Monitoring Program shall be reported the Department and **DPIE Water**, using contour plans depicting the surface topography, updated contour maps of the wet weather high groundwater level of the regional aquifer and proposed depth of extraction for each extraction Phase. Reporting is to occur on a six monthly basis for the duration of extractive operations, and throughout rehabilitation of the site, unless otherwise agreed with the Secretary.

The Applicant shall implement the Groundwater Monitoring Program as approved from time to time by the Secretary.

### **Process Water Dam Design and Construction**

47. The Applicant must ensure that the Process Water Dam is designed and constructed in a manner that satisfies the design and construction criteria for the Process Water Dam as developed under the Surface Water Management Plan (see condition 42(b) above).

## **NOISE**

### **Noise Management Plan**

48. The Applicant shall prepare a Noise Management Plan as part of the EMP.

The Noise Management Plan shall:

- identify existing and potential noise sources and their relative contribution to noise impacts from the development;
- specify appropriate intervals for noise monitoring to evaluate, assess and report noise emission levels due to construction and normal operations of the development under prevailing weather conditions;
- outline the methodologies to be used, including justification for monitoring intervals, weather conditions, seasonal variations, selecting locations, periods and times of measurements, the design of any noise modelling or other studies, including the means for determining the noise levels emitted by the development;
- specify measures to be taken to document any higher level of impacts or patterns of temperature inversions, and detail actions to quantify and ameliorate enhanced impacts if they occur;

- (e) provide details of noise amelioration measures, including measures to be used to reduce the impact of intermittent, low frequency and tonal noise (including truck reversing alarms) and reactive management responses for particular noise sources; and
- (f) contingency measures to be implemented should noise complaints be received.
- (g) provision for the notification of adjoining property owners of the commencement and duration of works adjoining the boundary;
- (h) construction of temporary noise shielding to residences affected by short-term noise impacts, including the bund recommended under Modification 2, and include an assessment of the effectiveness of this measure in reducing noise levels; and
- (i) include a noise reduction strategy for typical operations to ensure the noise levels from these operations do not exceed the noise criteria specified in Condition 47.

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

### Noise Operating Conditions

49. The Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 1 at any residence on privately-owned land.

Table 1: Operational noise criteria dB(A)

Receiver	Day (7am-6pm) Monday to Saturday <i>L<sub>Aeq</sub> (15 min)</i>	6am-7am Monday to Saturday <i>L<sub>A1</sub> (1 min)</i>	6am-7am Monday to Saturday <i>L<sub>Aeq</sub> (15 min)</i>
Receiver B	44	50	40
All other receivers	43	50	40

<sup>a</sup>The Noise Assessment Locations referred to in Table 1 are shown in Appendix 2

Noise generated by the development is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy* (as may be updated or replaced from time-to-time).

However, these criteria do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.”

- 47(a) The excavator to be used is to be fitted with acoustic mufflers to achieve a noise level of approximately 76dB(A) when measured at 7 metres.
- 47(b) The on-site generator is to be fitted with an acoustic enclosure to ensure that noise levels less than 44dB(A) at 30m are achieved.
- 47(c) A noise compliance investigation is to undertaken within one month of the installation of the equipment to demonstrate compliance with the noise level limits stated in Conditions 47(a) and 47(b). The results of the compliance investigation are to be provided for the approval of the Secretary within 14 days of the completion of the investigations.
- 47(d) The Applicant must ensure works associated with atypical operations, as described in Modification 2, only occur:
  - (a) for a maximum of 24 days in a year, and only between 8 am to 5 pm on those days, Monday to Saturday;
  - (b) after an investigation of options for avoiding multiple atypical operations at any one time so as to limit noise levels at affected receptors, and the outcomes of this investigation are detailed in the Noise Management Plan; and

- (c) at least 24 hours after notifying potentially affected receptors, with such notification to include information on the duration and extent of works, the likely noise to be experienced, and a contact telephone number.

## TRAFFIC AND TRANSPORT

### **Road Noise Management Plan**

50. The Applicant shall ensure that traffic noise from the development does not exceed (L Aeq(1 hr)) 55 dB(A) between 7 am and 10 pm and 50 dB(A) between 10 pm and 7 am at any affected residence under adverse weather conditions. Where ambient Leq levels already exceed these criteria, the Applicant shall ensure that traffic noise from the development does not result in an increase of more than 2 dB(A).

*Note: Adverse weather conditions means in the presence of winds up to 3 metres per second and/or temperature inversions of up to 4 degrees Centigrade per 100 metres.*

51. The Applicant shall prepare a Road Noise Management Plan as part of the EMP. The Plan shall document measures to be taken to meet the criteria, including a monitoring, reporting and response program; and methods for educating drivers in the reduction of road noise impacts.

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

### **Truck movements**

52. The Applicant must ensure that truck movements associated with the development do not exceed 70 outbound and 70 inbound per day and does not exceed 10 outbound and 10 inbound per hour.

### **Traffic Management Plan**

- 50A. The Applicant must prepare a Traffic Management Plan that must:
- (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;
  - (b) be prepared in consultation with TfNSW and Council;
  - (c) include a Drivers' Code of Conduct that contains procedures to ensure that drivers:
    - (i) adhere to posted speed limits or other required travelling speeds;
    - (ii) adhere to designated transport routes;
    - (iii) implement safe and quiet driving practices; and
    - (iv) minimise potential conflict with school buses.
  - (d) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct; and
  - (e) propose measures to minimise the transmission of dust and tracking of material onto the surface of public roads from vehicles exiting the site.

The Applicant must submit the Traffic Management Plan as approved by the Secretary by the 31 October 2021, or otherwise agreed by the Secretary. The Applicant must implement the Traffic Management Plan as approved by the Secretary.

### **Section 94A Contributions**

53. The Applicant shall pay to Council a contribution under Section 94A of the Act at the rate of \$0.65 per tonne of all extracted/ processed material transported from the subject site.

The following conditions apply to the payment of this contribution:

- (A) The contribution will be calculated and paid monthly from the date of this Consent;
- (b) The contribution will be indexed and adjusted annually as from the date of Consent, in accordance with the Consumer Price Index. This adjustment will be applicable to each financial year for the duration of this Consent and shall take effect from and including July each year, commencing 1 July 2000;
- (c) On or before the fourteenth day of each month for the duration of the Consent, the Applicant shall deliver to Council weighbridge records showing the true quantities of extracted/processed material transported from the property during the immediately preceding month and the Council will then, as soon as it can conveniently do so, issue an invoice to the Applicant, to be paid within fourteen days;
- (d) The Council has the right to inspect and have the original records relating to any extraction/processing material, including numbers and types of laden trucks, trailers and load quantities transported from the property audited, at any time when Council makes a written request to do so;
- (e) The Council will pay all the said contribution payments into a specially identified account for payment towards the rehabilitation, restoration, repair and/or maintenance of Old Northern and Wisemans Ferry Roads within the Baulkham Hills Shire boundary.

Note: This condition has been imposed in accordance with Council's Contributions Plan No. 6 – Extractive Industries. A copy of this plan may be inspected at the Customer Service Centre, Council's Administration Complex, corner of Carrington and Showground Roads, Castle Hill, between the hours of 8:30 am and 4:30 pm weekdays.

## FLORA AND FAUNA

54. Deleted.

55. The Applicant shall not clear the strip of remnant vegetation along the southern fence line (Old Northern Road) and the vegetation to the north of the site entrance (Roberts Road) containing Blue Mountains Mahogany (*Eucalyptus notabilis*). This area shall be fenced off to prevent vehicles entering the area.
56. In construction of the bund walls at the corner of Roberts Road and Old Northern Road, the Applicant shall minimise disturbance to existing native vegetation.

### **Flora and Fauna Management Plan**

57. The Applicant shall prepare a Flora and Fauna Management Plan as part of the EMP. The Plan shall be prepared in consultation with National Parks and Wildlife Service and Council, and shall:
  - (a) describe the characteristics and location of species, populations and communities that the proposal may impact upon;
  - (b) consider the feasibility and practicality of salvaging trees removed for the development for relocation to conserved or rehabilitated areas, for the purposes of reconstructing habitat for ground fauna
  - (c) contain a program for the active management and maintenance of all conserved and rehabilitated vegetation (as detailed in the EIS and required under this Consent) including consideration of:
    - post-extraction land use objectives for the site;
    - utilisation of local endemic species or species naturally occurring in the Maroota area;
    - planting around the conservation area to further buffer this area and enhance its long term viability as a bushland ecosystem;

- connection of existing areas and future areas of revegetation to form a network of wildlife corridors throughout site and to adjoining lands to facilitate species recruitment through natural immigration;
  - provision of rocks of varying sizes to provide refuge and basking sites for herpetofauna;
  - fencing of revegetated areas to prohibit grazing by stock; and
  - provision of artificial nest boxes for a range of arboreal fauna.
- (d) mitigation measures to be implemented should operations compromise the significant flora and fauna communities identified in the EIS;
- (e) an ongoing monitoring program of the existing and proposed revegetated areas to assess their floristical structure and diversity, resilience and robustness to disturbance, and fauna species diversity. The information obtained from the monitoring shall be used to guide future revegetation and management efforts; and
- (f) include detailed performance and completion criteria for evaluating the performance of the flora and fauna management measures and rehabilitation of the site, including triggers for any necessary remedial action.
58. The Applicant shall maintain the revegetated areas for the duration of the Consent. Maintenance may include:
- replanting failed or unsatisfactory areas
  - repairing erosion problems
  - fire management – fire suppression or fire encouragement
  - pest and weed control
  - control of feral animal populations
  - maintain and repair fencing
  - fertiliser application
  - watering plants in drier areas, especially in the establishment phase
  - application of lime or gypsum to control pH and improve soil structure.

## HERITAGE

59. If, during the development, the Applicant becomes aware of any heritage or archaeological material, all work likely to affect the material shall cease immediately and the relevant authorities consulted about an appropriate course of action prior to recommencement of work. The relevant authorities may include [Heritage NSW](#), and the Local Aboriginal Land Councils. Any necessary permits or consents shall be obtained and complied with prior to recommencement of work.

## LANDSCAPE AND REHABILITATION

### Rehabilitation Objectives

60. The Applicant shall rehabilitate the site in a manner that is generally consistent with the final landform designs in [Appendix 1](#), to the satisfaction of the Secretary. All rehabilitation must comply with the objectives in [Table 1](#):

*Table 1: Rehabilitation Objectives*

Feature	Objective
Site (as a whole)	<ul style="list-style-type: none"> <li>• Safe, stable and non-polluting</li> <li>• Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and minimising visual impacts when viewed from surrounding land</li> <li>• </li> </ul>
Surface Infrastructure	<ul style="list-style-type: none"> <li>• Decommissioned and removed, unless the Secretary agrees otherwise</li> </ul>

Quarry Pit Floor	<ul style="list-style-type: none"> <li>• Landscaped and revegetated using improved pasture species, native trees and understorey species</li> </ul>
Final Void	<ul style="list-style-type: none"> <li>• Minimise the height and slope of batters</li> <li>• Minimise the drainage catchment</li> </ul>
Community	<ul style="list-style-type: none"> <li>• Ensure public safety</li> <li>• Minimise the adverse socio-economic effects of quarry closure</li> </ul>

### ***Progressive Rehabilitation***

59. The Applicant shall 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.

*Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to further disturbance in future.*

### ***Landscape and Rehabilitation Management Plan***

60. The Applicant shall prepare a Landscape and Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be submitted to the Secretary for approval by 30 June 2017, unless otherwise agreed by the Secretary;
  - provide details of the conceptual final landform and associated land uses for the site;
  - describe the short, medium and long-term measures that would be implemented to ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent;
  - include a detailed description of the measures that would be implemented over the next 3 years (to be updated for each 3 year period following the 3 years covered by the initial approval of the plan) including the procedures to be implemented for:
    - maximising the salvage of environmental resources within the approved disturbance area for beneficial reuse;
    - protecting vegetation and fauna habitat outside the approved disturbance area on-site;
    - minimising the impacts on native fauna;
    - landscaping the site to minimise visual and lighting impacts;
    - reviewing improved pasture species and application rates;
    - controlling weeds and feral pests;
    - controlling erosion;
    - controlling access; and
    - bushfire management;
  - include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;
  - include a mass balance calculation to ensure that appropriate volumes of material are available to implement the final landform as described in this plan;
  - provide for the construction and maintenance of the process water dam in accordance with the approved design and construction criteria (see Condition 42(b));
  - identify the potential risks to the successful rehabilitation of the site, and include a description of the contingency measures that would be implemented to mitigate these risks; and
  - include details of who would be responsible for monitoring, reviewing, and implementing the plan.

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

### **Conservation and Rehabilitation Bond**

61. By 31 December 2017, the Applicant shall lodge a Conservation and Rehabilitation Bond with the Department to ensure that the management of biodiversity and the rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the Flora and Fauna Management Plan and Landscape and Rehabilitation Plan. The sum of the bond shall be determined by:
- (a) calculating the cost of rehabilitating the site taking into account the likely surface disturbance over the following 3 years of quarrying operations; and
  - (b) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary.

*Note: If the rehabilitation of the site is completed to the satisfaction of the Secretary, then the Secretary will release the bond. If the rehabilitation of the site is not completed to the satisfaction of the Secretary, then the Secretary will call in all or part of the bond, and arrange for the completion of the relevant works.*

62. Within 3 months of each Independent Environmental Audit (see Condition 70), the Applicant shall review, and if necessary revise, the sum of the Conservation and Rehabilitation Bond to the satisfaction of the Secretary. This review must consider the:
- (a) effects of inflation;
  - (b) likely cost of rehabilitating the site (taking into account the likely surface disturbance over the next 3 years of the development); and
  - (c) performance of the implementation of the rehabilitation of the site to date.

## **ENVIRONMENTAL MANAGEMENT**

### **Environmental Management Strategy**

63. The Applicant shall 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 by 30 June 2016;
  - (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 in relation to the development.

The Environmental Management Strategy is to include a copy of the sequence of extraction as updated under Modification 2, with all dam areas on the site clearly labelled and described.

The Applicant shall implement the approved strategy as approved from time to time by the Secretary.

### **Adaptive Management**

64. The Applicant shall assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in this Consent. 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 steps 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**

65. The Applicant shall 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;
    - 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;
    - 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**

66. By the end of March each year (or as otherwise agreed by the Secretary), the Applicant shall review the environmental performance of the development for the previous calendar year to the satisfaction of the Secretary. This review must:
- (a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the:



- relevant statutory requirements, limits or performance measures/criteria;
  - monitoring results of previous years; and
  - relevant predictions in the EIS, Modification 1 and Modification 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 next year to improve the environmental performance of the development.

### **Revision of Strategies, Plans and Programs**

67. Within 3 months of the submission of:
- (a) an annual review under Condition 66 above;
  - (b) an incident report under Condition 68 below;
  - (c) an audit report under Condition 70 below; or
  - (d) any modification to the conditions of this Consent (unless the conditions require otherwise), the Applicant shall review, and if necessary revise, 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, unless the Secretary agrees otherwise, the revised document must be submitted to the Secretary for approval.

*Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.*

## **REPORTING AND AUDITING**

### **Incident Notification**

68. The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.

### **Non-Compliance Notification**

- 68A. Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

### **Regular Reporting**

69. The Applicant shall 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**

70. Every 3 years from the date of this consent and at the completion of works under this consent, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
- (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
  - (b) include consultation with the relevant agencies;
  - (c) assess the environmental performance of the development and assess whether it is complying with the requirements in this Consent and any relevant EPL (including any assessment, plan or program required under these approvals);
  - (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and
  - (e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals.

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

71. Within 6 weeks of the completion of this audit, unless the Secretary agrees otherwise, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

#### **ACCESS TO INFORMATION**

72. By 30 June 2016 the Applicant shall:
- (a) make copies of the following publicly available on its website:
    - the documents identified in Condition 2(a) above;
    - 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;
    - the annual reviews of the development (for the last 5 years, if applicable);
    - 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 FINAL LANDFORM DESIGN

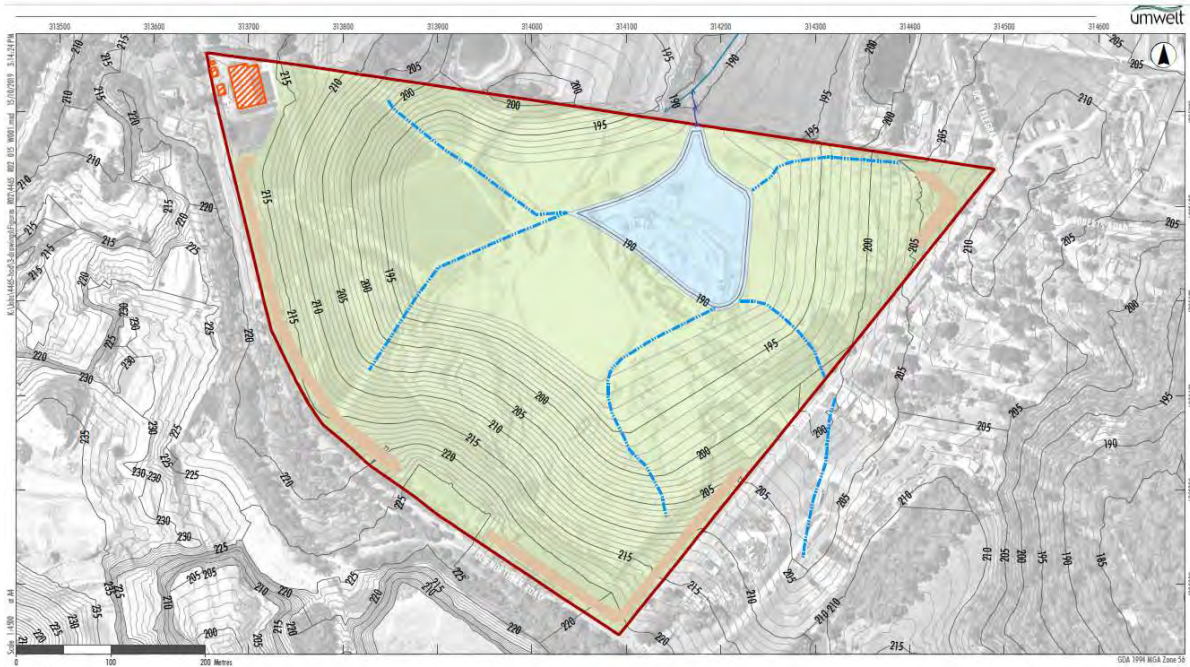


FIGURE 4.2  
Proposed Final Landform – 1,200,000 m3 Fill

### Final Landform Concept 1

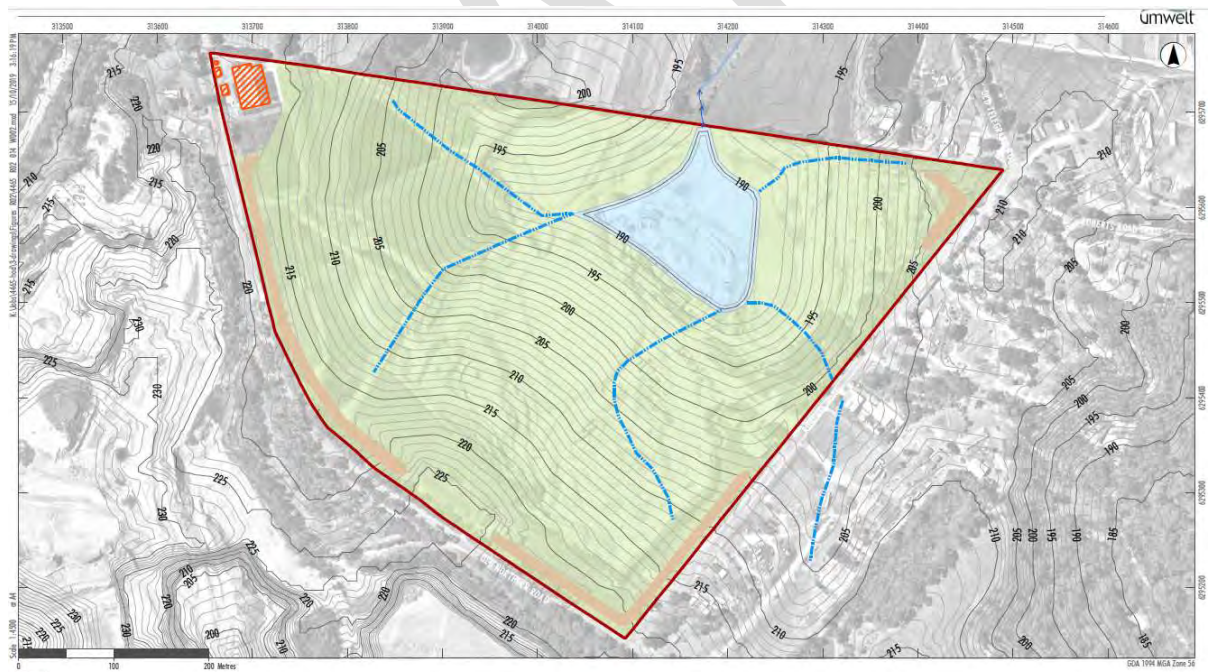


FIGURE 4.3  
Proposed Final Landform – 2,000,000 m3 Fill

### Final Landform Concept 2

## APPENDIX 2 RECEIVER LOCATION PLAN



# **Appendix D**

## **Environmental**

### **Protection Licence 6535**

# Licence Variation



Licence - 6535

HB MAROOKA PTY LTD  
ABN 68 100 465 521  
PO BOX 1778  
GOSFORD NSW 2250

Attention: Martin Hodgson

Notice Number 1603067  
File Number EF13/3063  
Date 26-Nov-2020

## NOTICE OF VARIATION OF LICENCE NO. 6535

### BACKGROUND

- A. HB MAROOKA PTY LTD (licensee) is the holder of Environment Protection Licence No. 6535 (licence) issued under the *Protection of the Environment Operations Act 1997 (Act)*. The licence authorises the carrying out of activities at CNR ROBERTS & OLD NORTHERN ROADS, MAROOKA, NSW, 2756 (premises).
- B. As part of the licence review, on 12 November 2020 the licensee confirmed that section 19 'Land-based Extractive' activity should be updated to reflect the current 'Extractive Activities' activity. It was also confirmed that more than 30,000 tonnes is extracted at the premises in a year and that the 'Crushing, grinding or separating' activity under Schedule 1 section 16 is still current. The activity name for section 19 was updated in Schedule 1 of the Act on 5 July 2019.
- C. As part of the licence review, on 16 November 2020 the licensee confirmed that the Ancillary Activities listed on the licence were still being undertaken at the premises and agreed that the activities required updating to reflect the current activity names under Schedule 1 section 2 'Agricultural processing' and section 20 'Helicopter-related activities'. The activity names for sections 2 and 20 were updated in Schedule 1 of the Act on 28 April 2008.
- D. On 17 November 2020 the Environment Protection Authority (EPA) completed the licence review which identified that the one Scheduled activity and both the Ancillary activities listed on the licence, under Schedule 1 sections 2, 19 and 20, did not reflect the current activity names as listed in Schedule 1 of the Act. A variation is required to update the Scheduled and Ancillary activity names on the licence to reflect the correct activity names under Schedule 1 of the Act.
- E. On 19 November 2020, after a phone conversation with the licensee to discuss the activity description and criteria for both ancillary activities, the licensee advised that both ancillary activities could be removed from the licence as each activity does not meet the criteria under Schedule 1 of the Act.

# Licence Variation

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- F. On 19 November 2020, the EPA provided the licensee with a draft version of the licence to reflect changes discussed in paragraph E above.
- G. On 23 November 2020 the licensee advised that they had reviewed that DRAFT licence variation provided to them by the EPA for comment on 19 November 2020 and that the variation is correct and can be issued.
- H. On 24 November 2020, the EPA provided the licensee with a draft version of the licence variation notice for comment.
- I. On 26 November 2020, the licensee advised that they had reviewed that DRAFT licence variation notice provided to them by the EPA for comment on 24 November 2020 and that the variation notice is correct and can be issued.

## VARIATION OF LICENCE NO. 6535

- 1. By this notice the EPA varies licence No. 6535. The attached licence document contains all variations that are made to the licence by this notice.
- 2. The following variations have been made to the licence:
  - Update of Scheduled activity name under condition A1.1 to reflect current legislation :
    - from 'Land-based Extractive' to 'Extractive activities' (Schedule 1 section 19). Scale remains unchanged.
  - Removal of 'Other activities' (condition A3) and the obsolete ancillary activities under condition A3.1:
    - 'Agricultural produce industries' (Schedule 1 section 2), as the activity does not meet the criteria.
    - 'Aircraft (helicopter) facilities' (Schedule 1 section 20), as the activity does not meet the criteria.

A handwritten signature in black ink, appearing to be 'Lara Barrington'.

.....  
**Lara Barrington**  
**Unit Head Regulatory Operations**  
**Regulatory Operations Metropolitan West**  
(by Delegation)

## INFORMATION ABOUT THIS NOTICE

- This notice is issued under section 58(5) of the Act.

# Licence Variation

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- Details provided in this notice, along with an updated version of the licence, will be available on the EPA's Public Register (<http://www.epa.nsw.gov.au/prpoeo/index.htm>) in accordance with section 308 of the Act.

## **Appeals against this decision**

- You can appeal to the Land and Environment Court against this decision. The deadline for lodging the appeal is 21 days after you were given notice of this decision.

## **When this notice begins to operate**

- The variations to the licence specified in this notice begin to operate immediately from the date of this notice, unless another date is specified in this notice.
- If an appeal is made against this decision to vary the licence and the Land and Environment Court directs that the decision is stayed the decision does not operate until the stay ceases to have effect or the Land and Environment Court confirms the decision or the appeal is withdrawn (whichever occurs first).



# Licence Variation Summary

Licence - 6535



This Summary serves merely to highlight changes made to areas of this licence. Changes made to tables within the licence are indicated using underline (for additions) and Strikethrough (for deletions).

While changes to conditions are indicated under subheadings such as 'New condition', 'Old condition', 'Replaced by', and 'Removed condition'.

The attached licence document contains all the changes made to this licence by the attached variation notice.

## 1 Administrative Conditions

### What the licence authorises and regulates

<u>Scheduled Activity</u>	<u>Fee Based Activity</u>	<u>Scale</u>
<del>Land-based extractive activity</del>	<del>Land-based extractive activity</del>	<del>&gt; 100000 - 500000 T annual capacity to extract, process or store</del>
<u>Extractive activities</u>	<u>Extractive activities</u>	<u>&gt; 100000 - 500000 T annually extracted or processed</u>

### Other activities

<u>Ancillary Activity</u>
<del>Agricultural Produce Industries</del>
<del>Aircraft (helicopter) facilities</del>

# Environment Protection Licence

Licence - 6535

<b>Licence Details</b>	
Number:	6535
Anniversary Date:	12-March

<b>Licensee</b>
HB MARROOTA PTY LTD
PO BOX 1778
GOSFORD NSW 2250

<b>Premises</b>
HB MARROOTA PTY LTD
CNR ROBERTS & OLD NORTHERN ROADS
MARROOTA NSW 2756

<b>Scheduled Activity</b>
Crushing, grinding or separating
Extractive activities

<b>Fee Based Activity</b>	<b>Scale</b>
Crushing, grinding or separating	> 100000-500000 T annual processing capacity
Extractive activities	> 100000-500000 T annually extracted or processed

<b>Region</b>
Metropolitan West - Sydney
4 Parramatta Square, 12 Darcy Street
PARRAMATTA NSW 2150
Phone: (02) 9995 5000
Fax: (02) 9995 6900
Locked Bag 5022
PARRAMATTA NSW 2124



# Environment Protection Licence

Licence - 6535

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# Environment Protection Licence

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Licence - 6535



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# Environment Protection Licence

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Licence - 6535



## 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).

# Environment Protection Licence

Licence - 6535



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:

<b>HB MARROOTA PTY LTD</b>
<b>PO BOX 1778</b>
<b>GOSFORD NSW 2250</b>

subject to the conditions which follow.

# Environment Protection Licence

Licence - 6535

## 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
Crushing, grinding or separating	Crushing, grinding or separating	> 100000 - 500000 T annual processing capacity
Extractive activities	Extractive activities	> 100000 - 500000 T annually extracted or processed

### A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
HB MAROOKA PTY LTD
CNR ROBERTS & OLD NORTHERN ROADS
MAROOKA
NSW 2756
LOT 1 DP 228308, LOT 2 DP 228308, LOT 2 DP 312327

A2.2 The premises location is shown on the map below.

# Environment Protection Licence

Licence - 6535



### 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; 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 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.

## 3 Limit Conditions



# Environment Protection Licence

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Licence - 6535

## 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 Noise limits

L2.1 Noise from the premises must not exceed the sound pressure level expressed as LA10 (15 minute) of 45 dB(A), except as expressly provided by this licence.

L2.2 Noise from the premises is to be measured or computed at any point within one metre of any residential boundary, or at any point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise level limits in Condition L2.1.

## 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.

O3.2 All loaded trucks entering or leaving the premises must have their loads covered.

### O4 Other operating conditions

O4.1 The licensee must prevent any tracking of mud on to public roads by vehicles leaving the premises.

# Environment Protection Licence

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Licence - 6535



## 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:
- 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.
- 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.

### M2 Recording of pollution complaints

- M2.1 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.
- M2.2 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.
- M2.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- M2.4 The record must be produced to any authorised officer of the EPA who asks to see them.

### M3 Telephone complaints line

- M3.1 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.
- M3.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a

# Environment Protection Licence



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complaints line so that the impacted community knows how to make a complaint.

M3.3 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
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.

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.

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 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.

R1.7 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

# Environment Protection Licence



Licence - 6535

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

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.

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

## R2 Notification of environmental harm

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

# Environment Protection Licence

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Licence - 6535



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.

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.

# Environment Protection Licence

Licence - 6535

## Dictionary

### General Dictionary

<b>3DGM [in relation to a concentration limit]</b>	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
<b>Act</b>	Means the Protection of the Environment Operations Act 1997
<b>activity</b>	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
<b>actual load</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>AM</b>	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> .
<b>AMG</b>	Australian Map Grid
<b>anniversary date</b>	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.
<b>annual return</b>	Is defined in R1.1
<b>Approved Methods Publication</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>assessable pollutants</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>BOD</b>	Means biochemical oxygen demand
<b>CEM</b>	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> .
<b>COD</b>	Means chemical oxygen demand
<b>composite sample</b>	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.
<b>cond.</b>	Means conductivity
<b>environment</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>environment protection legislation</b>	Has the same meaning as in the Protection of the Environment Administration Act 1991
<b>EPA</b>	Means Environment Protection Authority of New South Wales.
<b>fee-based activity classification</b>	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
<b>general solid waste (non-putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

# Environment Protection Licence

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<b>flow weighted composite sample</b>	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
<b>general solid waste (putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>grab sample</b>	Means a single sample taken at a point at a single time
<b>hazardous waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>licensee</b>	Means the licence holder described at the front of this licence
<b>load calculation protocol</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>local authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>material harm</b>	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
<b>MBAS</b>	Means methylene blue active substances
<b>Minister</b>	Means the Minister administering the Protection of the Environment Operations Act 1997
<b>mobile plant</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>motor vehicle</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>O&amp;G</b>	Means oil and grease
<b>percentile [in relation to a concentration limit of a sample]</b>	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.
<b>plant</b>	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
<b>pollution of waters [or water pollution]</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>premises</b>	Means the premises described in condition A2.1
<b>public authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>regional office</b>	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
<b>reporting period</b>	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.
<b>restricted solid waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>scheduled activity</b>	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
<b>special waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>TM</b>	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> .

# Environment Protection Licence



Licence - 6535

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

Mr Nigel Sargent

Environment Protection Authority

(By Delegation)

Date of this edition: 14-June-2000



# Environment Protection Licence



Licence - 6535

## End Notes

- 1 Licence varied by change to Common Name field, issued on 15-Oct-2001, which came into effect on 15-Oct-2001.
- 2 Licence transferred through application 140865, approved on 29-Oct-2001, which came into effect on 24-Sep-2001.
- 3 Licence varied by notice 1012523, issued on 21-May-2002, which came into effect on 15-Jun-2002.
- 4 Licence varied by correction to EPA Sub Region data record, issued on 20-Sep-2002, which came into effect on 20-Sep-2002.
- 5 Licence transferred through application 141899, approved on 23-Apr-2003, which came into effect on 21-Apr-2003.
- 6 Licence varied by notice 1034428, issued on 13-Dec-2004, which came into effect on 07-Jan-2005.
- 7 Licence varied by notice 1081877, issued on 10-Mar-2008, which came into effect on 10-Mar-2008.
- 8 Licence varied by Change to schedule 1, issued on 07-May-2008, which came into effect on 07-May-2008.
- 9 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 10 Licence varied by notice 1111632, issued on 01-Apr-2010, which came into effect on 01-Apr-2010.
- 11 Licence varied by notice 1527501 issued on 09-Mar-2015
- 12 Licence varied by notice 1529566 issued on 03-Jun-2015

# Appendix E

# Water Licence

# Conditions

## Monitoring Bore Licences

# NSW Office of Water

sydney South Coast Region  
Po Box 3720  
10 Valentine Avenue  
Parramatta NSW 2124  
Phone: (02 )82817777

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

10BL158808



Maroota Super Fund Pty Ltd  
P O Box 1778  
Gosford NSW 2250

LICENSE NUMBER
10BL158808
DATE LICENSE VALID FROM
12-Nov-1998
DATE LICENSE VALID TO
PERPETUITY
FEE
\$0.00

ABN 47661556763 GST NIL

LOCATION OF WORKS		
Portion(s) or Lot/Section/DP	PARISH	COUNTY
1//228308	Maroota	Cumberland
PT84MW1 & PT84MW5		

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

CONDITIONS APPLYING TO THIS LICENSE ARE

As shown on the attached Condition Statement

COPY

## NSW Office of Water

### CONDITIONS STATEMENT REFERRED TO ON 10BL158808 ISSUED UNDER PART V OF THE WATER ACT, 1912 ON 12-Nov-1998

- (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 LICENCE 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

## 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\*](#)
- [Approval issued under the \*Water Management Act 2000\*](#)

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

### **Water licence conversion status**

**Water Licence Number**

10 ▼

BL ▼

158808

#### Notes:

*Water Act 1912* licences and authorities are being converted to water access licences and approvals under the *Water Management Act 2000* as water sharing plans commence (see [licence conversion](#)).

If a *Water Act 1912* licence has been converted, the search results will display the water access licences and approvals that have been created. Water access licences are registered in the [Water Access Licence Register](#) administered by Land and Property Information. Those water access licences that do not display a WAL number in the search results are still to have their licence details confirmed and completed.

Due to privacy laws very little information on *Water Act 1912* licence and authorities can be made freely available. Full information for a particular licence or authority can be obtained if required for conveyancing by applying to the NSW Office of Water. See [legal searches for water related interests](#).

« Previous Search

Print Export

## Search Results

**The licence 10BL158808 has not been converted and is not subject to a water sharing plan.**

**Disclaimer:** The NSW Office of Water does not warrant the data is current nor does it warrant that the data or the data capturing processes are free from corruption or error.

**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@dpi.nsw.gov.au](mailto:water.enquiries@dpi.nsw.gov.au) or contact 1800 353 104.

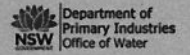


# NSW Office of Water

Sydney South Coast Region  
Po Box 3720  
10 Valentine Avenue  
Parramatta NSW 2124  
Phone: (02 ) 82817777

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

10BL605696



Maroota Super Fund Pty Ltd  
P O Box 1778  
Gosford NSW 2250

LICENSE NUMBER
10BL605696
DATE LICENSE VALID FROM
13-Jan-2015
DATE LICENSE VALID TO
PERPETUITY
FEE
\$0.00

ABN 47661556763 GST NIL

## LOCATION OF WORKS

<u>Portion(s) or Lot/Section/DP</u>	<u>PARISH</u>	<u>COUNTY</u>
1//228308	Maroota	Cumberland

<u>TYPE OF WORKS</u>	<u>PURPOSE(S) FOR WHICH WATER MAY BE USED</u>
Bore	Monitoring Bore

PT84MW6

## CONDITIONS APPLYING TO THIS LICENSE ARE

As shown on the attached Condition Statement

**ORIGINAL**

## NSW Office of Water

### CONDITIONS STATEMENT REFERRED TO ON 10BL605696 ISSUED UNDER PART V OF THE WATER ACT, 1912 ON 13-Jan-2015

(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.

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(B) SUCH METHODS AS AGREED TO OR DIRECTED BY NSW OFFICE OF WATER.

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- ANY OTHER PERSONS LAND;
- ANY CROWN LAND;
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- 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.

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(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

## Information about a water licence or approval

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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\*](#)
- [Approval issued under the \*Water Management Act 2000\*](#)

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

### **Water licence conversion status**

**Water Licence Number**

10 ▼

BL ▼

605696

#### **Notes:**

*Water Act 1912* licences and authorities are being converted to water access licences and approvals under the *Water Management Act 2000* as water sharing plans commence (see [licence conversion](#)).

If a *Water Act 1912* licence has been converted, the search results will display the water access licences and approvals that have been created. Water access licences are registered in the [Water Access Licence Register](#) administered by Land and Property Information. Those water access licences that do not display a WAL number in the search results are still to have their licence details confirmed and completed.

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«Previous Search

Print Export

## Search Results

**The licence 10BL605696 has not been converted and is not subject to a water sharing plan.**

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**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@dpi.nsw.gov.au](mailto:water.enquiries@dpi.nsw.gov.au) or contact 1800 353 104.

# 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

10BL605795



Maroota Super Fund Pty Ltd  
P O Box 1778  
Gosford NSW 2250

LICENSE NUMBER
10BL605795
DATE LICENSE VALID FROM
29-Aug-2016
DATE LICENSE VALID TO
PERPETUITY
FEE
\$0.00

ABN 72189919072 GST NIL

## LOCATION OF WORKS

<u>Portion(s) or Lot/Section/DP</u>	<u>PARISH</u>	<u>COUNTY</u>
1//228308	Maroota	Cumberland

MW 8, 9, 13

<u>TYPE OF WORKS</u>	<u>PURPOSE(S) FOR WHICH WATER MAY BE USED</u>
Bore	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  
10BL605795  
ISSUED UNDER PART V OF THE WATER ACT, 1912  
ON 29-Aug-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,

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(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.

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End Of Conditions



# 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

10BL605797



Hitchcock, Noelene Joyce  
100 Old Telegraph Road  
Maroota NSW 2756

LICENSE NUMBER
10BL605797
DATE LICENSE VALID FROM
29-Aug-2016
DATE LICENSE VALID TO
PERPETUITY
FEE
\$0.00

ABN 72189919072 GST NIL

### LOCATION OF WORKS

<u>Portion(s) or Lot/Section/DP</u>	<u>PARISH</u>	<u>COUNTY</u>
B//356946	Maroota	Cumberland

MW11

<u>TYPE OF WORKS</u>	<u>PURPOSE(S) FOR WHICH WATER MAY BE USED</u>
Bore	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  
10BL605797  
ISSUED UNDER PART V OF THE WATER ACT, 1912  
ON 29-Aug-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:-
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- ANY CROWN LAND;
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(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.

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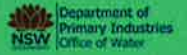
End Of Conditions

# 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

10BL605798



Martin, Glin  
16 Bay Rd  
Arcadia NSW 2159

LICENSE NUMBER
10BL605798
DATE LICENSE VALID FROM
29-Aug-2016
DATE LICENSE VALID TO
PERPETUITY
FEE
\$0.00

ABN 72189919072 GST NIL

## LOCATION OF WORKS

Portion(s) or Lot/Section/DP  
2//312327

PARISH  
Maroota

COUNTY  
Cumberland

MW10

## 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  
10BL605798  
ISSUED UNDER PART V OF THE WATER ACT, 1912  
ON 29-Aug-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.

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(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.

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End Of Conditions

# 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

10BL605799



Martin, Leonard Stanley  
16 Bay St  
Arcadia NSW 2159

LICENSE NUMBER
10BL605799
DATE LICENSE VALID FROM
29-Aug-2016
DATE LICENSE VALID TO
PERPETUITY
FEE
\$0.00

ABN 72189919072 GST NIL

Portion(s) or Lot/Section/DP	LOCATION OF WORKS	
	PARISH	COUNTY
2//228308	Maroota	Cumberland
MW7, 12		

TYPE OF WORKS	PURPOSE(S) FOR WHICH WATER MAY BE USED
Bore	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  
10BL605799  
ISSUED UNDER PART V OF THE WATER ACT, 1912  
ON 29-Aug-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.

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End Of Conditions

# Pumping Bore Licence

BOX 1W  
(A1845103)

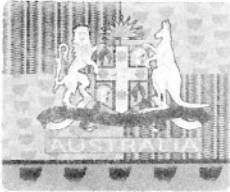
COPY



NEW SOUTH WALES

# CERTIFICATE OF TITLE

WATER MANAGEMENT ACT, 2000



WAL TITLE REFERENCE <b>WAL24163</b>	
EDITION <b>1</b>	DATE OF ISSUE <b>1/9/2014</b>
CERTIFICATE AUTHENTICATION CODE <b>MP27-QV-7HVH</b>	



This certificate is issued under s87B of the Water Management Act, 2000.

WARNING NOTE: INFORMATION ON THIS REGISTER IS NOT GUARANTEED

TENURE TYPE: CONTINUING

PT84PB1

HOLDER(S)

LEONARD STANLEY MARTIN

(DW AG357440)

ENCUMBRANCES

1. TERM TRANSFER: NIL

ACCESS LICENCE DETAILS

CATEGORY: AQUIFER

SHARE COMPONENT:

SHARE - 45 UNITS

WATER SOURCE - MAROOTA TERTIARY SANDS GROUNDWATER SOURCE

WATER SHARING PLAN - GREATER METROPOLITAN REGION GROUNDWATER SOURCES

EXTRACTION COMPONENT:

TIMES/RATES/CIRCUMSTANCES - SUBJECT TO THE CONDITIONS OF THE WATER

ACCESS LICENCE

EXTRACTION FROM - AQUIFER

EXTRACTION ZONE - WHOLE WATER SOURCE

NOMINATED WORKS:

WORK APPROVAL NUMBER(S) - 10WA114817

INTERSTATE TAGGING ZONE - NIL

CONDITIONS

LICENCE CONDITIONS FORM A PART OF THIS LICENCE AND AFFECT THE SHARE AND EXTRACTION COMPONENTS. CONDITION STATEMENTS ARE AVAILABLE FROM THE NSW OFFICE OF WATER (NOW).

NOTES

A WATER LICENCE INFORMATION SHEET IS AVAILABLE FROM THE NSW OFFICE OF WATER (NOW) AND SHOULD BE REFERRED TO IN INTERPRETING THIS LICENCE. NOW WEBSITE WWW.WATER.NSW.GOV.AU, PHONE 1800 353 104, EMAIL INFORMATION@WATER.NSW.GOV.AU NOW REFERENCE NUMBER: 10AL114816 PREVIOUS WATER ACT LICENCE NUMBER(S): 10PT901430, 10BL159748.

\*\*\*\* END OF CERTIFICATE \*\*\*\*

ANY ATTEMPT TO ALTER THIS CERTIFICATE COULD RESULT IN HEAVY FINES OR IMPRISONMENT (S.141 REAL PROPERTY ACT).

## 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\*](#)
- [Approval issued under the \*Water Management Act 2000\*](#)

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

### **Water licence conversion status**

**Water Licence Number**

10 ▼

BL ▼

159748

#### **Notes:**

*Water Act 1912* licences and authorities are being converted to water access licences and approvals under the *Water Management Act 2000* as water sharing plans commence (see [licence conversion](#)).

If a *Water Act 1912* licence has been converted, the search results will display the water access licences and approvals that have been created. Water access licences are registered in the [Water Access Licence Register](#) administered by Land and Property Information. Those water access licences that do not display a WAL number in the search results are still to have their licence details confirmed and completed.

Due to privacy laws very little information on *Water Act 1912* licence and authorities can be made freely available. Full information for a particular licence or authority can be obtained if required for conveyancing by applying to the NSW Office of Water. See [legal searches for water related interests](#).

« Previous Search

Print Export

## Search Results

**Access licenses created for '10BL159748'**

WAL No.	Water Source	Status			
<a href="#">24163</a>	Maroota Tertiary Sands Groundwater Source	Current			
Category [Subcategory]	Status	Water Source	Tenure Type	Management Zone	Share Components (units or ML)
Aquifer	Current	Maroota Tertiary Sands Groundwater Source	Continuing		45.00

#### Extraction Times or Rates

Subject to conditions water may be taken at any time or rate

#### Nominated Work Approval(s)

10WA114817

#### - Conditions

#### Plan Conditions

##### Water sharing plan

#### Greater Metropolitan Region Groundwater Sources

##### Take of water

- MW0929-00001 From 1 July 2018, if the water supply work nominated on this access licence is located at or less than 40 m from the top of the high bank of a river then:
- A. water must not be taken in this groundwater source when flows are in the Very Low Flow Class for an unregulated river access licence in that river.
  - B. This restriction will only apply when the system that confirms when water can be taken is available on DPI Water website.
  - C. DPI Water will inform the licence holder in writing of the applicable restrictions and how to access the information on its website when this system becomes operative.
- MW0604-00001 Water allocations remaining in the account for this access licence must not be carried over from one water year to the next water year.
- 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.
- MW0603-00001 The total volume of water taken under this access licence in any water year must not exceed a volume equal to:
- A. the sum of water in the account from the available water determination for the current year, plus
  - B. the net amount of water assigned to or from the account under a water allocation assignment, plus
  - C. any water re-credited by the Minister to the account.
- ##### 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.
- MW0606-00001 The volume of water taken in the water year must be recorded in the logbook at the end of each water year. The maximum volume of water permitted to be taken in that water year must also be recorded in the logbook.
- 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 DPI Water.
- Reporting**
- 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](mailto: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.

### Other Conditions

NIL

### Approvals created for '10BL159748'

Approval No.	Water Source	Status
<a href="#">10WA114817</a>	Maroota Tertiary Sands Groundwater Source	Current

Kind of Approval	Issue Date	Expiry Date	Approval Number	Status	Water Source
Water Supply Works	01-JUL-2011	14-JUN-2025	10WA114817	Current	Maroota Tertiary Sands Groundwater Source

Work Type	Description	No of Works	Location (Lot/DP)
Extraction Works Gw	Bore	1	Lot 1, DP 228308

### Water Access Licences nominating these works

Reference Number	WAL Number
10AL114816	24163

### - Conditions

### Plan Conditions

Water sharing plan	Greater Metropolitan Region Groundwater 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.

**Water management works**

MW0097-00001 If contaminated water is found above the production aquifer during the construction of the water supply work authorised by this approval, the licensed driller must:

- A. notify DPI Water in writing within 48 hours of becoming aware of the contaminated water, and
- B. adhere to the Minimum Construction Requirements for Water Bores in Australia (2012), as amended or replaced from time to time.

MW0487-00001 The water supply work authorised by this approval must be constructed within three (3) years from the date this approval is granted.

MW0044-00001 When a water supply work authorised by this approval is to be abandoned or replaced, the approval holder must contact DPI Water in writing to verify whether the work must be decommissioned.

The work is to be decommissioned, unless the approval holder receives notice from the Minister not to do so.

When decommissioning the work the approval holder must:

- A. comply with the minimum requirements for decommissioning bores prescribed in the Minimum Construction Requirements for Water Bores in Australia (2012), as amended or replaced from time to time, and
- B. notify DPI Water in writing within sixty (60) days of decommissioning that the work has been decommissioned.

**Monitoring and recording**

MW0481-00001 A logbook must be kept and maintained at the authorised work site or on the property for each water supply work authorised by this approval, unless the work is metered and fitted with a data logger.

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](mailto: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.

MK0485-00001 Within sixty (60) days of completing construction of the water supply work authorised by this approval, the approval holder must provide a completed Form A for that work to DPI Water.

**Other Conditions****Take of water**

DK0316-00128 The approval holder must not take water from the approved work at a rate that exceeds 3.0 L/second.

**Water management works**

DK1363-00001	The approval holder must not construct or install works used for the purpose of conveying, distributing or storing water from the works authorised by this approval, that obstruct the reasonable passage of floodwaters flowing in, to, or from a river or lake.
DK1202-00001	The approval holder must allow DPI Water or any person authorised by it, full and free access to the approved works, either during or after construction, for the purpose of carrying out inspection or test of the approved works and its fittings and must carry out any work or alterations deemed necessary by the department for the protection or proper maintenance of the approved 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.

**Land to which the converted entitlement previously related.**

Lot/DP	Description
Lot 1, DP 228308	Work Location
Lot 1, DP 228308	Land Benefited
Lot 2, DP 228308	Land Benefited
Lot 2, DP 312327	Land Benefited

**Disclaimer:** The NSW Office of Water does not warrant the data is current nor does it warrant that the data or the data capturing processes are free from corruption or error.

**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@dpi.nsw.gov.au](mailto:water.enquiries@dpi.nsw.gov.au) or contact 1800 353 104.



## Dam Licences

## 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 Access Licence (WAL) Number

WAL

A WAL number starts with the letters 'WAL' followed by several numbers

Can't find your WAL number? Do you have a reference number? A reference number starts with a two digit number, followed by 'AL' and then several numbers. Use the following tool to find your WAL by entering your reference number. [Enter the reference number to find the WAL number.](#)

Notes:

The search results will list the conditions imposed on the water access licence. Any approved water supply work/s nominated on the water access licence are identified by the approval number/s for the work/s.

The information about a water access licence provided in the search results is a summary and may not always be up to date. If you require full and up to date details about a particular water access licence (including current holders, share and extraction component details, encumbrances and notations) you should search the [Water Access Licence Register](#) administered by Land and Property Information.

- Water Act 1912 Licences and Authorities**
- Approval issued under the Water Management Act 2000**

Find out if a Water Act 1912 licence has been converted

- Water licence conversion status**

« Previous Search

Print Export

## Search Results

Category [Subcategory]	Status	Water Source	Tenure Type	Management Zone	Share Components (units or ML)
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Unregulated River	Current	Hawkesbury And Lower Nepean Rivers Water Source	Continuing	Lower Hawkesbury River Management Zone	264.00
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Extraction Times or Rates

Subject to conditions water may be taken at any time or rate

Nominated Work Approval(s)

10CA104888

- Conditions

Plan Conditions

Water sharing plan      Greater Metropolitan Region Unregulated River Water Sources

Take of water

- 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.
  
- 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.
  
- 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.
  
- 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.
  
- MW0013-00002      A. Water must not be taken from the Lower Hawkesbury River Management Zone of Hawkesbury and Lower Nepean Rivers Water Source when flows are in the Very Low Flow Class.  
 B. This restriction will only apply when the system that confirms when water can be taken is available on the relevant licensor website.  
 C. the relevant licensor will inform the licence holder in writing of the applicable restrictions and how to access the information on its website when this system becomes operative.
 

This restriction does not apply if water is to be taken from a runoff harvesting dam or an in-river dam pool.
  
- 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.

Monitoring and recording

MW2338-00001

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

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.

Reporting

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](mailto: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.

Other Conditions

NIL

Disclaimer: The NSW Office of Water does not warrant the data is current nor does it warrant that the data or the data capturing processes are free from corruption or error.

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@dpi.nsw.gov.au](mailto:water.enquiries@dpi.nsw.gov.au) or contact 1800 353 104.



### Approval details

---

<b>Approval number</b>	10CA104888
<b>Status</b>	CURRENT*
<b>Approval kind</b>	Water Supply Works Water Use
<b>Water sharing plan</b>	GREATER METROPOLITAN REGION UNREGULATED RIVER WATER SOURCES
<b>Date of effect</b>	01/Jul/2011
<b>Expiry date</b>	16/Feb/2026
<b>Approval holder(s)</b>	Schedule 1
<b>Water supply works</b>	Schedule 2
<b>Water use</b>	Schedule 3
<b>Conditions</b>	Schedule 4

### Contact for service of documents

---

<b>Name</b>	Martin, Leonard Stanley
<b>Address</b>	16 Bay Rd ARCADIA NSW 2159

\* **Note:** An approval has effect for such period as is specified in the approval, or if the period is extended under section 105, that extended period. If an application for extension of an approval is lodged before the approval expires, the term of the expiring approval is extended until either the date of the final decision on the application, or a date fixed by the Minister for the approval, whichever is the later date. An approval which has expired can be the subject of an application to extend it but it needs to be accompanied by a statutory declaration of the reasons for the delay in making the application. If the Minister accepts these reasons the term of the approval is taken to have been extended, and the application may be dealt with, as if the application had been made before the approval expired.

It is an offence under the Water Management Act 2000 to breach a term or condition of the approval or to construct and use works to which the approval does not relate. It is also an offence to use works the subject of an approval if the approval has expired, been surrendered or cancelled.

### Schedule 1 - Approval holders

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The holders of this approval are:

**Approval holder(s)**

**ACN (if applicable)**

---

Leonard Stanley Martin

Maroota Super Fund Pty Ltd

#### Important notice - change of landholder or contact

Please advise the Office in the event of any of the following, as soon as practicable:

- If there is a change in the ownership or occupation of the land benefited by this approval (see Schedule 2). Under the Water Management Act 2000, an approval is typically held by the owner or lawful occupier of the benefited land. Consequently, a change in occupation may cause a change in your legal obligations as an approval holder.\*
- If there is a change to the contact person. You will be required to lodge a written statement signed by all the holders.\*
- If there is a change to the mailing address for the nominated contact person. This should be done by the contact person in writing.

*\* An updated Statement of Approval will be issued free of charge*

**Schedule 2 - Water supply works**

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**Part A: Authorised water supply works**

Subject to the conditions of this approval, in relation to each numbered work in the table, the holders of this approval are authorised to construct and use a water supply work of the type shown at the location specified:

**Work 1**

---

<b>Specified work</b>	BYWASH DAM x 2	
<b>Specified location</b>	2//228308	Whole Lot
<b>Management zone (if applicable)</b>	LOWER HAWKESBURY RIVER MANAGEMENT ZONE	
<b>Water source</b>	HAWKESBURY AND LOWER NEPEAN RIVERS WATER SOURCE	
<b>Water sharing plan</b>	GREATER METROPOLITAN REGION UNREGULATED RIVER WATER SOURCES	

**Work 2**

---

<b>Specified work</b>	65MM CENTRIFUGAL PUMP x 2	
<b>Specified location</b>	2//228308	Whole Lot
<b>Management zone (if applicable)</b>	LOWER HAWKESBURY RIVER MANAGEMENT ZONE	
<b>Water source</b>	HAWKESBURY AND LOWER NEPEAN RIVERS WATER SOURCE	
<b>Water sharing plan</b>	GREATER METROPOLITAN REGION UNREGULATED RIVER WATER SOURCES	

### Schedule 3 - Water Use

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Subject to the conditions of this approval, the holder(s) of this approval is authorised to use water for the following purpose(s) and location(s):

#### Purpose 1

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**Specified purpose**

IRRIGATION

**Specified location**

1//228308  
2//228308



## Schedule 4 - Conditions

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The approval is subject to the following conditions:

### Plan conditions

#### Water sharing plan

#### *Greater Metropolitan Region Unregulated River Water Sources*

#### Take of water

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##### 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.

#### Water management works

---

##### MW0491-00001

When a water supply work authorised by this approval is to be abandoned or replaced, the approval holder must contact DPI Water in writing to verify whether the work must be decommissioned.

The work is to be decommissioned, unless the approval holder receives notice from the Minister not to do so.

Within sixty (60) days of decommissioning, the approval holder must notify DPI Water in writing that the work has been decommissioned.

#### Monitoring and recording

---

##### MW0481-00001

A logbook must be kept and maintained at the authorised work site or on the property for each water supply work authorised by this approval, unless the work is metered and fitted with a data logger.

##### MW2338-00001

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

##### 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](mailto: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.

## Other conditions

### Water management works

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- 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.
- 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:
- 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** 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.
- DK1217-00001** The location of the dam(s) as shown on a plan retained in the office of DPI Water shall not be altered.
- DK0261-00571** When a flow is entering the storage of the dam, the pipe must be operated so as to maintain a flow in the watercourse downstream of the said dam equivalent to the flow entering the storage of the dam for the time being or the capacity of the said pipe, whichever is the lesser.
- DK0243-00224** When a flow is entering the storage of the dam the pipe shall be so operated as to maintain a flow in the watercourse downstream of the said dam equivalent to the flow entering the storage of the dam for the time being or the capacity of the said pipe, which ever is the lesser.

### Additional conditions

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- NS17761** The level of the crest of the bywash of the upstream dam on the Unnamed Watercourse shall be fixed at not higher than 6.90 m above the level of a bench mark established on a concrete weir below the upstream dam of the watercourse near the work and particulars of which are retained in the office of DPI Water.

**NS17762**

A pipe with a diameter of not less than 50 mm, fitted with a stop valve or other control device, shall be constructed through the dam to the satisfaction of DPI Water. The level of the invert of the said pipe shall be fixed at not higher than 0.05 m above the level of the established benchmark or, alternatively the licensee shall provide a 50 mm diameter pipe siphon or other approved device, for passing flows through the storage of the dam.

**NS17763**

The level of the crest of the bywash of the downstream dam on the unnamed watercourse shall be fixed at not higher than 0.88 m below the level of a bench mark established on the bank of the watercourse near the work and particulars of which are retained in the office of DPI Water.

**NS17764**

(a) a concrete rock weir shall be constructed on the unnamed watercourse upstream of the dam to the satisfaction of DPI Water. The level of the crest of the said weir shall be fixed at no lower than the level of the established benchmark.

(b) the holder of the license shall install a bypass channel or pipeline with a diameter of not less than 150 mm to the satisfaction of DPI Water in respect of location, type and construction, so as to pass flows from the weir above into the unnamed watercourse downstream from the dam.

(c) the holder of the license shall install through the weir two 150 mm diameter pipes to the satisfaction of DPI Water. One of the said pipes shall discharge into the diversion channel or pipeline and the other shall discharge into the course of the unnamed watercourse upstream of the dam.

**Glossary**

**cease to take** - Cease to take conditions means any condition on this approval, or on the access licence under which water is proposed to be taken, that prohibits the taking of water in a particular circumstance.

**logbook** - A logbook is a document, electronic or hard copy, that records specific required information.

**metered water supply work** - A metered water supply work is a water supply work fitted with a data logger and a water meter that complies with Australian Standard AS 4747: Meters for non-urban water supply.

**water meter** - A water meter is a device that measures the volume of water that is extracted over a known period of time. Examples of a water meter may include a mechanical meter, electromagnetic meter, channel meter with mobile phone, or an authorised meter equivalent.

**General Notes**

All conditions on an approval require compliance. An appeal to the Land and Environment Court against a decision to impose certain conditions on an approval can be made within 28 days after the date the decision is made. Conditions identified with the first letter "D" are those that can be appealed during the appeal period.

The words in this approval have the same meaning as in the *Water Management Act 2000*



**Note: The words in this approval have the same meaning as in the WMA**

**END OF STATEMENT**

Nursery Bore Licence

BOX 1W  
(A1845103)



NEW SOUTH WALES

# CERTIFICATE OF TITLE

WATER MANAGEMENT ACT, 2000



WAL TITLE REFERENCE <b>WAL24157</b>	
EDITION <b>1</b>	DATE OF ISSUE <b>1/9/2014</b>
CERTIFICATE AUTHENTICATION CODE <b>24DC-MV-FR4X</b>	



This certificate is issued under s87B of the Water Management Act, 2000.

WARNING NOTE: INFORMATION ON THIS REGISTER IS NOT GUARANTEED

TENURE TYPE: CONTINUING

HOLDER(S)

LEONARD STANLEY MARTIN

(DW AG357440)

ENCUMBRANCES

1. TERM TRANSFER: NIL

ACCESS LICENCE DETAILS

CATEGORY: AQUIFER

SHARE COMPONENT:

SHARE - 6 UNITS

WATER SOURCE - MAROOTA TERTIARY SANDS GROUNDWATER SOURCE

WATER SHARING PLAN - GREATER METROPOLITAN REGION GROUNDWATER SOURCES

EXTRACTION COMPONENT:

TIMES/RATES/CIRCUMSTANCES - SUBJECT TO THE CONDITIONS OF THE WATER

ACCESS LICENCE

EXTRACTION FROM - AQUIFER

EXTRACTION ZONE - WHOLE WATER SOURCE

NOMINATED WORKS:

WORK APPROVAL NUMBER(S) - 10CA114819

INTERSTATE TAGGING ZONE - NIL

CONDITIONS

LICENCE CONDITIONS FORM A PART OF THIS LICENCE AND AFFECT THE SHARE AND EXTRACTION COMPONENTS. CONDITION STATEMENTS ARE AVAILABLE FROM THE NSW OFFICE OF WATER (NOW).

NOTES

A WATER LICENCE INFORMATION SHEET IS AVAILABLE FROM THE NSW OFFICE OF WATER (NOW) AND SHOULD BE REFERRED TO IN INTERPRETING THIS LICENCE. NOW WEBSITE WWW.WATER.NSW.GOV.AU, PHONE 1800 353 104, EMAIL INFORMATION@WATER.NSW.GOV.AU NOW REFERENCE NUMBER: 10AL114818 PREVIOUS WATER ACT LICENCE NUMBER(S): 10PT901431, 10BL157595.

\*\*\*\* END OF CERTIFICATE \*\*\*\*

ANY ATTEMPT TO ALTER THIS CERTIFICATE COULD RESULT IN HEAVY FINES OR IMPRISONMENT (S.141 REAL PROPERTY ACT).

## 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](#)
- [Approval issued under the Water Management Act 2000](#)

Find out if a Water Act 1912 licence has been converted

### [Water licence conversion status](#)

Water Licence Number

Notes:

Water Act 1912 licences and authorities are being converted to water access licences and approvals under the Water Management Act 2000 as water sharing plans commence (see [licence conversion](#)).

If a Water Act 1912 licence has been converted, the search results will display the water access licences and approvals that have been created. Water access licences are registered in the [Water Access Licence Register](#) administered by Land and Property Information. Those water access licences that do not display a WAL number in the search results are still to have their licence details confirmed and completed.

Due to privacy laws very little information on Water Act 1912 licence and authorities can be made freely available. Full information for a particular licence or authority can be obtained if required for conveyancing by applying to the NSW Office of Water. See [legal searches for water related interests](#).

[« Previous](#)   [Search](#)

[Print](#)   [Export](#)

## Search Results

Access licenses created for '10BL157595'

WAL No.	Water Source	Status			
<a href="#">24157</a>	Maroota Tertiary Sands Groundwater Source	Current			
Category [Subcategory]	Status	Water Source	Tenure Type	Management Zone	Share Components (units or ML)
Aquifer	Current	Maroota Tertiary Sands Groundwater Source	Continuing		6.00

#### Extraction Times or Rates

Subject to conditions water may be taken at any time or rate

#### Nominated Work Approval(s)

10CA114819

- Conditions

#### Plan Conditions

Water sharing plan  
Greater Metropolitan Region Groundwater Sources

#### Take of water

MW0929-00001 From 1 July 2018, if the water supply work nominated on this access licence is located at or less than 40 m from the top of the high bank of a river then:  
A. water must not be taken in this groundwater source when flows are in the Very Low Flow Class for an unregulated river access licence in that river.  
B. This restriction will only apply when the system that confirms when water can be taken is available on DPI Water website.  
C. DPI Water will inform the licence holder in writing of the applicable restrictions and how to access the information on its website when this system becomes operative.

MW0604-00001 Water allocations remaining in the account for this access licence must not be carried over from one water year to the next water year.

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.

MW0603-00001 The total volume of water taken under this access licence in any water year must not exceed a volume equal to:  
A. the sum of water in the account from the available water determination for the current year, plus  
B. the net amount of water assigned to or from the account under a water allocation assignment, plus  
C. any water re-credited by the Minister to the account.

#### 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.



- MW0606-00001 The volume of water taken in the water year must be recorded in the logbook at the end of each water year. The maximum volume of water permitted to be taken in that water year must also be recorded in the logbook.
- 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 DPI Water.
- Reporting
- 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](mailto: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.

## Other Conditions

NIL

## Approvals created for '10BL157595'

Approval No.	Water Source	Status
<a href="#">10CA114819</a>	Maroota Tertiary Sands Groundwater Source	Current

Kind of Approval	Issue Date	Expiry Date	Approval Number	Status	Water Source
Water Supply Works And Water Use	01-JUL-2011	14-JUN-2025	10CA114819	Current	Maroota Tertiary Sands Groundwater Source

Work Type	Description	No of Works	Location (Lot/ DP)
Extraction Works Gw	Bore	1	Lot 2, DP 228308

Use Purpose(s)	Location(s)
Industrial	Lot 2, DP 228308
Irrigation	Lot 2, DP 228308

## Water Access Licences nominating these works

Reference Number	WAL Number
10AL114818	24157

- Conditions

## Plan Conditions

## Water sharing plan

## Greater Metropolitan Region Groundwater 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.

## Water management works

MW0097-00001 If contaminated water is found above the production aquifer during the construction of the water supply work authorised by this approval, the licensed driller must:

- A. notify DPI Water in writing within 48 hours of becoming aware of the contaminated water, and
- B. adhere to the Minimum Construction Requirements for Water Bores in Australia (2012), as amended or replaced from time to time.

MW0487-00001 The water supply work authorised by this approval must be constructed within three (3) years from the date this approval is granted.

MW0044-00001 When a water supply work authorised by this approval is to be abandoned or replaced, the approval holder must contact DPI Water in writing to verify whether the work must be decommissioned.

The work is to be decommissioned, unless the approval holder receives notice from the Minister not to do so.

When decommissioning the work the approval holder must:

- A. comply with the minimum requirements for decommissioning bores prescribed in the Minimum Construction Requirements for Water Bores in Australia (2012), as amended or replaced from time to time, and
- B. notify DPI Water in writing within sixty (60) days of decommissioning that the work has been decommissioned.

## Monitoring and recording

MW0481-00001 A logbook must be kept and maintained at the authorised work site or on the property for each water supply work authorised by this approval, unless the work is metered and fitted with a data logger.

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](mailto: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.

MK0485-00001 Within sixty (60) days of completing construction of the water supply work authorised by this approval, the approval holder must provide a completed Form A for that work to DPI Water.

## Other Conditions

## Water management works

DK1363-00001	The approval holder must not construct or install works used for the purpose of conveying, distributing or storing water from the works authorised by this approval, that obstruct the reasonable passage of floodwaters flowing in, to, or from a river or lake.
DK1202-00001	The approval holder must allow DPI Water or any person authorised by it, full and free access to the approved works, either during or after construction, for the purpose of carrying out inspection or test of the approved works and its fittings and must carry out any work or alterations deemed necessary by the department for the protection or proper maintenance of the approved 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.

Land to which the converted entitlement previously related.

Lot/ DP	Description
Lot 2, DP 228308	Work Location
Lot 2, DP 228308	Land Benefited

Disclaimer: The NSW Office of Water does not warrant the data is current nor does it warrant that the data or the data capturing processes are free from corruption or error.

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.

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# Appendix F

# Complaints Register

# Hodgsons Quarries Complaints Register

Date published:

8/03/2022

Date Received	Site Complaint Regarding	Pollution Complaint Category					
		Air	Water	Noise	Waste	Traffic	Other
Jan-11	Nil received						
Feb-11	Nil received						
Mar-11	Nil received						
Apr-11	Nil received						
May-11	Nil received						
Jun-11	Nil received						
Jul-11	Nil received						
Aug-11	Nil received						
Sep-11	Nil received						
Oct-11	Nil received						
Nov-11	Nil received						
Dec-11	Nil received						
Jan-12	Nil received						
Feb-12	Nil received						
Mar-12	Nil received						
Apr-12	Nil received						
May-12	Nil received						
Jun-12	Nil received						
Jul-12	Nil received						
Aug-12	Nil received						
Sep-12	Nil received						
Oct-12	Nil received						
Nov-12	Nil received						
Dec-12	Nil received						
Jan-13	Nil received						
Feb-13	Nil received						
Mar-13	Nil received						
Apr-13	Nil received						
May-13	Nil received						
Jun-13	Nil received						
Jul-13	Nil received						
Aug-13	Nil received						
Sep-13	Nil received						
Oct-13	Nil received						
Nov-13	Nil received						
Dec-13	Nil received						
Jan-14	Nil received						
Feb-14	Nil received						
Mar-14	Nil received						
Apr-14	Nil received						
May-14	Nil received						
Jun-14	Nil received						
Jul-14	Nil received						
Aug-14	Nil received						
Sep-14	Nil received						
Oct-14	Nil received						
Nov-14	Nil received						
Dec-14	Nil received						
Jan-15	Nil received						
Feb-15	Nil received						
Mar-15	Nil received						
Apr-15	Nil received						
May-15	Nil received						
Jun-15	Nil received						
Jul-15	Nil received						
Aug-15	Nil received						

# Hodgsons Quarries Complaints Register

Date published:

8/03/2022

Date Received	Site Complaint Regarding	Pollution Complaint Category					
		Air	Water	Noise	Waste	Traffic	Other
Sep-15	Nil received						
Oct-15	Nil received						
Nov-15	Nil received						
Dec-15	Nil received						
Jan-16	Nil received						
Feb-16	Nil received						
Mar-16	Nil received						
Apr-16	Nil received						
May-16	Nil received						
Jun-16	Nil received						
Jul-16	Nil received						
Aug-16	Nil received						
Sep-16	Nil received						
Oct-16	Nil received						
Nov-16	Nil received						
Dec-16	Nil received						
Jan-17	Nil received						
Feb-17	Nil received						
Mar-17	Nil received						
Apr-17	Nil received						
May-17	Nil received						
Jun-17	Nil received						
Jul-17	Nil received						
Aug-17	Nil received						
Sep-17	Nil received						
Oct-17	Nil received						
Nov-17	Nil received						
Dec-17	Nil received						
Jan-18	Nil received						
Feb-18	Nil received						
Mar-18	Nil received						
Apr-18	Nil received						
May-18	Nil received						
Jun-18	Nil received						
Jul-18	Nil received						
Aug-18	Nil received						
Sep-18	Nil received						
Oct-18	Nil received						
Nov-18	Nil received						
Dec-18	Nil received						
Jan-19	Nil received						
Feb-19	Nil received						
Mar-19	Nil received						
Apr-19	Nil received						
May-19	Nil received						
Jun-19	Nil received						
Jul-19	Nil received						
Aug-19	Nil received						
Sep-19	Nil received						
Oct-19	Nil received						
Nov-19	Nil received						
Dec-19	Nil received						
Jan-20	Nil received						
Feb-20	Nil received						
Mar-20	Nil received						
Apr-20	Nil received						

# Hodgsons Quarries Complaints Register

Date published:

8/03/2022

Date Received	Site Complaint Regarding	Pollution Complaint Catgeory					
		Air	Water	Noise	Waste	Traffic	Other
May-20	Nil received						
Jun-20	Nil received						
Jul-20	Nil received						
Aug-20	Nil received						
Sep-20	Nil received						
Oct-20	Nil received						
Nov-20	Nil received						
Dec-20	Nil received						
Jan-21	Nil received						
Feb-21	Nil received						
Mar-21	Nil received						
Apr-21	Nil received						
May-21	Nil received						
Jun-21	Nil received						
Jul-21	Nil received						
Aug-21	Nil received						
Sep-21	Nil received						
Oct-21	Nil received						
Nov-21	Nil received						
Dec-21	Nil received						
Jan-22	Nil received						
Feb-22	Nil received						

# Appendix G

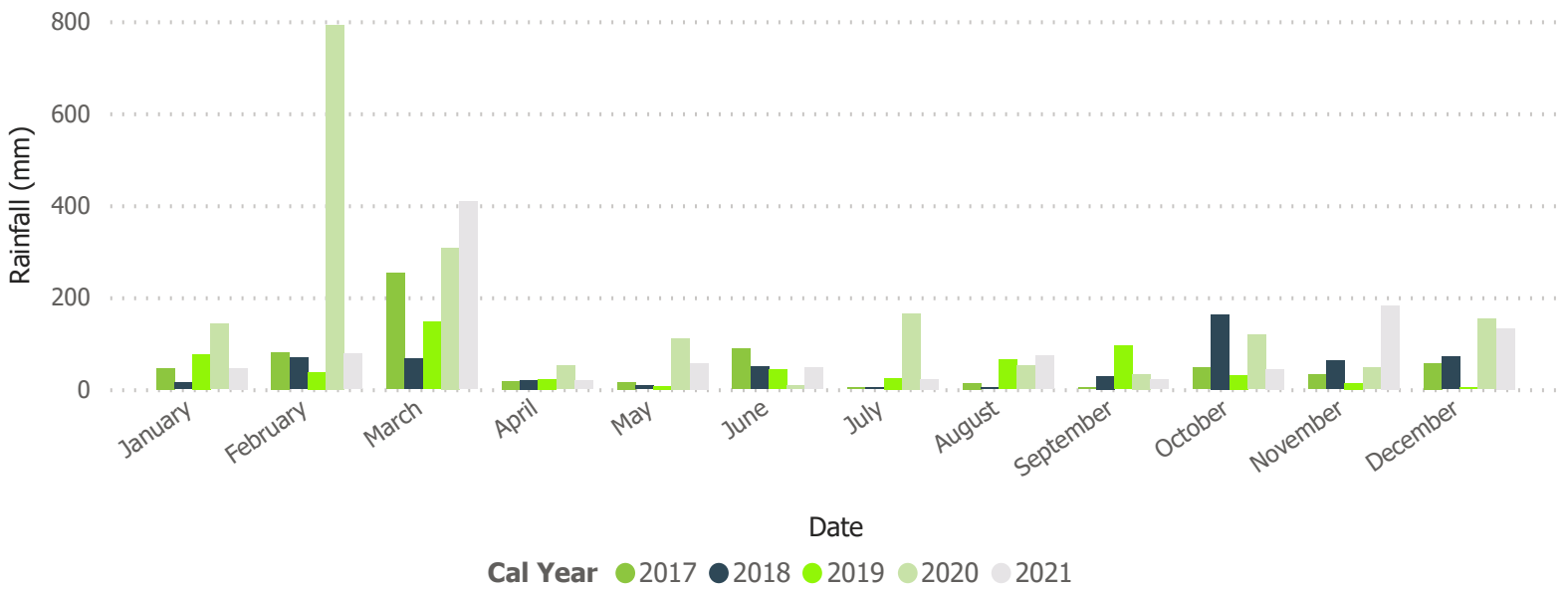
## Weather Data

### Summaries

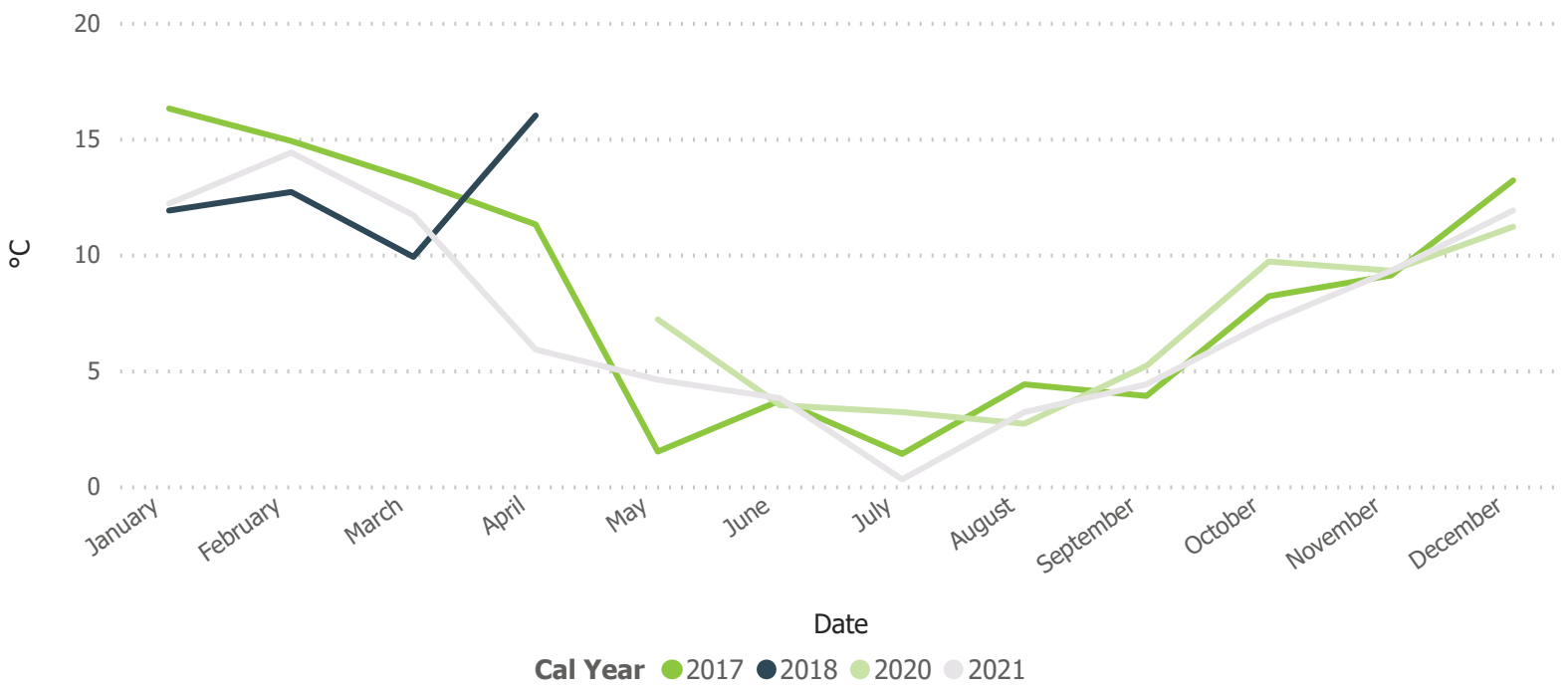


# Weather Trends

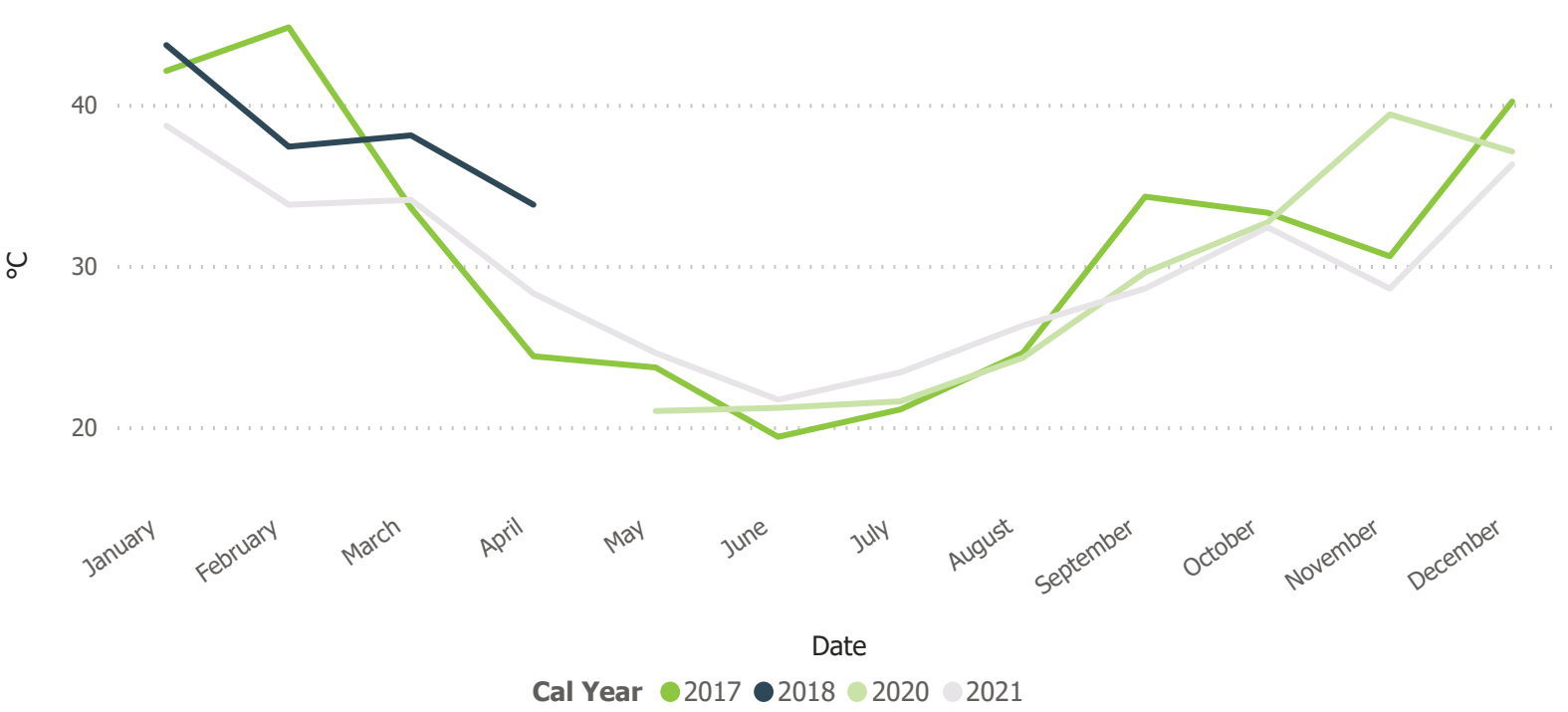
## Precipitation



## Minimum Temperature



## Maximum Temperature



## Weather Tables

### Precipitation

Cal Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2017	46.2	80.8	252.6	18.0	15.4	87.6	0.8	13.2	1.6	46.6	32.2	57.2	<b>652.2</b>
2018	14.4	69.0	66.2	20.2	7.6	49.2	3.0	3.8	28.6	163.0	61.6	70.4	<b>557.0</b>
2019	76.2	37.2	146.2	22.2	7.4	42.2	24.6	64.8	94.6	30.6	13.0	0.4	<b>559.4</b>
2020	141.6	792.0	308.0	50.8	111.2	8.6	164.6	51.8	33.2	118.4	46.4	152.8	<b>1,979.4</b>
2021	45.6	77.2	408.8	19.2	57.0	46.4	22.0	73.4	21.4	43.8	181.8	132.2	<b>1,128.8</b>
<b>Total</b>	<b>324.0</b>	<b>1,056.2</b>	<b>1,181.8</b>	<b>130.4</b>	<b>198.6</b>	<b>234.0</b>	<b>215.0</b>	<b>207.0</b>	<b>179.4</b>	<b>402.4</b>	<b>335.0</b>	<b>413.0</b>	<b>4,876.8</b>

### Weather Station - Minimum Temperature

Cal Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2017	16.3	14.9	13.2	11.3	1.5	3.7	1.4	4.4	3.9	8.2	9.1	13.2	<b>1.4</b>
2018	11.9	12.7	9.9	16.0									<b>9.9</b>
2020					7.2	3.5	3.2	2.7	5.2	9.7	9.3	11.2	<b>2.7</b>
2021	12.2	14.4	11.7	5.9	4.6	3.8	0.3	3.2	4.4	7.1	9.3	11.9	<b>0.3</b>
<b>Total</b>	<b>11.9</b>	<b>12.7</b>	<b>9.9</b>	<b>5.9</b>	<b>1.5</b>	<b>3.5</b>	<b>0.3</b>	<b>2.7</b>	<b>3.9</b>	<b>7.1</b>	<b>9.1</b>	<b>11.2</b>	<b>0.3</b>

### Richmond BoM - Minimum Temperature

Cal Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2019	17.6	12.7	10.7	5.2	-0.7	-0.5	-2.5	-3.3	1.6	6.2	7.3	10.6	<b>-3.3</b>
2020	16.1	13.0	11.4	5.2	1.1								<b>1.1</b>
<b>Total</b>	<b>16.1</b>	<b>12.7</b>	<b>10.7</b>	<b>5.2</b>	<b>-0.7</b>	<b>-0.5</b>	<b>-2.5</b>	<b>-3.3</b>	<b>1.6</b>	<b>6.2</b>	<b>7.3</b>	<b>10.6</b>	<b>-3.3</b>

### Weather Station - Maximum Temperature

Cal Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2017	42.1	44.8	33.6	24.4	23.7	19.4	21.1	24.6	34.3	33.3	30.6	40.2	<b>44.8</b>
2018	43.7	37.4	38.1	33.8									<b>43.7</b>
2020					21.0	21.2	21.6	24.3	29.6	32.7	39.4	37.1	<b>39.4</b>
2021	38.7	33.8	34.1	28.3	24.6	21.7	23.4	26.3	28.6	32.4	28.6	36.3	<b>38.7</b>
<b>Total</b>	<b>43.7</b>	<b>44.8</b>	<b>38.1</b>	<b>33.8</b>	<b>24.6</b>	<b>21.7</b>	<b>23.4</b>	<b>26.3</b>	<b>34.3</b>	<b>33.3</b>	<b>39.4</b>	<b>40.2</b>	<b>44.8</b>

### Richmond BoM - Minimum Temperature

Cal Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2019	41.4	39.5	38.1	33.8	26.8	23.8	24.6	26.2	32.2	35.9	38.7	45.0	<b>45.0</b>
2020	47.4	46.8	38.7	29.6	27.4								<b>47.4</b>
<b>Total</b>	<b>47.4</b>	<b>46.8</b>	<b>38.7</b>	<b>33.8</b>	<b>27.4</b>	<b>23.8</b>	<b>24.6</b>	<b>26.2</b>	<b>32.2</b>	<b>35.9</b>	<b>38.7</b>	<b>45.0</b>	<b>47.4</b>



# Appendix H Air Monitoring Results

# Depositional Dusts This Report Period

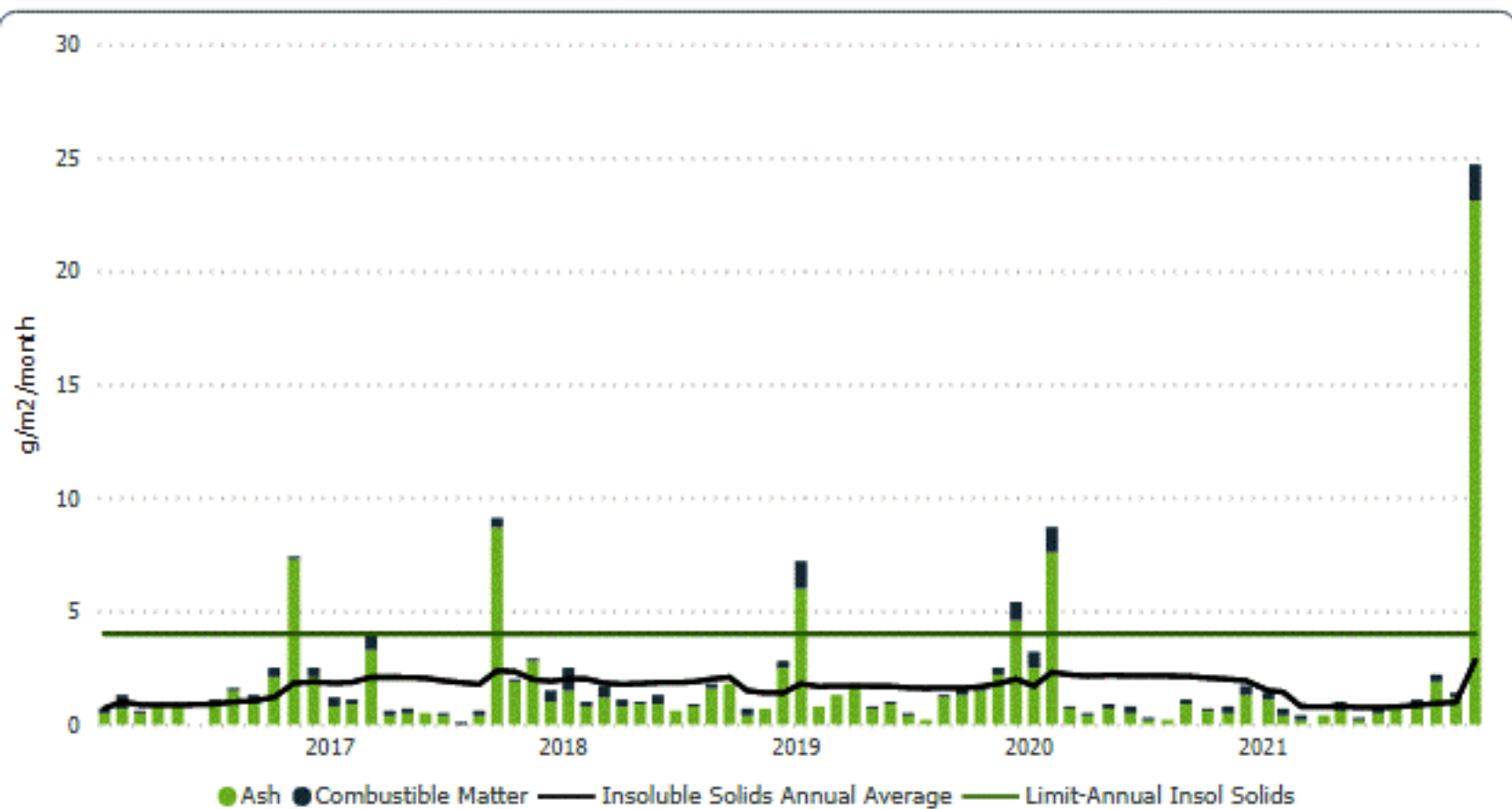
D1 Gate

## Deposited Matter g/m<sup>2</sup>/month

Date	Insoluble Solids	Rolling Annual Average Insol Solids	Limit-Annual Insol Solids	Ash	Combustible Matter
11/1/2021	1.4	1.5	4	1.1	0.3
3/2/2021	0.7	1.4	4	0.4	0.3
3/3/2021	0.4	0.8	4	0.2	0.2
8/4/2021	0.4	0.8	4	0.4	0.0
4/5/2021	1.0	0.8	4	0.6	0.4
2/6/2021	0.3	0.8	4	0.2	0.1
2/7/2021	0.7	0.7	4	0.5	0.2
30/7/2021	0.7	0.8	4	0.7	0.0
1/9/2021	1.1	0.8	4	0.9	0.2
1/10/2021	2.2	0.9	4	1.9	0.3
1/11/2021	1.4	1.0	4	1.2	0.2
1/12/2021	24.7	2.8	4	23.1	1.6

## Sampling Comments for High Results

Date & Time On	Date & Time Sampled	Sampling Comments
1/11/2021 10:10:00 AM	1/12/2021 11:20:00 AM	



# Depositional Dusts This Report Period

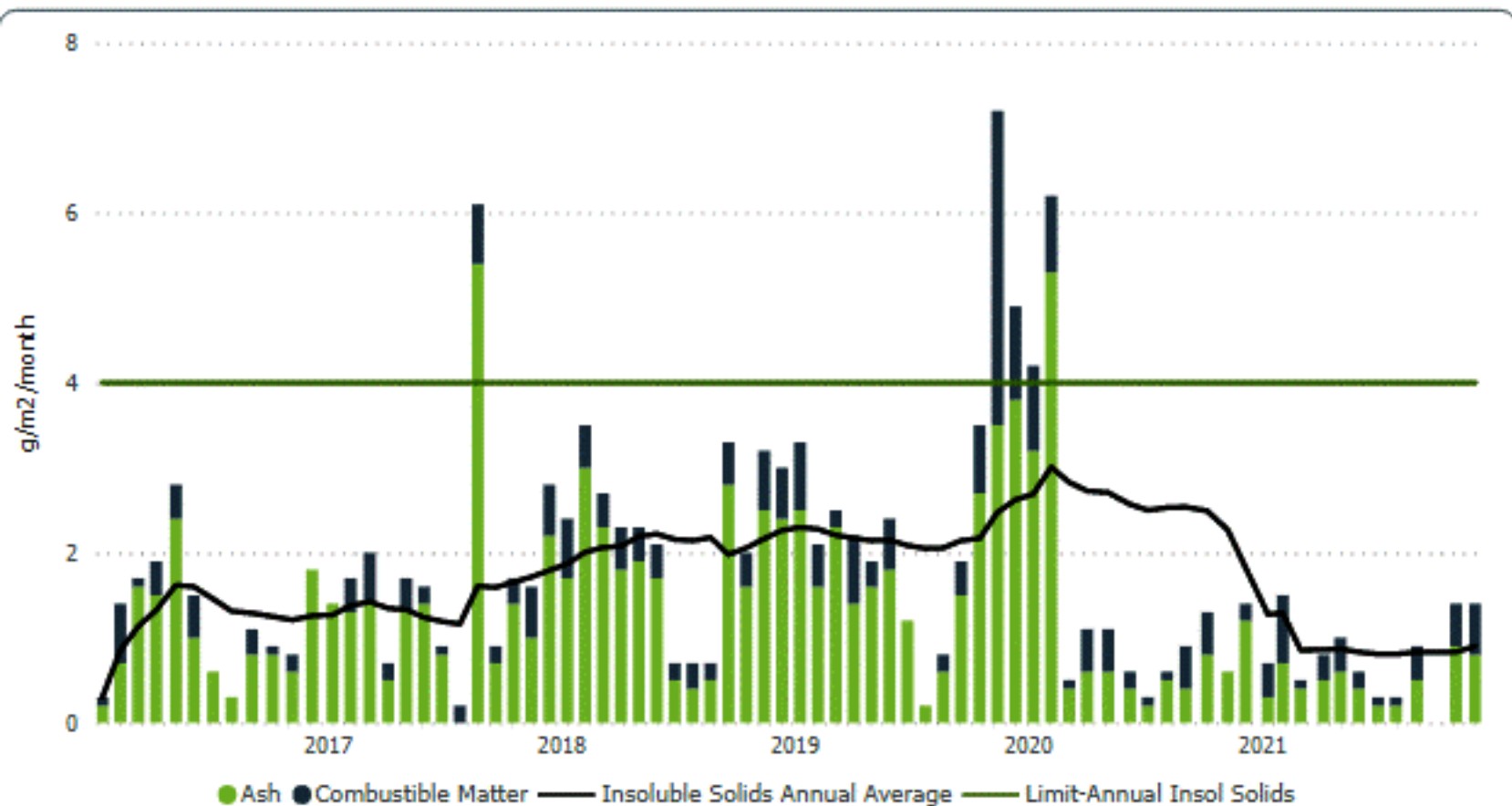
Multiple selections

## Deposited Matter g/m2/month

Date	Insoluble Solids	Rolling Annual Average Insol Solids	Limit-Annual Insol Solids	Ash	Combustible Matter
11/1/2021	0.7	1.3	4	0.3	0.4
3/2/2021	1.5	1.3	4	0.7	0.8
3/3/2021	0.5	0.9	4	0.4	0.1
8/4/2021	0.8	0.9	4	0.5	0.3
4/5/2021	1.0	0.9	4	0.6	0.4
2/6/2021	0.6	0.8	4	0.4	0.2
2/7/2021	0.3	0.8	4	0.2	0.1
30/7/2021	0.3	0.8	4	0.2	0.1
1/9/2021	0.9	0.8	4	0.5	0.4
1/11/2021	1.4	0.8	4	0.9	0.5
1/12/2021	1.4	0.9	4	0.8	0.6

## Sampling Comments for High Results

Date & Time On	Date & Time Sampled	Sampling Comments
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# Depositional Dusts This Report Period

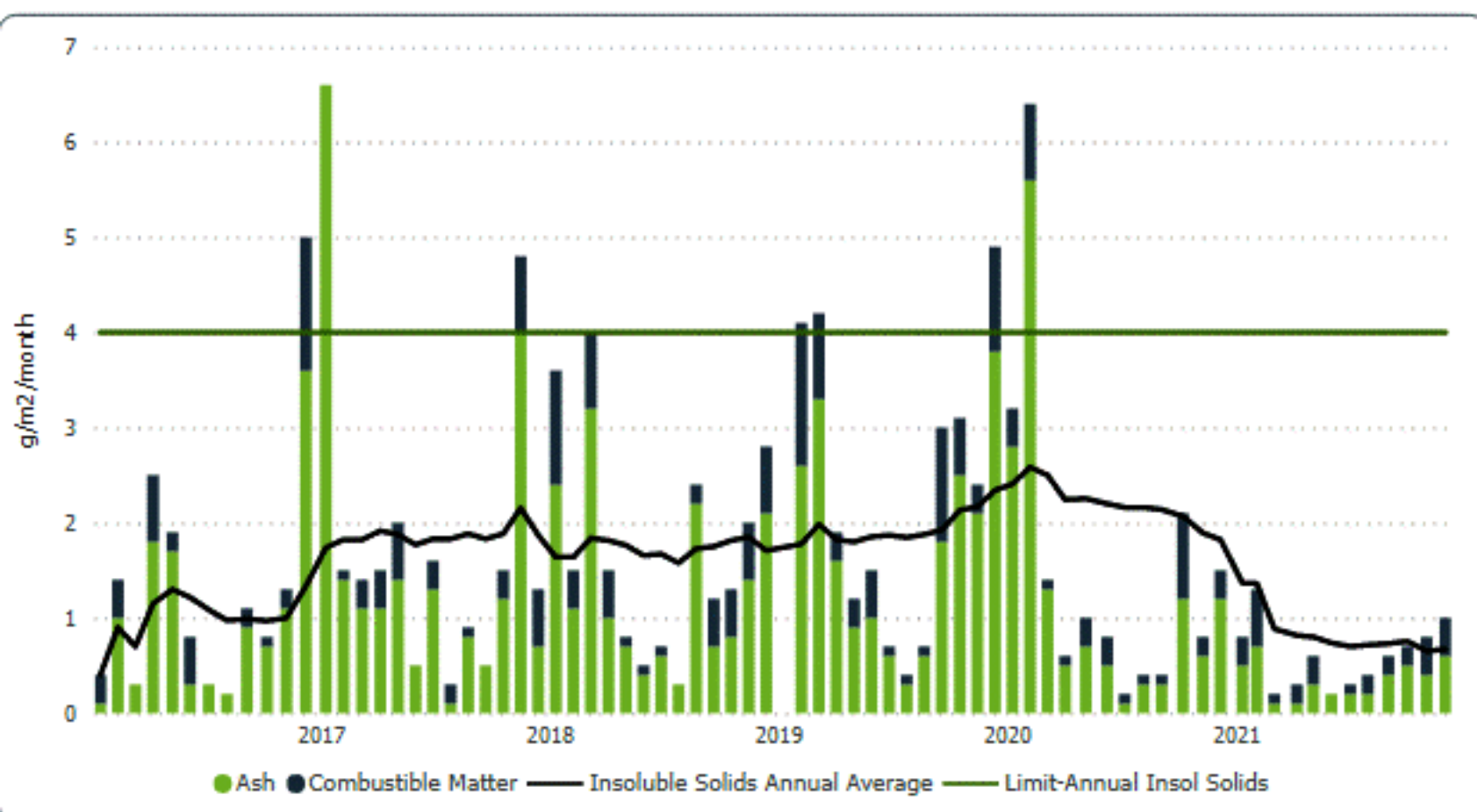
D3A Bundwall

## Deposited Matter g/m2/month

Date	Insoluble Solids	Rolling Annual Average Insol Solids	Limit-Annual Insol Solids	Ash	Combustible Matter
11/1/2021	0.8	1.4	4	0.5	0.3
3/2/2021	1.3	1.4	4	0.7	0.6
3/3/2021	0.2	0.9	4	0.1	0.1
8/4/2021	0.3	0.8	4	0.1	0.2
4/5/2021	0.6	0.8	4	0.3	0.3
2/6/2021	0.2	0.7	4	0.2	0.0
2/7/2021	0.3	0.7	4	0.2	0.1
30/7/2021	0.4	0.7	4	0.2	0.2
1/9/2021	0.6	0.7	4	0.4	0.2
1/10/2021	0.7	0.8	4	0.5	0.2
1/11/2021	0.8	0.7	4	0.4	0.4
1/12/2021	1.0	0.7	4	0.6	0.4

## Sampling Comments for High Results

Date & Time On	Date & Time Sampled	Sampling Comments
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## Total Suspended Particulates (TSP) Results This Report Period

# 15.40

TSP Annual Ave

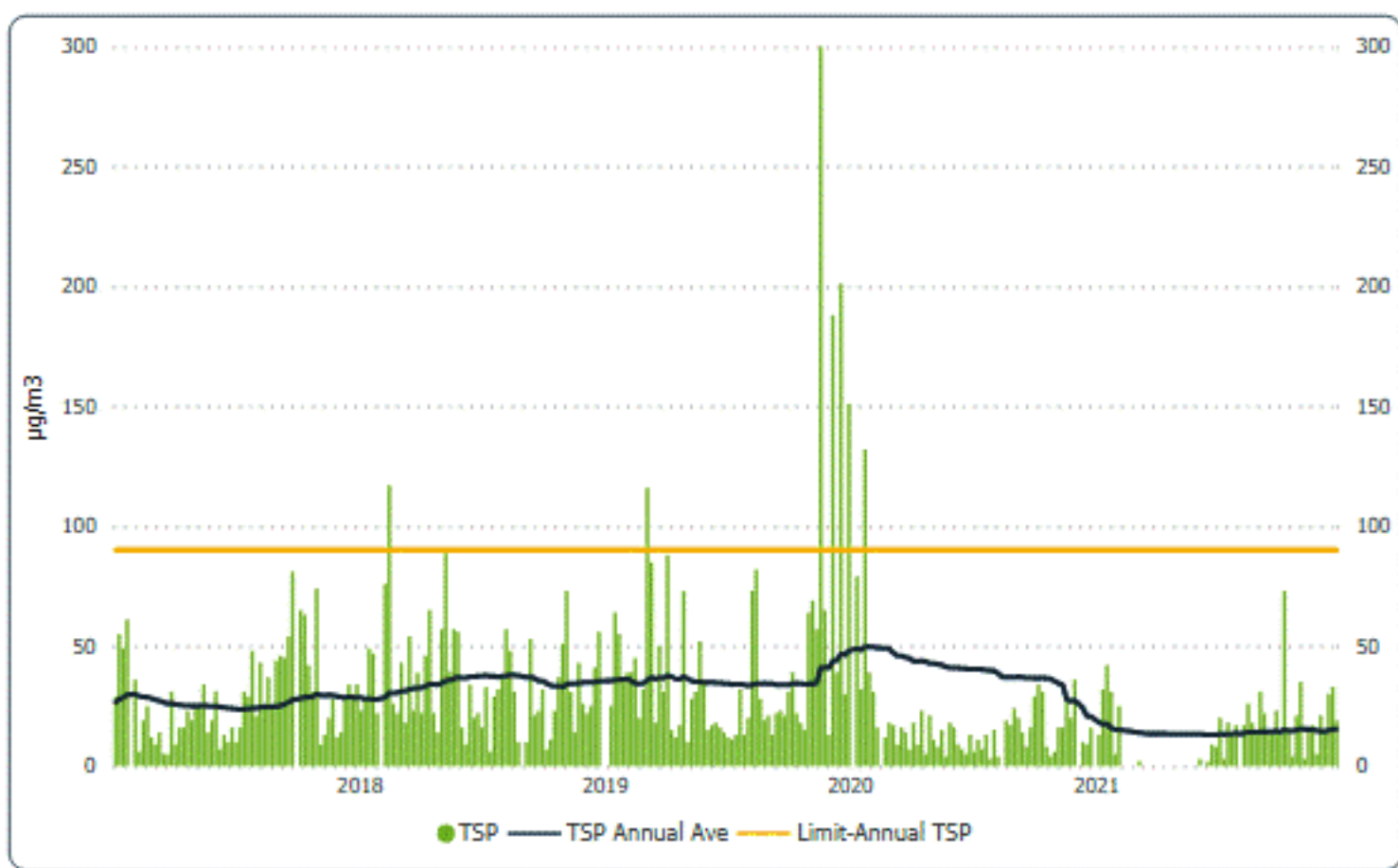
# 73.00

Max of TSP

Annual Average Exceedances (>90  $\mu\text{g}/\text{m}^3$ )

Date TSP TSP Annual Ave

▲





## PM10 High Volume Air Sampler Results This Report Period

# 8.81

PM10 Annual Average

# 48.00

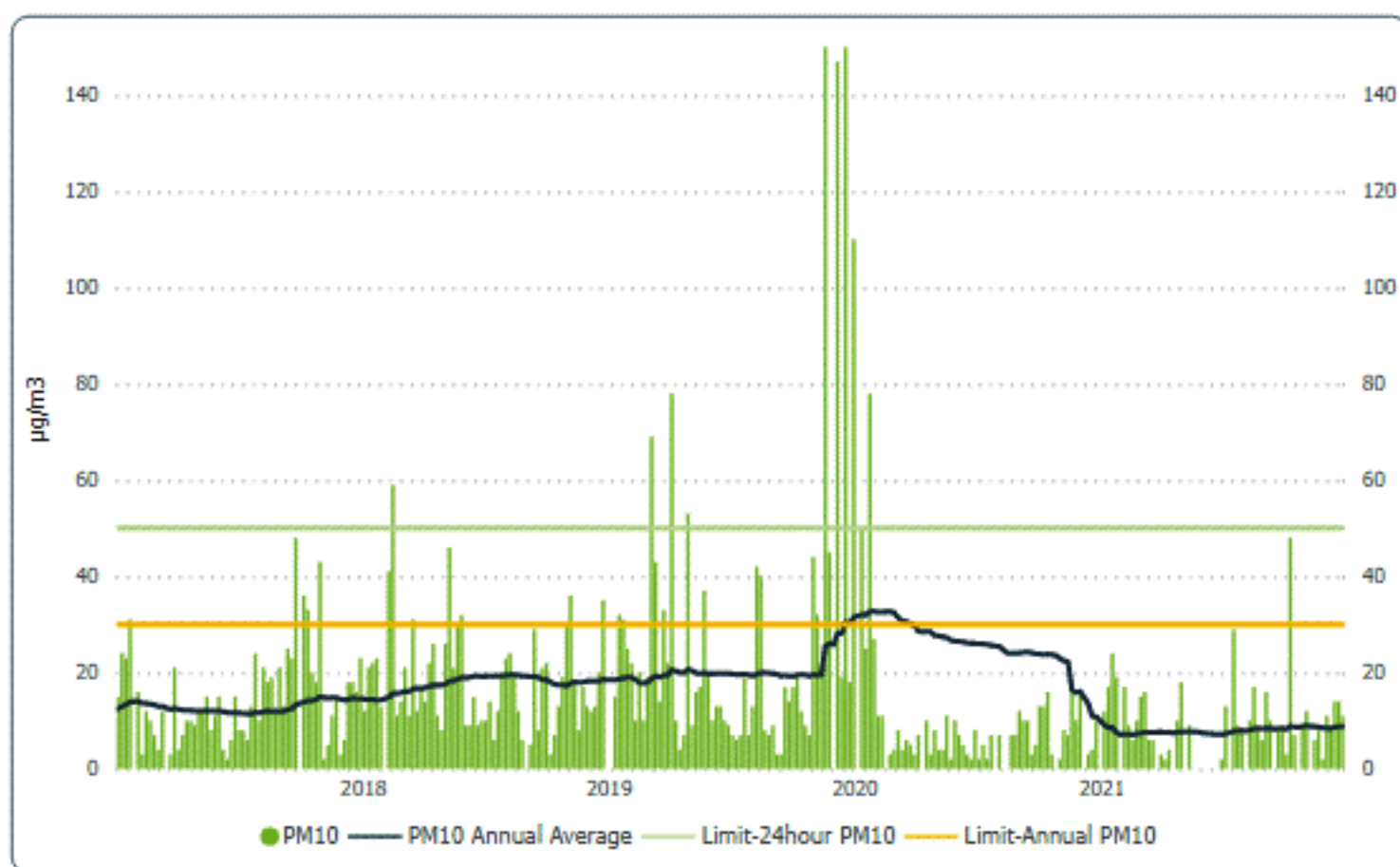
Max of PM10

### 24 hour exceedances (>50 $\mu\text{g}/\text{m}^3$ )

Date PM10 Sampling Comments

### Annual Average Exceedances (>30 $\mu\text{g}/\text{m}^3$ )

Date PM10 PM10 Annual Average



## PM2.5 High Volume Air Sampler Results This Report Period

# 6.07

PM2.5 Annual Average

# 37.00

Max of PM2.5

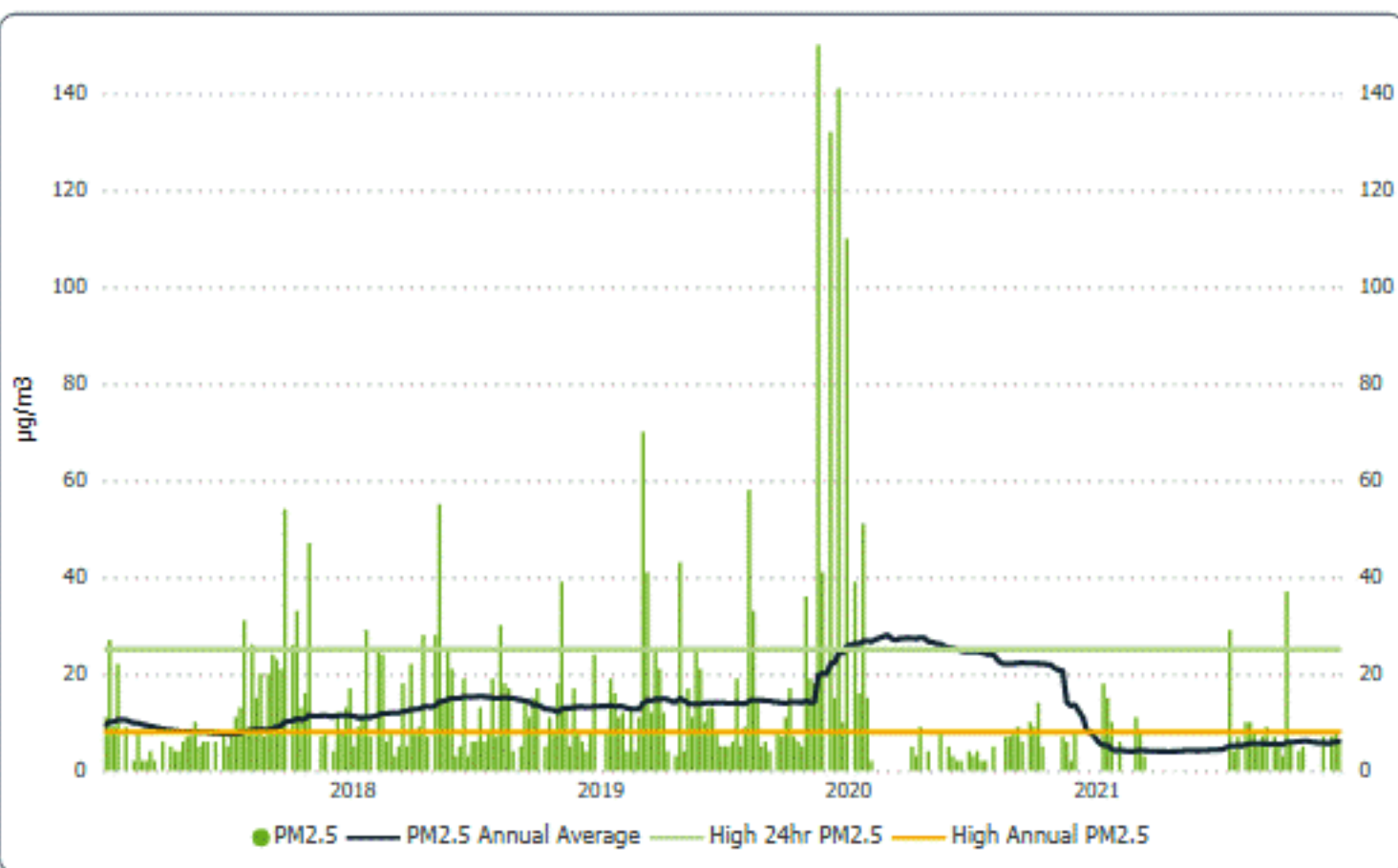
### Results > 25 $\mu\text{g}/\text{m}^3$

Date	PM2.5
17/7/2021	29
9/10/2021	37

### High Annual Averages (>8 $\mu\text{g}/\text{m}^3$ )

Date	PM2.5	PM2.5 Annual Average
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▲



# Appendix I

# Pumping Records

Date	Start	Finish	Hours	Litres @ 120/min
1/01/2021	0	0	0	0
2/01/2021	0	0	0	0
3/01/2021	0	0	0	0
4/01/2021	0	0	0	0
5/01/2021	0	0	0	0
6/01/2021	0	0	0	0
7/01/2021	0	0	0	0
8/01/2021	0	0	0	0
9/01/2021	0	0	0	0
10/01/2021	0	0	0	0
11/01/2021	0	0	0	0
12/01/2021	0	0	0	0
13/01/2021	0	0	0	0
14/01/2021	0	0	0	0
15/01/2021	0	0	0	0
16/01/2021	0	0	0	0
17/01/2021	0	0	0	0
18/01/2021	0	0	0	0
19/01/2021	0	0	0	0
20/01/2021	0	0	0	0
21/01/2021	0	0	0	0
22/01/2021	0	0	0	0
23/01/2021	0	0	0	0
24/01/2021	0	0	0	0
25/01/2021	7	14.5	7.5	54000
26/01/2021	0	0	0	0
27/01/2021	8.5	14.5	6	43200
28/01/2021	8.5	14.5	6	43200
29/01/2021	8	14.5	6.5	46800
30/01/2021	0	0	0	0
31/01/2021	0	0	0	0
1/02/2021	10	14.5	4.5	32400
2/02/2021	7.5	14	6.5	46800
3/02/2021	7.5	14.5	7	50400
4/02/2021	0	0	0	0
5/02/2021	7	14.5	7.5	54000
6/02/2021	0	0	0	0
7/02/2021	0	0	0	0
8/02/2021	0	0	0	0
9/02/2021	0	0	0	0
10/02/2021	7	14.5	7.5	54000
11/02/2021	0	0	0	0
12/02/2021	8	13	5	36000
13/02/2021	0	0	0	0
14/02/2021	0	0	0	0
15/02/2021	7.5	14.5	7	50400
16/02/2021	7.5	14.5	7	50400
17/02/2021	7	14.5	7.5	54000
18/02/2021	7.5	14.5	7	50400

Date	Start	Finish	Hours	Litres @ 120/min
19/02/2021	7.5	14.5	7	50400
20/02/2021	0	0	0	0
21/02/2021	0	0	0	0
22/02/2021	0	0	0	0
23/02/2021	7	14.5	7.5	54000
24/02/2021	0	0	0	0
25/02/2021	7	14.5	7.5	54000
26/02/2021	7.5	14	6.5	46800
27/02/2021	0	0	0	0
28/02/2021	0	0	0	0
1/03/2021	0	0	0	0
2/03/2021	0	0	0	0
3/03/2021	0	0	0	0
4/03/2021	0	0	0	0
5/03/2021	0	0	0	0
6/03/2021	0	0	0	0
7/03/2021	0	0	0	0
8/03/2021	7	14.5	7.5	54000
9/03/2021	7.5	14.5	7	50400
10/03/2021	8	14.5	6.5	46800
11/03/2021	7.5	14.5	7	50400
12/03/2021	7.5	14.5	7	50400
13/03/2021	0	0	0	0
14/03/2021	0	0	0	0
15/03/2021	7.5	11	3.5	25200
16/03/2021	0	0	0	0
17/03/2021	0	0	0	0
18/03/2021	0	0	0	0
19/03/2021	7.5	14.5	7	50400
20/03/2021	0	0	0	0
21/03/2021	0	0	0	0
22/03/2021	9	14.5	5.5	39600
23/03/2021	12	14.5	2.5	18000
24/03/2021	0	0	0	0
25/03/2021	0	0	0	0
26/03/2021	7.5	14.5	7	50400
27/03/2021	0	0	0	0
28/03/2021	0	0	0	0
29/03/2021	8	14.5	6.5	46800
30/03/2021	8	14.5	6.5	46800
31/03/2021	7.5	14.5	7	50400
1/04/2021	7.5	14.5	7	50400
2/04/2021	7	14	7	50400
3/04/2021	0	0	0	0
4/04/2021	0	0	0	0
5/04/2021	7	14.5	7.5	54000
6/04/2021	8.5	14.5	6	43200
7/04/2021	0	0	0	0
8/04/2021	7.5	14.5	7	50400

Date	Start	Finish	Hours	Litres @ 120/min
9/04/2021	7	14.5	7.5	54000
10/04/2021	0	0	0	0
11/04/2021	0	0	0	0
12/04/2021	8	14.5	6.5	46800
13/04/2021	7.5	14.5	7	50400
14/04/2021	8	14.5	6.5	46800
15/04/2021	0	0	0	0
16/04/2021	8	14	6	43200
17/04/2021	0	0	0	0
18/04/2021	0	0	0	0
19/04/2021	13	14.5	1.5	10800
20/04/2021	0	0	0	0
21/04/2021	12	14.5	2.5	18000
22/04/2021	7.5	14.5	7	50400
23/04/2021	7.5	14.5	7	50400
24/04/2021	0	0	0	0
25/04/2021	0	0	0	0
26/04/2021	0	0	0	0
27/04/2021	0	0	0	0
28/04/2021	0	0	0	0
29/04/2021	7.5	14.5	7	50400
30/04/2021	0	0	0	0
1/05/2021	0	0	0	0
2/05/2021	0	0	0	0
3/05/2021	0	0	0	0
4/05/2021	8.5	14.5	6	43200
5/05/2021	8	14.5	6.5	46800
6/05/2021	7.5	14	6.5	46800
7/05/2021	7.5	14.5	7	50400
8/05/2021	0	0	0	0
9/05/2021	0	0	0	0
10/05/2021	7.5	14.5	7	50400
11/05/2021	0	0	0	0
12/05/2021	7.5	14.5	7	50400
13/05/2021	7.5	14.5	7	50400
14/05/2021	9	14.5	5.5	39600
15/05/2021	0	0	0	0
16/05/2021	0	0	0	0
17/05/2021	0	0	0	0
18/05/2021	8	14.5	6.5	46800
19/05/2021	8.5	14.5	6	43200
20/05/2021	8.5	14.5	6	43200
21/05/2021	0	0	0	0
22/05/2021	0	0	0	0
23/05/2021	0	0	0	0
24/05/2021	9.5	14.5	5	36000
25/05/2021	11	14.5	3.5	25200
26/05/2021	10.5	14.5	4	28800
27/05/2021	9.5	14.5	5	36000

Date	Start	Finish	Hours	Litres @ 120/min
28/05/2021	10.5	14.5	4	28800
29/05/2021	0	0	0	0
30/05/2021	0	0	0	0
31/05/2021	9.5	14.5	5	36000
1/06/2021	9	14.5	5.5	39600
2/06/2021	0	0	0	0
3/06/2021	8	14.5	6.5	46800
4/06/2021	10	14.5	4.5	32400
5/06/2021	0	0	0	0
6/06/2021	0	0	0	0
7/06/2021	0	0	0	0
8/06/2021	0	0	0	0
9/06/2021	7.5	16	8.5	61200
10/06/2021	8.5	17	8.5	61200
11/06/2021	8	17	9	64800
12/06/2021	0	0	0	0
13/06/2021	0	0	0	0
14/06/2021	0	0	0	0
15/06/2021	9.5	17	7.5	54000
16/06/2021	8.5	17	8.5	61200
17/06/2021	8.5	17	8.5	61200
18/06/2021	7.5	16.5	9	64800
19/06/2021	7.5	12	4.5	32400
20/06/2021	0	0	0	0
21/06/2021	8.5	17	8.5	61200
22/06/2021	8	17	9	64800
23/06/2021	10	17	7	50400
24/06/2021	7.5	16.5	9	64800
25/06/2021	9	15	6	43200
26/06/2021	0	0	0	0
27/06/2021	0	0	0	0
28/06/2021	0	0	0	0
29/06/2021	7	16	9	64800
30/06/2021	8	16	8	57600
1/07/2021	8.5	15.5	7	50400
2/07/2021	8.5	15.5	7	50400
3/07/2021	7.5	12	4.5	32400
4/07/2021	0	0	0	0
5/07/2021	8	16	8	57600
6/07/2021	7.5	16	8.5	61200
7/07/2021	0	0	0	0
8/07/2021	7.5	16	8.5	61200
9/07/2021	7.5	16	8.5	61200
10/07/2021	7.5	12	4.5	32400
11/07/2021	0	0	0	0
12/07/2021	0	0	0	0
13/07/2021	0	0	0	0
14/07/2021	7	16	9	64800
15/07/2021	7	16	9	64800

Date	Start	Finish	Hours	Litres @ 120/min
16/07/2021	7.5	16	8.5	61200
17/07/2021	7	12	5	36000
18/07/2021	0	0	0	0
19/07/2021	10	16	6	43200
20/07/2021	8	15	7	50400
21/07/2021	11	16	5	36000
22/07/2021	7	16	9	64800
23/07/2021	7.5	16	8.5	61200
24/07/2021	7	12	5	36000
25/07/2021	0	0	0	0
26/07/2021	7	14	7	50400
27/07/2021	0	0	0	0
28/07/2021	0	0	0	0
29/07/2021	7	16.5	9.5	68400
30/07/2021	7.5	16.5	9	64800
31/07/2021	7	13	6	43200
1/08/2021	0	0	0	0
2/08/2021	8.5	16	7.5	54000
3/08/2021	7.5	15	7.5	54000
4/08/2021	8	16	8	57600
5/08/2021	7.5	16.5	9	64800
6/08/2021	0	0	0	0
7/08/2021	7	12	5	36000
8/08/2021	0	0	0	0
9/08/2021	0	0	0	0
10/08/2021	7.5	16	8.5	61200
11/08/2021	8.5	16	7.5	54000
12/08/2021	8.5	1	-7.5	-54000
13/08/2021	0	0	0	0
14/08/2021	0	0	0	0
15/08/2021	0	0	0	0
16/08/2021	0	0	0	0
17/08/2021	0	0	0	0
18/08/2021	7	16.5	9.5	68400
19/08/2021	7	16.5	9.5	68400
20/08/2021	7.5	16.5	9	64800
21/08/2021	7	13	6	43200
22/08/2021	0	0	0	0
23/08/2021	8	16	8	57600
24/08/2021	8	16	8	57600
25/08/2021	9	14	5	36000
26/08/2021	0	0	0	0
27/08/2021	0	0	0	0
28/08/2021	0	0	-	0
29/08/2021	0	0	0	0
30/08/2021	0	0	0	0
31/08/2021	0	0	0	0
1/09/2021	7	16.5	9.5	68400
2/09/2021	8	16.5	8.5	61200



Date	Start	Finish	Hours	Litres @ 120/min
3/09/2021	7.5	16	8.5	61200
4/09/2021	7	16	9	64800
5/09/2021	0	0	0	0
6/09/2021	8	16	8	57600
7/09/2021	7.5	16	8.5	61200
8/09/2021	0	0	0	0
9/09/2021	0	0	0	0
10/09/2021	7	15	8	57600
11/09/2021	7	12	5	36000
12/09/2021	0	0	0	0
13/09/2021	7	16.5	9.5	68400
14/09/2021	8.5	16	7.5	54000
15/09/2021	7.5	16	8.5	61200
16/09/2021	8.5	14	5.5	39600
17/09/2021	8	16	8	57600
18/09/2021	7	12	5	36000
19/09/2021	0	0	0	0
20/09/2021	0	0	0	0
21/09/2021	0	0	0	0
22/09/2021	7	16.5	9.5	68400
23/09/2021	8	17	9	64800
24/09/2021	8	17	9	64800
25/09/2021	0	0	0	0
26/09/2021	0	0	0	0
27/09/2021	7.5	17	9.5	68400
28/09/2021	7.5	16.5	9	64800
29/09/2021	8.5	15.5	7	50400
30/09/2021	8.5	17	8.5	61200
1/10/2021	8	17	9	64800
2/10/2021	8	17	9	64800
3/10/2021	0	0	0	0
4/10/2021	0	0	0	0
5/10/2021	10	17	7	50400
6/10/2021	8.5	16.5	8	57600
7/10/2021	7	17	10	72000
8/10/2021	7.5	17	9.5	68400
9/10/2021	7.5	12	4.5	32400
10/10/2021	0	0	0	0
11/10/2021	0	0	0	0
12/10/2021	0	0	0	0
13/10/2021	8.5	17	8.5	61200
14/10/2021	8	16.5	8.5	61200
15/10/2021	8	16.5	8.5	61200
16/10/2021	8	16.5	8.5	61200
17/10/2021	0	0	0	0
18/10/2021	8	16.5	8.5	61200
19/10/2021	8	16.5	8.5	61200
20/10/2021	7.5	17	9.5	68400
21/10/2021	8	17	9	64800

Date	Start	Finish	Hours	Litres @ 120/min
22/10/2021	8	17	9	64800
23/10/2021	7	12	5	36000
24/10/2021	0	0	0	0
25/10/2021	8.5	17	8.5	61200
26/10/2021	8	17	9	64800
27/10/2021	10.5	17	6.5	46800
28/10/2021	10	16.5	6.5	46800
29/10/2021	7.5	17	9.5	68400
30/10/2021	7	12	5	36000
31/10/2021	0	0	0	0
1/11/2021	8.5	16.5	8	57600
2/11/2021	8.5	16.5	8	57600
3/11/2021	8	16	8	57600
4/11/2021	8.5	17	8.5	61200
5/11/2021	7.5	17	9.5	68400
6/11/2021	7	12	5	36000
7/11/2021	0	0	0	0
8/11/2021	7.5	17	9.5	68400
9/11/2021	11	17	6	43200
10/11/2021	8	16.5	8.5	61200
11/11/2021	7.5	17	9.5	68400
12/11/2021	7.5	17	9.5	68400
13/11/2021	7	12	5	36000
14/11/2021	0	0	0	0
15/11/2021	7.5	17	9.5	68400
16/11/2021	9.5	17	7.5	54000
17/11/2021	8	16.5	8.5	61200
18/11/2021	8	16.5	8.5	61200
19/11/2021	8	16.5	8.5	61200
20/11/2021	7.5	12	4.5	32400
21/11/2021	0	0	0	0
22/11/2021	11.5	17	5.5	39600
23/11/2021	10.5	16	5.5	39600
24/11/2021	13	16	3	21600
25/11/2021	7.5	12	4.5	32400
26/11/2021	0	0	0	0
27/11/2021	8	16	8	57600
28/11/2021	7	16	9	64800
29/11/2021	7	16	9	64800
30/11/2021	0	0	0	0
1/12/2021	0	0	0	0
2/12/2021	0	0	0	0
3/12/2021	0	0	0	0
4/12/2021	0	0	0	0
5/12/2021	7	16	9	64800
6/12/2021	8	16	8	57600
7/12/2021	0	0	0	0
8/12/2021	0	0	0	0
9/12/2021	0	0	0	0

Date	Start	Finish	Hours	Litres @ 120/min
10/12/2021	0	0	0	0
11/12/2021	8	16	8	57600
12/12/2021	7.5	15.5	8	57600
13/12/2021	7	16	9	64800
14/12/2021	8	12	4	28800
15/12/2021	11	16	5	36000
16/12/2021	0	0	0	0
17/12/2021	0	0	0	0
18/12/2021	8.5	15.5	7	50400
19/12/2021	7	16	9	64800
20/12/2021	7.5	16	8.5	61200
21/12/2021	8	15	7	50400
22/12/2021	8	16	8	57600
23/12/2021	7	12	5	36000
24/12/2021	0	0	0	0
25/12/2021	0	0	0	0
26/12/2021	0	0	0	0
27/12/2021	0	0	0	0
28/12/2021	0	0	0	0
29/12/2021	0	0	0	0
30/12/2021	7	12	5	36000
31/12/2021	7	14.5	7.5	54000

# Appendix J

# Noise Monitoring

# Results

# Noise Monitoring Assessment

Hodgson Quarries and Plant Pty Ltd

Prepared for: VGT Environmental Compliance Solutions  
Pty Limited  
October 2021  
MAC160257RP6



# Document Information

## Noise Monitoring Assessment

### Hodgson Quarries and Plant Pty Ltd

**Prepared for:** VGT Environmental Compliance Solutions Pty Limited

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Document ID	Status	Date	Prepared By	Signed	Reviewed By	Signed
MAC160257RP6	Final	28 October 2021	Nicholas Shipman		Oliver Muller	

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APPENDIX A – GLOSSARY OF TERMS

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# 1 Introduction

Muller Acoustic Consulting Pty Ltd (MAC) has been commissioned by VGT Environmental Compliance Solutions Pty Limited to complete a Noise Monitoring Assessment (NMA) for Hodgson Quarries and Plant Pty Ltd ('the quarry'). The NMA has been completed to quantify operational noise emissions and off-site truck noise as per Condition 47 and 48 of their Project Approval (Department of Planning and Environment (DPE)) and Environment Protection License (EPL) (ref:6535) from NSW Environment Protection Authority (EPA).

The assessment has been conducted in accordance with the following documents:

- NSW Environment Protection Authority (EPA), 2017, Noise Policy for Industry (NPI);
- NSW Department of Environment, Climate Change and Water (DECCW), 2011, NSW Road Noise Policy (RNP);
- Australian Standard AS 1055:2018 (AS 1055) – Acoustics – Description and Measurement of Environmental Noise;
- NSW Environment Protection Authority (EPA), 2015, Environment Protection Licence EPL 6535 (EPL); and
- Development Application (DA No.267-11-99), 2000, Department of Planning and Environment (DPE).

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

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## 2 Noise Criteria

### 2.1 Operational Noise Criteria

The project has operational noise criteria prescribed by both the DPE and EPA (see **Appendix B**). Notwithstanding, for consistency with the Acoustic Assessment prepared for Modification 2 of the quarry, this assessment has adopted criteria as per the Development Application summarised below:

*Condition 47. For typical operations, noise from the premises must not exceed:*

- an LAeq, 15 min noise emission criterion of 43dBA (7am to 6pm) Monday to Saturday;
- an LAeq, 15 min noise emission criterion of 40dBA (6am to 7am) Monday to Saturday; and
- an LA1, 1 min noise emission criterion of 50dBA (6am to 7am) Monday to Saturday.

*Noise generated by the development is to be measured in accordance with the relevant requirements of the NSW Industrial Noise Policy.*

*However, these criteria do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.*

### 2.2 Road Noise Criteria

Condition 48 of the DA specifies noise criteria for off-site road trucks from the quarry. These criteria are consistent with those outlined in the RNP (DECCW, 2011) for local roads.

*Condition 48.*

*The Applicant shall ensure that traffic noise from the development does not exceed (LAeq(1 hr)) 55dBA between 7am and 10pm and 50dBA between 10pm and 7am at any affected residence under adverse weather conditions. Where ambient LAeq levels already exceed these criteria, the Applicant shall ensure that traffic noise from the development does not result in an increase of more than 2dBA.*

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### 3 Methodology

Attended noise surveys for this assessment were conducted in general accordance with the procedures described in Australian Standard AS 1055:2018, “Acoustics - Description and Measurement of Environmental Noise” and the EPL.

The acoustic instrumentation used carries current NATA calibration and complies with AS/NZS 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  $\pm 0.5$  dBA. All equipment carried appropriate and current NATA (or manufacturer) calibration certificates.

#### 3.1 Operational Noise Measurement Methodology

The locality surrounding the quarry is primarily rural/residential. Three representative receivers were selected for this assessment being Location A (north east), Location B (south east) and Location C (north west) (see **Figure 1**). The measurements were carried out using a Svantek Type 1, 971 noise analyser on Tuesday 19 October 2021.

The monitoring consisted of six 15-minute monitoring intervals between 6am to 8am. Where possible throughout each survey the operator quantified the contribution of any significant noise sources. Quarry loading and transportation operations commence at 6am, it is noted that processing was not operational during the monitoring period. The programme of the measurements and list of quarry activities is presented in **Table 1**.

Table 1 Noise Monitoring Programme			
Number of 15 minute Measurements	Measurement Period	Assessment Period	Quarry Activities
3	6am to 7am	Night/Morning Shoulder	Toolbox Talks, Loading/Transportation, No Processing
3	7am to 8am	Day	Loading/Transportation, No Processing

### 3.2 Road Noise Assessment Methodology

Road noise monitoring was conducted at 4405 Old Northern Road, Maroota NSW using a Type 1 Svantek, 977 noise analyser on Tuesday 19 October 2021. The monitoring was conducted between 6am to 8am as per Condition 48 of the DA, with the monitoring position situated at a 15m offset from Old Northern Road.

This location was selected as it had a clear line of site to Old Northern Road and could also be used to visually identify project related trucks entering and leaving site via Roberts Road. Noise levels obtained at the monitoring location are considered representative for receivers situated 15m from the road alignment, which is considered a representative worst case.



**KEY**




-  ROBERTS ROAD MAROOTA SAND QUARRY
-  ATTENDED NOISE MONITORING LOCATIONS
-  ROAD NOISE MONITORING LOCATION

FIGURE 1 - LOCALITY PLAN

MAC160257



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## 4 Results

### 4.1 Operational Noise Results – Location A

The monitoring and assessment results are presented in individual tables for each monitoring location. The results of the 15-minute attended noise measurements for Tuesday 19 October 2021 for Location A are summarised in **Table 2**.

Table 2 Operational Noise Results – Location A						
Time (hrs)	Primary Noise Descriptor (dBA re 20 µPa)				Meteorology	Description and SPL, dBA
	L <sub>Amax</sub>	L <sub>A10</sub>	L <sub>Aeq</sub>	L <sub>A90</sub>		
06:10 (Morning Shoulder)					WS: 0.6m/s	Birds 36-44
					WD: NW	Wind in trees 35-37
	69	49	49	39	Rain: Nil	Traffic 36-69
						Pedestrian 34-54
						Quarry Mobile Plant <35
	Quarry Site L <sub>Aeq</sub> (15min) Contribution					<35
	Criteria L <sub>Aeq</sub> (15min)					40
07:03 (Day)					WS: 0.3m/s	Traffic 36-90
					WD: NW	Birds 36-52
	90	55	62	40	Rain: Nil	Dog bark 36-49
						Quarry Inaudible
	Quarry Site L <sub>Aeq</sub> (15min) Contribution					<30
	Criteria L <sub>Aeq</sub> (15min)					43

## 4.2 Operational Noise Results – Location B

The results of the 15-minute attended noise measurements for Tuesday 19 October 2021 for Location B are summarised in **Table 3**.

Table 3 Operator-Attended Noise Survey Results – Location B						
Time (hrs)	Primary Noise Descriptor (dBA re 20 µPa)				Meteorology	Description and SPL, dBA
	L <sub>Amax</sub>	L <sub>A10</sub>	L <sub>Aeq</sub>	L <sub>A90</sub>		
06:26 (Morning Shoulder)	79	54	55	37	WS: 0.5m/s WD: NW Rain: Nil	Traffic 31-79 Birds 31-66 Site Transportation 43-44 (2 minutes)
Quarry Site L <sub>Aeq</sub> (15min) Contribution						34
Criteria L <sub>Aeq</sub> (15min)						40
07:22 (Day)	75	51	54	36	WS: 0.4m/s WD: NW Rain: Nil	Traffic 33-75 Birds 33-64 Aircraft 33-54 Quarry Inaudible
Quarry Site L <sub>Aeq</sub> (15min) Contribution						<30
Criteria L <sub>Aeq</sub> (15min)						44

#### 4.3 Operational Noise Results - Location C

The results of the 15-minute attended noise measurements for Tuesday 19 October 2021 for Location C are summarised in **Table 4**.

Table 4 Operator-Attended Noise Survey Results – Location C						
Time (hrs)	Primary Noise Descriptor (dBA re 20 µPa)				Meteorology	Description and SPL, dBA
	L <sub>Amax</sub>	L <sub>A10</sub>	L <sub>Aeq</sub>	L <sub>A90</sub>		
06:45 (Morning Shoulder)	61	50	47	42	WS: 0.4m/s WD: NW Rain: Nil	Traffic 35-61 Birds 38-48 Agriculture 37-42 Quarry Inaudible
Quarry Site L <sub>Aeq</sub> (15min) Contribution						<30
Criteria L <sub>Aeq</sub> (15min)						40
07:40 (Day)	62	47	45	39	WS: 0.4m/s WD: NW Rain: Nil	Traffic 38-62 Birds 36-56 Quarry Inaudible
Quarry Site L <sub>Aeq</sub> (15min) Contribution						<30
Criteria L <sub>Aeq</sub> (15min)						43

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#### 4.4 Road Noise Results

The results of the road noise attended measurements for Tuesday 19 October 2021 are summarised in **Table 5**.

Noise monitoring identified that overall LAeq(1hr) noise levels were dominated by vehicles not associated with the quarry. Therefore, road traffic noise calculations were undertaken to quantify project road noise contributions at the measurement position. The calculations were completed using United States (US) Federal Highway Administration (FHWA) calculation method (Report 550/9-74-004) Appendix A-13 and CORTN amendments. This method is an internationally accepted theoretical traffic noise prediction calculation, ideal for calculation of road traffic noise where relatively small traffic flows are encountered. The FHWA Traffic Noise Model (TNM) is listed in the RNP as an appropriate calculation method. Results of the traffic noise calculations identify that quarry vehicles satisfy the relevant day and night (morning shoulder) road noise criteria.

<b>Table 5 Road Noise Survey Results</b>				
Period	Number of Quarry Trucks (passbys)	Overall Measured	Calculated LAeq(1hr)	Criteria
		LAeq(1hr) (dBA re 20 µPa)	Project Truck Contribution	dBA
		dBA	dBA	LAeq(1hr)
6am to 7am	10	68	50	50
7am to 8am	2	68	44	55

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## 5 Discussion

### 5.1 Operational Noise Discussion

#### 5.1.1 Discussion of Results – Location A

Attended measurement results for monitoring conducted at Location A on Tuesday 19 October 2021 identified that quarry noise was audible during morning shoulder measurements and inaudible for day measurements, with non-quarry sources dominating measured noise levels. Generally, quarry noise sources included loader movements and reverse alarms and non-quarry noise sources included local and distant traffic, birds, pedestrians and dogs barking.

Therefore, estimated quarry noise contributions were below the relevant EPL noise limit for all measurements at Location A.

#### 5.1.2 Discussion of Results – Location B

Attended measurement results for monitoring conducted at Location B on Tuesday 19 October 2021 identified that quarry noise was audible during morning shoulder measurements and inaudible for day measurements, with non-quarry sources dominating measured noise levels. Generally, quarry noise sources included road truck movements and non-quarry noise sources included local and distant traffic, birds and aircraft noise.

Therefore, estimated quarry noise contributions were below the relevant EPL noise limit for all measurements at Location B.

#### 5.1.3 Discussion of Results – Location C

Attended measurement results for monitoring conducted at Location C on Tuesday 19 October 2021 identified that quarry noise was inaudible during morning shoulder and day measurements, with non-quarry sources dominating measured noise levels. Generally, non-quarry noise sources included traffic, birds and agricultural noise.

Therefore, estimated quarry noise contributions were below the relevant EPL noise limit for all measurements at Location C.

#### 5.1.4 Road Noise Discussion

Road noise emission from quarry vehicles, satisfied relevant noise criteria as specified by Condition 48 of the DA for receivers situated at a 15m offset to the roadway. Furthermore, ambient road traffic not associated with the project dominated measured noise levels throughout measurements.



## 6 Conclusion

Muller Acoustic Consulting Pty Ltd (MAC) has completed a Noise Monitoring Assessment on behalf of Hodgson Quarries and Plant Pty Ltd. The assessment was completed to quantify site noise emissions against relevant noise criteria pertaining to quarry operations and off-site truck movements.

Attended monitoring has identified that operational and road noise emissions generated by the quarry comply with relevant statutory noise limits. Furthermore, project related noise emissions are generally masked by extraneous non-quarry sources.

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# Appendix A – Glossary of Terms

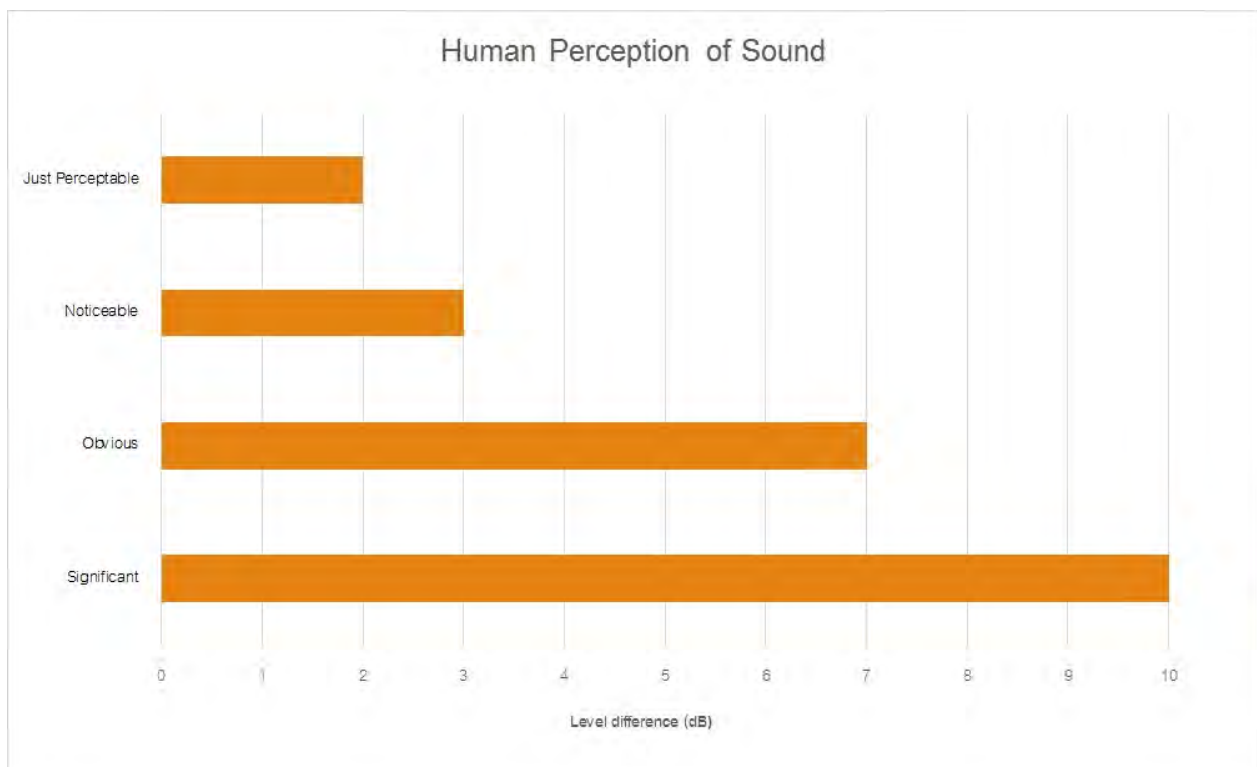
Table A1 provides a number of technical terms have been used in this report.

Table A1 Glossary of 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 LA90 statistical noise levels.
Adverse Weather	Weather effects that enhance noise (that is, wind and temperature inversions) that occur at a site for a significant period of time (that is, wind occurring more than 30% of the time in any assessment period in any season and/or temperature inversions occurring more than 30% of the nights in winter).
Ambient Noise	The noise associated with a given environment. Typically a composite of sounds from many 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 noise.
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 Linear or decibels Z-weighted.
Hertz (Hz)	The measure of frequency of sound wave oscillations per second - 1 oscillation per second equals 1 hertz.
LA10	A noise level which is exceeded 10 % of the time. It is approximately equivalent to the average of maximum noise levels.
LA90	Commonly referred to as the background noise, this is the level exceeded 90 % of the time.
LAeq	The summation of noise over a selected period of time. It is the energy average noise from a source, and is the equivalent continuous sound pressure level over a given period.
LAm <sub>ax</sub>	The maximum root mean squared (rms) sound pressure level received at the microphone during a measuring interval.
RBL	The Rating Background Level (RBL) is an overall single figure background level representing each assessment period over the whole monitoring period. The RBL is used to determine the intrusiveness criteria for noise assessment purposes and is the median of the ABL's.
Sound power level (LW)	This is a measure of the total power radiated by a source. The sound power of a source is a fundamental location of the source and is independent of the surrounding environment. Or a measure of the energy emitted from a source as sound and is given by : $= 10 \cdot \log_{10} (W/W_0)$ Where : W is the sound power in watts and W <sub>0</sub> is the sound reference power at 10-12 watts.

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 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 – Regulatory Noise Limits

# Environment Protection Licence



Licence - 6535

## Licence Details

Number:	6535
Anniversary Date:	12-March

## Licensee

HB MAROOKA PTY LTD

PO BOX 1778

GOSFORD NSW 2250

## Premises

HB MAROOKA PTY LTD

CNR ROBERTS &amp; OLD NORTHERN ROADS

MAROOKA NSW 2756

## Scheduled Activity

Crushing, Grinding or Separating

Extractive Activities

## Fee Based Activity

### Scale

Crushing, grinding or separating	> 100000-500000 T processed
Land-based extractive activity	> 100000-500000 T extracted, processed or stored

## Region

Metropolitan - Sydney Industry

Level 13, 10 Valentine Ave

PARRAMATTA NSW 2150

Phone: (02) 9995 5000

Fax: (02) 9995 6900

PO Box 668 PARRAMATTA

NSW 2124



# Environment Protection Licence

---



Licence - 6535

## **P1 Location of monitoring/discharge points and areas**

P1.1 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.

## **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 Noise limits**

L2.1 Noise from the premises must not exceed the sound pressure level expressed as LA10 (15 minute) of 45 dB(A), except as expressly provided by this licence.

L2.2 Noise from the premises is to be measured or computed at any point within one metre of any residential boundary, or at any point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise level limits in Condition L2.1.

## **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.

**ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979**

**DETERMINATION OF A DEVELOPMENT APPLICATION UNDER SECTION 80(1) OF THE  
ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979**

I, the Minister for Urban Affairs and Planning, under Section 80(1) of the Environmental Planning and Assessment Act, 1979 (the Act), determine the Development Application referred to in Schedule 1 by granting consent to the Application, subject to the conditions set out in Schedule 2.

The reason for the imposition of conditions is to minimise any adverse environmental effects of the development, consistent with the objectives of the Act.

Andrew Refshauge MP  
Minister for Urban Affairs and Planning

Sydney

2000

File No. S98/00772

**SCHEDULE 1**

Application made by:	Dr L. S. Martin ("the Applicant").
To:	The Minister for Urban Affairs and Planning ("the Minister").
In respect of:	Lots 1 and 2 DP 228308, Lot 2 DP 312327, Roberts Road, Maroota, in the Baulkham Hills Local Government Area.
For the following:	Extraction and on-site processing of sand, clay and pebble; construction of a bund wall.
Development Application:	DA No. 267-11-99 lodged with the Department of Urban Affairs and Planning on 22 November 1999, accompanied by a Environmental Impact Statement prepared by Nexus Environmental Planning Pty Ltd. and dated November 1999.
Determination:	<ol style="list-style-type: none"> <li>1) To ascertain the date upon which the consent becomes effective, refer to Section 83 of the Act.</li> <li>2) To ascertain the date upon which the consent is liable to lapse, refer to Section 95 of the Act.</li> <li>3) Section 97 of the Act confers on an applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court exercisable within 12 months after receipt of notice.</li> </ol>

*This instrument includes changes made by DA 267-11-99 Mod 1 in 29 November 2000 (marked red).*

*This instrument includes changes made by DA 267-11-99 Mod 3 in 18 August 2015 (marked blue).*

*This instrument includes changes made by DA 267-11-99 Mod 2 in 18 March 2016 (marked green).*

44. The results of the Groundwater Monitoring Program shall be reported the Department and DPI-Water, using contour plans depicting the surface topography, updated contour maps of the wet weather high groundwater level of the regional aquifer and proposed depth of extraction for each extraction Phase. Reporting is to occur on a six monthly basis for the duration of extractive operations, and throughout rehabilitation of the site, unless otherwise agreed with the Secretary.

The Applicant shall implement the Groundwater Monitoring Program as approved from time to time by the Secretary.

### *Process Water Dam Design and Construction*

45. The Applicant must ensure that the Process Water Dam is designed and constructed in a manner that satisfies the design and construction criteria for the Process Water Dam as developed under the Surface Water Management Plan (see condition 42(b) above).

## **NOISE**

### *Noise Management Plan*

46. The Applicant shall prepare a Noise Management Plan as part of the EMP.

The Noise Management Plan shall:

- (a) identify existing and potential noise sources and their relative contribution to noise impacts from the development;
- (b) specify appropriate intervals for noise monitoring to evaluate, assess and report noise emission levels due to construction and normal operations of the development under prevailing weather conditions;
- (c) outline the methodologies to be used, including justification for monitoring intervals, weather conditions, seasonal variations, selecting locations, periods and times of measurements, the design of any noise modelling or other studies, including the means for determining the noise levels emitted by the development;
- (d) specify measures to be taken to document any higher level of impacts or patterns of temperature inversions, and detail actions to quantify and ameliorate enhanced impacts if they occur;
- (e) provide details of noise amelioration measures, including measures to be used to reduce the impact of intermittent, low frequency and tonal noise (including truck reversing alarms) and reactive management responses for particular noise sources; and
- (f) contingency measures to be implemented should noise complaints be received.
- (g) provision for the notification of adjoining property owners of the commencement and duration of works adjoining the boundary;
- (h) construction of temporary noise shielding to residences affected by short-term noise impacts, including the bund recommended under Modification 2, and include an assessment of the effectiveness of this measure in reducing noise levels; and
- (i) include a noise reduction strategy for typical operations to ensure the noise levels from these operations do not exceed the noise criteria specified in Condition 47.

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

47. For typical operations, noise from the premises must not exceed:
- an  $L_{Aeq,15 \text{ min}}$  noise emission criterion of 43 dB(A) (7am to 6pm) Monday to Saturday;
  - an  $L_{Aeq,15 \text{ min}}$  noise emission criterion of 40 dB(A) (6am to 7am) Monday to Saturday; and
  - an  $L_{A1,1 \text{ minute}}$  noise emission criterion of 50 dB(A) (6am to 7am) Monday to Saturday.

Noise generated by the development is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy* (as may be updated or replaced from time-to-time).

However, these criteria do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement."

- 47(a) The excavator to be used is to be fitted with acoustic mufflers to achieve a noise level of approximately 76dB(A) when measured at 7 metres.
- 47(b) The on-site generator is to be fitted with an acoustic enclosure to ensure that noise levels less than 44dB(A) at 30m are achieved.
- 47(c) A noise compliance investigation is to undertaken within one month of the installation of the equipment to demonstrate compliance with the noise level limits stated in Conditions 47(a) and 47(b). The results of the compliance investigation are to be provided for the approval of the Secretary within 14 days of the completion of the investigations.
- 47(d) The Applicant must ensure works associated with atypical operations, as described in Modification 2, only occur:
- (a) for a maximum of 24 days in a year, and only between 8 am to 5 pm on those days, Monday to Saturday;
  - (b) after an investigation of options for avoiding multiple atypical operations at any one time so as to limit noise levels at affected receptors, and the outcomes of this investigation are detailed in the Noise Management Plan; and
  - (c) at least 24 hours after notifying potentially affected receptors, with such notification to include information on the duration and extent of works, the likely noise to be experienced, and a contact telephone number.

## TRAFFIC AND TRANSPORT

### *Road Noise Management Plan*

48. The Applicant shall ensure that traffic noise from the development does not exceed (L Aeq(1 hr)) 55 dB(A) between 7 am and 10 pm and 50 dB(A) between 10 pm and 7 am at any affected residence under adverse weather conditions. Where ambient Leq levels already exceed these criteria, the Applicant shall ensure that traffic noise from the development does not result in an increase of more than 2 dB(A).

*Note: Adverse weather conditions means in the presence of winds up to 3 metres per second and/or temperature inversions of up to 4 degrees Centigrade per 100 metres.*

49. The Applicant shall prepare a Road Noise Management Plan as part of the EMP. The Plan shall document measures to be taken to meet the criteria, including a monitoring, reporting and response program; and methods for educating drivers in the reduction of road noise impacts.

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

### *Truck movements*

50. The Applicant shall ensure that truck movements associated with the development do not exceed 100 movements per day (50 laden truck movements) or 20 (10 laden truck movements) movements per hour, during construction or operation.

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# Appendix K Flora Monitoring Results

**ANNUAL  
BIODIVERSITY  
MONITORING  
REPORT  
2021**

**Prepared for Hodgson Quarries and Plant Pty Ltd**

**October 2021 V.1**



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# **Annual Biodiversity Monitoring Report 2021**

**Hodgson Quarries and Plant Pty Ltd  
Roberts Road Maroota NSW**

This assessment has been prepared by

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South East Environmental

October 2021 V.1

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## Abbreviations

<b>Abbreviation</b>	<b>Description</b>
BC Act	<i>Biodiversity Conservation Act 2016</i>
DPIE	Department of Planning, Industry and Environment
EEC	Endangered Ecological Community
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Environmental Protection and Biodiversity Conservation Act 1999</i>
HTW	High Threat Weed
KPI	Key Performance Indicators
KTP	Key Threatening Processes
LEP	Local Environmental Plan
NSW OES	New South Wales Office of Environment, Energy and Science
OEMP	Operational Environmental Management Plan
ONR	Old Northern Road
PCT	Plant Community Type
SEPP	State Environmental Planning Policy
THSC	The Hills Shire Council
VIS	Vegetation Information System
WoNS	Weeds of National Significance

# 1 INTRODUCTION

---

This Annual Biodiversity Monitoring Report presents the findings of the annual monitoring of the biodiversity value within the Hodgson Quarries operation at Roberts Road Maroota.

## 1.1 BACKGROUND

Hodgson Quarries and Plant Pty Ltd operates a sand extraction and processing operation on a 28 hectare site including Lot 1 and 2 of DP228308 and Lot 2 of DP312327 Roberts Road Maroota. The quarry operates in compliance to Development Consent File No. S98/00772 issued by the Minister for Urban Affairs and Planning in 2000.

Several modifications have been made to the Development Consent, the most recent (Mod 4) being approved in 2021. Modification 3 triggered a review of the Operational Environmental Management Plan (OEMP) which included the update of a Flora and Fauna Management Plan. A requirement of the Flora and Fauna Management Plan, as addressed in Schedule 2 Condition 55 of the consent, is to develop an ongoing monitoring program for existing vegetated areas to assess their floristic structure, diversity, resilience, robustness to disturbance and fauna species diversity.

## 1.2 OBJECTIVES

The objectives of this Annual Biodiversity Monitoring Report is to describe the current condition of the vegetation found throughout the site and to advise Hodgson Quarries on the appropriate management measures that should be implemented to meet the expectations of the Flora and Fauna Management Plan (2016) prepared by VGT Pty Ltd.

This report will:

- identify native flora and fauna species, populations and ecological communities known to or likely to occur within the site;
- describe the native vegetation and habitats within the site;
- describe the current condition of the threatened flora and its habitat found within the site;
- determine the legislative and conservation significance of species, populations and ecological communities known or likely to occur within the site with reference to the Commonwealth *EPBC Act 1999* and the *NSW BC Act 2016*;
- recommend appropriate biodiversity and environmental management measures that should be implemented to reach criteria for monitoring success set by the Flora and Fauna Management Plan for the Sand Quarry, Roberts Road Maroota, NSW (2016);
- provide an independent monitoring report for inclusion as part of the external reporting for the quarry Annual Review.

## 2 METHODOLOGY

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### 2.1 SITE HISTORY

#### 2.1.1 Agricultural use

Much of the undisturbed area on the Roberts Road quarry site is agricultural land. Approximately 9 hectares is currently in use for this purpose, with approximately 0.5 hectares currently under active rehabilitation within the agricultural land area as will be discussed further in this report.

The remaining vegetation within the agricultural land area has had ongoing disturbance over many years which has including timber removal, livestock grazing and fruit orchards. As a result, exotic weed species are common. Farm dams have been dug which once provided irrigation to the fruit orchards and now provide water to livestock and Sunrise Plant Nursery which is located in the north/west corner of the property. They also provide a water source for native and exotic species that occur in the immediate area.

#### 2.1.2 Remnant native vegetation

An area immediately north of the entrance gate along Roberts Road contains remnant native vegetation which has been excluded from the sand extraction operational area. Although this area shows signs of past disturbance, it remains relatively intact and appears to be supporting a reasonable diversity of native flora and fauna given its small size of approximately 1 hectare.

The remnant native vegetation consists of a Sandstone Gully Forest type which was most likely once a moist open forest at the head of the catchment for Coopers Creek which extends further to the north. This vegetation type would have supported several species of canopy tree which were likely to have been harvested for fence post timber in the early European settlement era. Remaining canopy species are most likely regrowth from a clearing event in the early 1900's and provide ample protection for the lower stratum. Fencing to exclude livestock has improved the ability for native species, particularly the ground cover stratum, to flourish.

#### 2.1.3 Threatened flora habitat

An area in the north eastern corner of the site contains a threatened flora species which has previously been identified and monitored. The area where this species has been located has had severe disturbance in the past from clearing, grazing and most recently the sand quarry operations.

The area immediately surrounding the threatened species consists of pushed up crushed sandstone material which has resulted in an extremely compacted ground surface. Native shrubs from the soil seed bank and surrounding areas are becoming established despite the harsh growing conditions. It is expected that over time without intervention this area will establish as an extension of the remnant native vegetation adjacent although the plant community type may remain different indefinitely due to the change in surface geology.

### 2.2 FIELD SURVEY

Botanical surveys of the study area were conducted during October 2021. The survey consisted of a random meander throughout the areas of the property not in current use by quarry operations.

A targeted threatened flora survey was undertaken to locate *Acacia bynoeana* onsite. All flora species recorded are listed in Appendix A of this report.

Opportunistic sightings were also undertaken for indirect evidence of native fauna, including scratches, scats, nests, hollows in use, camps, roosts, den sites etc. Opportunistic sightings of all fauna species were recorded throughout the survey period.

There is no requirement for targeted threatened fauna surveys within the site however incidental sightings from previous reporting periods has been considered for this report.

### 2.3 CRITERIA TO MONITOR SUCCESS

VGT Pty Ltd 2016 have outlined the Key Performance Indicators (KPI) to measure success of the biodiversity and rehabilitation effort of the flora and fauna management within the Roberts Road quarry site. The following tables depict the performance and completion criteria for the site.

**Table 1.** Performance and completion criteria for Roberts Road quarry (taken from VGT Pty Ltd 2016)

<i>Performance Criteria being monitored</i>	
<i>Native Vegetation monitoring</i>	Demonstrated use of native plant species naturally occurring in the Maroota area used in all progressive revegetated and rehabilitated areas.
	Low mortality of plants used in progressive revegetation with 75% becoming established 3 years after planting.
	Installation of high durability fencing, with low maintenance requirements and suitable for excluding cattle and other livestock, to be installed prior to the completion of revegetation work areas.
	Fencing surrounding revegetated and rehabilitated areas are maintained in working condition.
	Installation of fencing along the southern fence line and to the north of the site entrance completed during dewatering of the fines ponds and prior to the construction of the new access track.
	Vegetation is retained.
	Low evidence of native vegetation disturbance surrounding the bund walls at the corner of Old Northern Road and Roberts Road.
<i>Fauna Monitoring</i>	Weeds, pests and feral animals are to be controlled.
	Weeds, pests and feral animals are to be controlled.
	Connectivity between current and future rehabilitated areas are established adjacent to existing and future areas of vegetation. Patches are not to be separated by more than 10 metres.
	Evidence of varying sized rocks between 20mm and greater than 200mm spread over rehabilitated areas.
	Evidence of logs and other fallen timber spread over rehabilitated areas.
	Ground dwelling fauna species of similar diversity to adjacent areas of similar habitat.
	On completion of the rehabilitation, a suitably qualified ecologist has determined the requirement on whether nest boxes are required. If nest boxed required to be installed a nest box management plan has been prepared.

## 2.4 SURVEY LIMITATIONS

The survey was conducted within a short timeframe during spring. Therefore some plant species may not have been identified due to the survey being performed when not in flower, or when dormant. It is noted that some flora species are seasonal, and may not have been visible at the time of the surveys.

The survey limitations have been addressed through:

- consideration of flora and fauna species known to occur in the locality (including number of records from BioNet);
- consideration of habitat suitability present within the study areas and connectivity to other areas of habitat in the local landscape;
- consideration of past and current weather conditions;
- A conservative approach in assuming the presence of a species that could potentially be present in the study areas.

Where the study area contains potential habitat for threatened fauna species known to occur in the locality, and where survey areas support a likelihood of occurrence, it has been assumed on a conservative approach that such species may occur in the study area.

## 3 RESULTS

---

Results from the field surveys conducted over October 2021 have been separated into three distinct areas to enable quantification of condition for each specific location and its monitoring objectives.

### 3.1 REMNANT NATIVE VEGETATION

The remnant native vegetation is a disturbed patch of native dominant species located in the north eastern corner of the property. The condition of the remnant area can be further divided into two separate areas as determined by disturbance level and the current soil profile available for flora species.

#### 3.1.1 Immediately north of Roberts Road site entry gate

The remnant native vegetation within this area has a mature canopy of Eucalyptus and Angophora species. Lower strata are present including midstorey canopy, shrubs and ground cover. The exclusion of livestock grazing within this area has resulted in an increase of native ground cover species which over time will contribute to a much richer biodiversity value.

Biodiversity functional attributes such as size class of canopy species, litter cover, fallen timber and natural regeneration of species occurring is present within the area. Such attributes are likely to increase over time providing disturbance remains excluded within the area.



**Figure 1.** Remnant vegetation located immediately north of Roberts Road site entry gate Oct 2021

### 3.1.2 North eastern corner

The remnant vegetation within the area of the far north eastern corner of the site has undergone past disturbance which has left the canopy broken. Eucalyptus and Angophora species are recovering throughout much of the area however the mature specimens are spaced apart providing little in canopy protection to the stratum below. The shrub stratum in this area is dominant and in some areas almost impenetrable. In other areas the shrub stratum is sparse and bare ground occurs.

In severely disturbed areas species from the following genus are thriving in the harsh conditions:

- Acacia
- Allocasuarina
- Daviesia
- Dillwynia
- Hakea

Leaf litter is abundant throughout most of this area however fallen timber and size class of canopy species is limited.



**Figure 2.** Remnant vegetation located in the north eastern corner adjacent to Roberts Road Oct 2021

## 3.2 AGRICULTURAL LAND

### 3.2.1 Roberts Road Boundary

Exotic grasses dominate the agricultural land along Roberts Road. Some native species are present, particularly along the large bund wall which provides protection from the hot westerly sun, including Three-awned Speargrass *Aristida vagans*, Slender Rat's Tail Grass *Sporobolus creber* and Weeping Grass *Microlaena stipoides*. Agricultural weeds occur within the area although they are not considered to be dominant within the landscape. One Weed of National Significance (WoNS) was identified, Fireweed *Senecio madagascariensis*. However, due to no grazing pressure on grass over the past 12 month period, the Fireweed density appears to be less this reporting period due to being outcompeted by thick grass growth.



The native species which have been planted on a bund wall bordering Roberts Road and Old Northern Road are growing well. Almost all of these species have reached reproductive maturity and have had a strong flowering season this year.



**Figure 3.** Bund wall adjacent to Roberts Road.

### 3.2.2 Old Northern Road Boundary

This area of agricultural land is dominated by exotic grass species suitable for livestock grazing. Some agricultural weed species occur although they do not dominate the landscape. A WoNS species, Fireweed *Senecio madagascariensis*, was observed in low density within this area. The Common Eastern Toadlet *Crinia signifera* was heard calling from the large dam adjacent to Old Northern Road along the western boundary. Several Eastern Snake-necked Tortoise's *Chelodina longicollis* were observed foraging within the large dam while a Red-bellied Black Snake *Pseudechis porphyriacus* was commonly observed sunbaking along the edge of the same dam during the reporting period.



**Figure 4.** Agricultural land with grassed bund wall adjacent to Old Northern Road

### 3.2.3 North western corner

A plant nursery is established in the far north western corner of the site. The nursery makes use of water in the farm dams located on site. The agricultural land directly to the east of the nursery site is dominated by exotic grass species suitable for livestock grazing. One WoNS was identified in low density in this location, Fireweed *Senecio madagascariensis*.



**Figure 5.** Agricultural land along Old Northern Road in the west/south west of the site

### 3.3 PLANTED NATIVE VEGETATION

#### 3.3.1 North of Roberts Road entrance gate

Bottlebrush *Callistemon* species have been planted along the eastern boundary of the property adjacent to the existing native vegetation. These shrubs are well established and provide a screen to Roberts Road. The shrubs provide habitat for small birds and food resources for a range of mammals, birds and invertebrate.



**Figure 6.** Bund wall immediately north of Roberts Road site entrance

#### 3.3.2 Old Northern Road

The southeastern corner and southern boundary of the site has small bund walls with planted native trees and shrubs. The trees along Old Northern Road have required pruning due to their close proximity to electrical power lines. As a result some of the trees have perished. The remaining plants appear to be growing well despite the pruning. The bund walls have good coverage of native vegetation with reproduction maturity demonstrated by most species during this monitoring period.



**Figure 7.** Planted native vegetation along Old Northern Road

### 3.3.3 Northern Boundary

A variety of Bottlebrush *Callistemon* species have been planted in two locations along the northern boundary of the property. Exclusion fencing has been undertaken and success to date appears to be high. There were two WoNS species present along the fence line of the neighboring property, *Lantana* *Lantana camara* and Blackberry *Rubus fruticosus* sp. aggregate.



**Figure 8.** Planted native vegetation along northern property boundary

### 3.4 THREATENED FLORA

A single threatened flora species was previously identified within the property boundary. During the site survey in October 2021 five *Acacia bynoeana* individuals were located and identified onsite within the verge of the remnant native vegetation area and the sand quarry operational area. Plants varied in size from approximately 50mm – 200mm high, 50mm - 400mm in diameter. Four plants had multi-stems which were all healthy and had ample foliage and seed pod indicating the plant had reached reproductive maturity. The fifth plant was a small single stemmed seedling. All these plants appear to be new recruits.

NSW OES plant profile describe the habitat for the *Acacia bynoeana* as:

- Occurs in heath or dry sclerophyll forest on sandy soils;
- Seems to prefer open, sometimes slightly disturbed sites such as trail margins, edges of roadside spoil mounds and in recently burnt patches; and
- Associated overstorey species include Red Bloodwood, Scribbly Gum, Parramatta Red Gum, Saw Banksia and Narrow-leaved Apple.

The location in which these plants occurs is a spoil mound pushed up from the silt pond adjacent. There is no canopy nearby which can be associated with the habitat.

No other threatened flora species were identified onsite.



**Figure 9.** *Acacia bynoeana* identified and located onsite



**Figure 10.** Typical habitat where *Acacia bynoeana* has been identified and located onsite

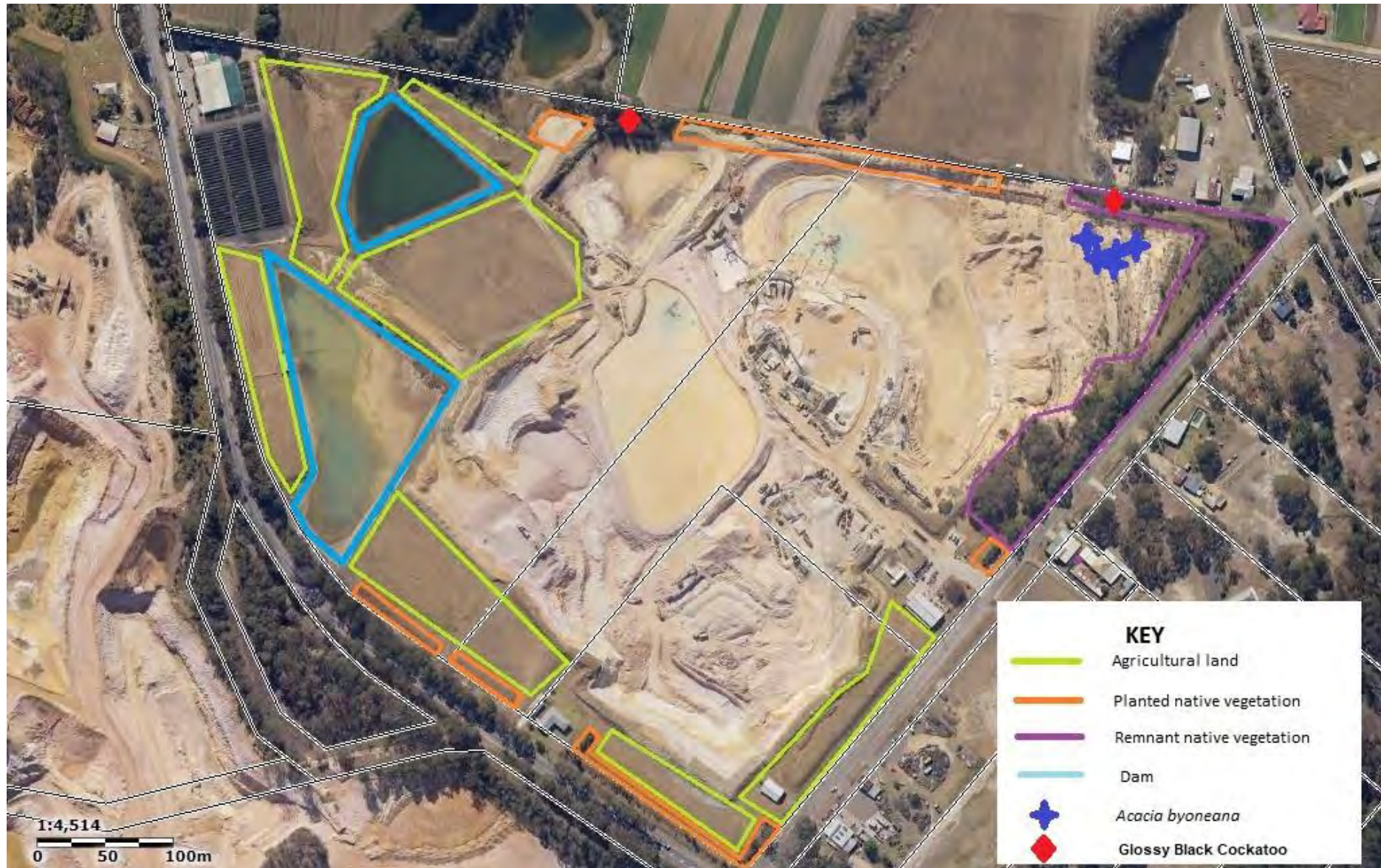


Figure 11. Location of vegetation zones within the Hodgson Quarries Roberts Road site

### 3.5 NATIVE FAUNA

There was no dedicated native fauna survey undertaken for this report. One threatened fauna species has been previously identified within the property via incidental sightings.

During the botanical survey in October 2021, and throughout the reporting period, opportunistic sightings of native fauna were recorded. In total nineteen native species were recorded onsite. One threatened fauna species was identified onsite being the Glossy Black Cockatoo. These birds were observed feeding in the *Allocasuarina littoralis* located on the northern boundary bund wall within the remnant native vegetation. A complete list of fauna observed during the monitoring period can be found in Appendix C.

Overall the condition of habitat for native fauna species within the property is considered to be low in its current state. The remnant native vegetation areas currently have the most habitat value to support a range of native fauna species however this area is small and not likely to be large enough to support any viable population. Connectivity to native vegetation in all directions is broken due to road easements or surrounding agricultural land use.



**Figure 12.** Glossy Black Cockatoo within the *Allocasuarina littoralis* on the northern boundary



## 4 DISCUSSION AND RECOMMENDATIONS

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This is the fourth Annual Biodiversity Monitoring Report produced for Hodgson Quarries Roberts Road Maroota. Rehabilitation work is in the early stages and will increase with both intensity and measurable criteria in the years that follow, particularly as the quarry operations come to an end.

The site does appear to have recovered from the dry weather conditions which persisted from mid 2017 and into early 2020. Evidence of some die back, particularly of large shrubs is still apparent although juvenile growth is reasonably prolific. Forbs and ferns which were not well represented in the previous monitoring period are now present. Native grasses have made a strong comeback in the native vegetation areas, particularly along Roberts Road.

Natural native regeneration from the soil seed bank is occurring throughout much of the remnant native vegetation areas. Fencing to exclude livestock has most likely assisted in the ability for natural regeneration to occur undisturbed. Fencing has also taken place in planted areas along the northern property boundary where planting success is high.

Weeds are present throughout the property with WoNS occurring in low density within the agricultural areas and in higher density within the planted native vegetation along the northern boundary bund wall. High Threat Weeds (HTW), as determined by the DPIE BAM Calculator, are also present although most of these weeds can be found within the agricultural land area. It is highly recommended these weeds are managed to maintain control of their growth and spread. Recommended weed control methods suitable for use throughout the year is supplied in Appendix D.

There is an intention to undertake some infill native planting over time on the bund wall along the southern end of Roberts Road and the eastern bund wall facing Old Northern Road. Due to overhead powerlines in the immediate area, low growing native shrub species suitable for planting in these locations is highly recommended.

Overall the rehabilitation and biodiversity of the site is within the expectations of the life of the quarry. Regular weed management would benefit the site, particularly the WoNS.

## 5 LIMITATIONS AND ASSUMPTIONS

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This study was limited by the timing and frequency of the survey. There may be flora and/or fauna species present at the site that were not recorded due to their seasonal, territorial or cryptic nature.

It can never be proven that threatened species have not, do not or will not use the site as habitat. The conclusions drawn in this report are a result of testing, observation and experience.

This report describes the habitat and vegetation of the site at the time of the field survey. Vegetation and habitat will change over time and therefore the findings of this report are only relevant for the current proposal and for the duration of the application.

## 6 QUALIFICATIONS AND EXPERIENCE OF THE AUTHOR AND FIELD ECOLOGIST

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The Author and Field Ecologist, Melissa Mass, has formal qualifications including a Bachelor of Applied Science (B. App. Sc.), majoring in Ecology, and a Certificate 3 in Horticulture. Her current Scientific Licence number issued from the NSW OEH is SL101441 with expiry date 31st Oct 2023. Furthermore an Animal Research Authority issued by the NSW Animal Care and Ethics Committee is current to undertake general survey work throughout NSW with expiry date 23rd Mar 2023. Melissa is an accredited Biodiversity Assessor conforming to the requirements as imposed by DPIE with Accreditation number being BAAS18053.

Melissa has been working as an Ecologist for 13 years. Her work has included targeted threatened species assessment and management, reviews of environmental factors, bush regeneration, environmental impact assessments, and environmental survey and monitoring.

Melissa has a strong focus on threatened species ecology and has actively contributed to the Long-nosed Potoroo National Recovery Plan.

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## 8 APPENDIX

### Appendix A – Native Flora identified and recorded as present onsite November 2020

Scientific Name	Common Name	Status
<i>Acacia bynoeana</i>	Bynoe's Wattle	BC Act – Endangered EPBC Act – Vulnerable
<i>Acacia linifolia</i>	White Wattle	
<i>Acacia myrtifolia</i>	Red-stemmed Wattle	
<i>Acacia parramattensis</i>	Parramatta Wattle	
<i>Acacia suaveolens</i>	Sweet Wattle	
<i>Acacia ulicifolia</i>	Prickly Moses	
<i>Allocasuarina littoralis</i>	Black She-oak	
<i>Allocasuarina paludosa</i>	Swamp She-oak	
<i>Allocasuarina torulosa</i>	Forest Oak	
<i>Amyema congener</i>	Variable Mistletoe	
<i>Angophora bakeri</i>	Narrow Leaved Apple	
<i>Angophora costata</i>	Smooth Barked Apple	
<i>Anisopogon avenaceus</i>	Oat Speargrass	
<i>Aristida vagans</i>	Three-awn Speargrass	
<i>Aristida warburgii</i>	Fine leafed wire grass	
<i>Blechnum cartilagineum</i>	Gristle Fern	
<i>Bossiaea heterophylla</i>	Variable Bossiaea	
<i>Breynia oblongifolia</i>	Coffee Bush	
<i>Callistemon citrinus</i>	Crimson Bottlebrush	
<i>Cassytha pubescens</i>	Devils Twine	
<i>Cheilanthes sieberi</i>	Mulga Fern	
<i>Clematis aristata</i>	Old Mans Beard	
<i>Cyathea australis</i>	Rough Tree Fern	
<i>Dampiera stricta</i>	Blue Dampiera	
<i>Daviesia ulicifolia</i>	Gorse Bitter Pea	
<i>Dianella caerulea</i>	Blue Flax-lily	
<i>Dichelachne micrantha</i>	Shorthair Plumegrass	
<i>Dichondra repens</i>	Kidney Weed	
<i>Dillwynia retorta</i>	Heathy Parrot Pea	
<i>Dodonaea triquetra</i>	Large Leaf Hop Bush	
<i>Drosera auriculata</i>	Sundew	
<i>Echinopogon ovatus</i>	Forest Hedgehog Grass	
<i>Einadia hastata</i>	Berry Saltbush	
<i>Entolasia marginata</i>	Bordered Panic	
<i>Eucalyptus acmenoides</i>	White Mahogany	
<i>Eucalyptus eugeniodides</i>	Thin Leaved Stringybark	
<i>Eucalyptus haemastoma</i>	Scribbly Gum	
<i>Eucalyptus notabilis</i>	Mountain Mahogany	
<i>Eucalyptus tereticornis</i>	Forest Red Gum	
<i>Eucalyptus umbra</i>	Broad-leaved White Mahogany	
<i>Euchiton sphaericus</i>	Star Cudweed	
<i>Geranium homeanum</i>	Cranesbill	

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<i>Gleichenia dicarpa</i>	Pouched Coral Fern	
<i>Glycine clandestina</i>	Twining Glycine	
<i>Grevillea buxifolia</i>	Grey Spider Flower	
<i>Grevillea speciosa</i>	Red Spider Flower	
<i>Hakea sericea</i>	Needlebush	
<i>Hardenbergia violacea</i>	False Sarsaparilla	
<i>Juncus usitatus</i>	Common Rush	
<i>Kunzea ambigua</i>	Tick Bush	
<i>Leptospermum polygalifolium</i>	Tantoon	
<i>Lindsaea microphylla</i>	Lacy Wedge Fern	
<i>Lomandra longifolia</i>	Spiny head Mat-rush	
<i>Lomandra multiflora</i>	Many-flowered Mat-rush	
<i>Microlaena stipoides</i>	Weeping grass	
<i>Microtis unifolia</i>	Onion Orchid	
<i>Notelaea longifolia</i>	Large Mock Olive	
<i>Oxalis perennans</i>	Native Sorrel	
<i>Ozothamnus diosmifolius</i>	Rice Flower	
<i>Parsonia straminea</i>	Common Silkpod	
<i>Persoonia lanceolate</i>	Lance Leaf Geebung	
<i>Petrophile pulchella</i>	Conesticks	
<i>Phyllota phyllicoides</i>	Heath Phyllota	
<i>Pittosporum undulatum</i>	Sweet pittosporum	
<i>Pratia purpurascens</i>	White Root	
<i>Pteridium esculentum</i>	Bracken Fern	
<i>Senecio linearifolius</i>	Fireweed Groundsel	
<i>Sporobolus creber</i>	Slender Rat's Tail Grass	
<i>Syncarpia glomulifera</i>	Turpentine	
<i>Themeda triandra</i>	Kangaroo Grass	
<i>Viola hederacea</i>	Ivy Leaved Violet	
<i>Xanthorrhoea media</i>	Grass Tree	

## Appendix B – Exotic flora identified and recorded as present onsite November 2020

Scientific Name	Common Name	Status
<i>Ageratina adenophora</i>	Crofton Weed	High Threat Weed (HTW)
<i>Anagallis arvensis</i>	Red Pimpernel	
<i>Andropogon virginicus</i>	Whisky Grass	HTW
<i>Araujia sericifera</i>	Moth Vine	HTW
<i>Bidens pilosa</i>	Cobblers pegs	HTW
<i>Briza minor</i>	Shivery Grass	
<i>Chloris gayana</i>	Rhodes Grass	HTW
<i>Cirsium vulgare</i>	Spear Thistle	
<i>Conyza bonariensis</i>	Flax-leaf fleabane	
<i>Cynodon dactylon</i>	Couch Grass	
<i>Digitaria sanguinalis</i>	Crabgrass	
<i>Ehrharta erecta</i>	Panic Veldtgrass	HTW
<i>Eragrostis curvula</i>	African Lovegrass	HTW
<i>Gnaphalium coarctatum</i>	Cudweed	
<i>Hypochaeris radicata</i>	Catsear	
<i>Lantana camara</i>	Lantana	WoNS, HTW
<i>Ligustrum sinense</i>	Small-leaf Privet	HTW
<i>Oxalis corniculata</i>	Creeping Woodsorrel	
<i>Paspalum dilatatum</i>	Paspalum	HTW
<i>Paspalum urvillei</i>	Vasey's Grass	
<i>Pennisetum clandestinum</i>	Kikuyu Grass	
<i>Phytolacca octandra</i>	Inkweed	
<i>Plantago lanceolata</i>	Lambs Tongues	
<i>Rubus fruticosus sp. agg.</i>	Blackberry	WoNS, HTW
<i>Senecio madagascariensis</i>	Fireweed	WoNS, HTW
<i>Setaria parviflora</i>	Slender Pigeon Grass	
<i>Sida rhombifolia</i>	Paddy's Lucerne	
<i>Solanum mauritianum</i>	Wild Tobacco Bush	
<i>Solanum nigrum</i>	Black Nightshade	
<i>Solanum sisymbriifolium</i>	Sticky Nightshade	
<i>Sonchus oleraceus</i>	Common Sow Thistle	
<i>Trifolium repens</i>	White Clover	
<i>Verbena bonariensis</i>	Purpletop	
<i>Vicia sativa</i>	Common Vetch	

## Appendix C – Fauna identified and recorded as present onsite 2021

Scientific Name	Common Name	Observation Type
<b>Bird</b>		
<i>Anthochaera chrysoptera</i>	Little Wattlebird	Observed
<i>Colluricincla harmonica</i>	Grey Shrike-thrush	Observed
<i>Calyptorhynchus lathami</i>	Glossy Black Cockatoo	Observed
<i>Cracticus tibicen</i>	Australian Magpie	Observed
<i>Dacelo novaeguineae</i>	Laughing Kookaburra	Observed
<i>Eopsaltria australis</i>	Eastern Yellow Robin	Observed
<i>Malurus cyaneus</i>	Superb Fairy Wren	Observed
* <i>Manorina melanocephala</i>	Noisy Minor	Observed
<i>Sericornis frontalis</i>	White-browed scrubwren	Observed
<i>Vanellus miles</i>	Masked Lapwing	Observed
<b>Mammal</b>		
* <i>Oryctolagus cuniculus</i>	European Rabbit	Scat and digs
<i>Trichosurus vulpecula</i>	Brush-tailed Possum	Scat
* <i>Vulpes vulpes</i>	European Red Fox	Scat
<i>Wallabia bicolor</i>	Swamp Wallaby	Scat
<b>Reptile</b>		
<i>Chelodina longicollis</i>	Snake-necked Turtle	Observed
<i>Ctenotus taeniolatus</i>	Copper-tailed Skink	Observed
<i>Intellagama lesueurii</i>	Water Dragon	Observed
<i>Lampropholis guichenoti</i>	Common Skink	Observed
<i>Pseudechis porphyriacus</i>	Red-bellied Black Snake	Observed
<b>Amphibian</b>		
<i>Crinia signifera</i>	Common Eastern Toadlet	Heard call
<i>Litoria peronii</i>	Peron's Tree Frog	Observed

\*Pest species



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### Appendix D – Recommended weed control for each month of the year (WoNS and HTW only)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>African Lovegrass</b>	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide				Herbicide	Herbicide	Herbicide	Herbicide
<b>Blackberry</b>	Herbicide	Herbicide	Herbicide						Herbicide	Herbicide	Herbicide	Herbicide
<b>Cobblers Pegs</b>	Hand removal	Hand removal	Hand removal	Hand removal					Herbicide	Herbicide	Herbicide	Hand removal
<b>Crofton Weed</b>	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide				Herbicide	Herbicide	Herbicide	Herbicide
<b>Fireweed</b>	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal
<b>Lantana</b>	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide				Herbicide	Herbicide	Herbicide	Herbicide
<b>Paspalum</b>	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide			Herbicide	Herbicide	Herbicide	Herbicide
<b>Rhodes Grass</b>	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide
<b>Whiskey Grass</b>	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Herbicide	Herbicide	Herbicide	Hand removal

Herbicide – Foliar spray with an appropriate product as per the instructions on the label. Foliar spray should be carried out during active growing season.  
 Hand removal – Necessary when targeted species have reached flowering maturity. Entire plant can be removed or flowering heads may be cut. Removed material should be immediately bagged to prevent spread of seed and appropriately disposed of.

This table should be considered a guide for appropriate treatment during different months of the year. It does not indicate a specified work schedule.

# Appendix L

# Weed Management

# Reports

**Plan of:** Weed Management September 2021 - Maroota Sand Quarry  
**Figure:** ONE  
**Version/Date:** V0 16/12/2021  
**Our Ref:** 11340\_HMA\_WeedSurvey\_Q04\_V0\_F1\_Sept2021

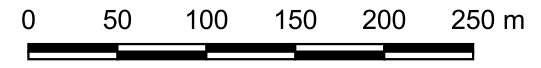
**Location:** Maroota Quarry, Roberts Road, Maroota, NSW  
**Council:** Hills Shire Council  
**Tenure:** Not Applicable  
**Client:** Hodgson Quarries & Plant Pty Ltd

**Source:** nearmap - Image Date 22/04/2021 Zone MGA 56  
**Survey:** Lot Boundary NSW Clip & Ship  
**Projection:** GDA2020/MGA Zone 56 EPSG:7856  
**Contour Interval:** Not Applicable

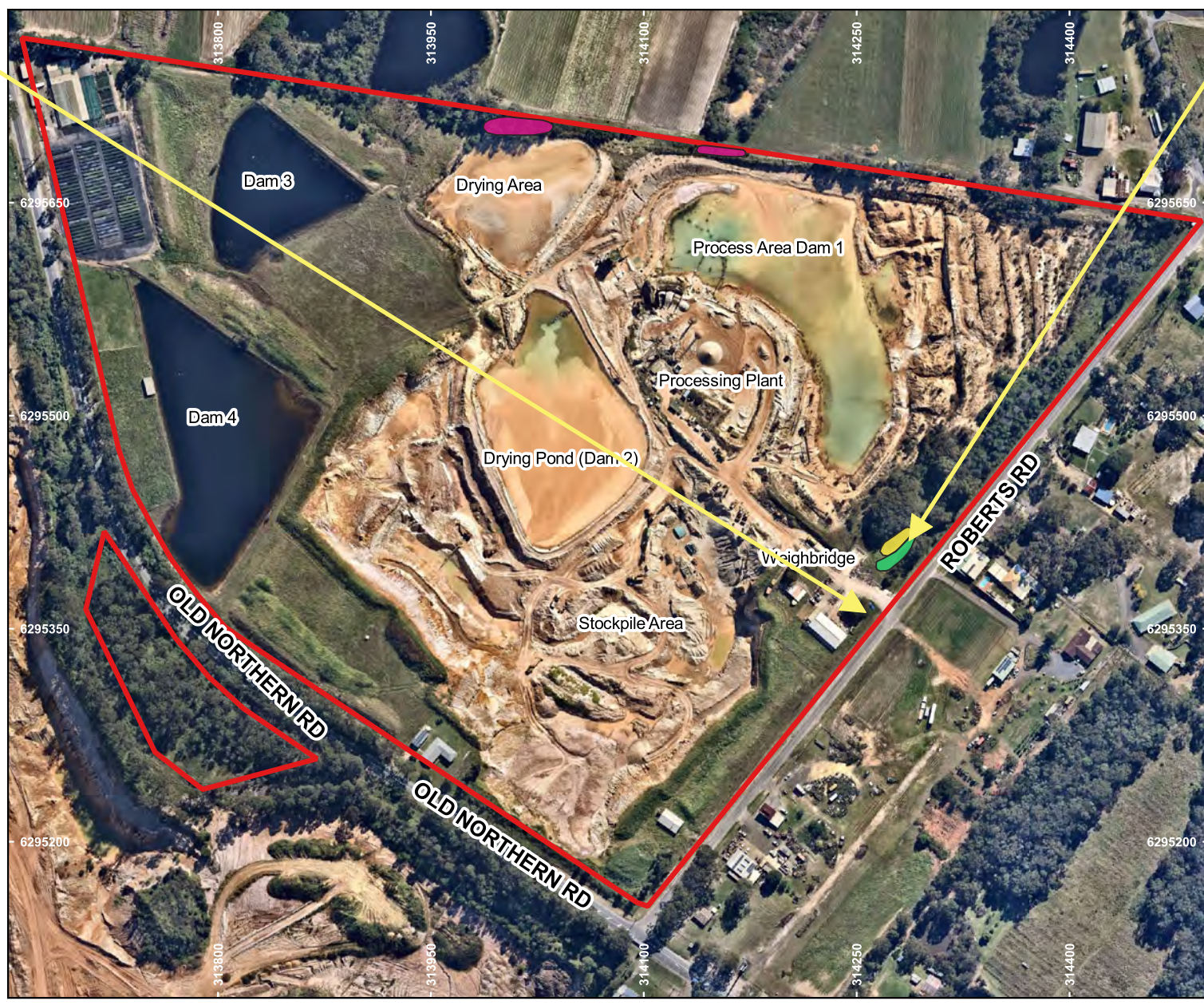
**Plan By:** SK/JD  
**Project Manager:** LT



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Application method:



**Weed Name:** Blackberry, Crofton Weed and Whiskey Grass  
**Treatment Date:** 21st September 2021  
**Herbicide:** SureFire Metsulfuron Methyl  
**Photography:**

Spraying of weed areas adjacent Roberts Road



**Legend**  
 Property Boundary  
 Lot

**Treatment Areas**  
**2021 - September Treatment Areas**  
 Blackberry  
 Crofton Weed and Whiskey Grass  
 Lantana

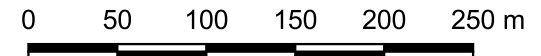
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>African Lovegrass</b>	Herbicide - 21/09/21	Herbicide - 27/10/21	Slashing - 16/11/2021	Slashing - 6/12/21					Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Herbicide - 6/12/21
<b>Blackberry</b>	Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Herbicide - 6/12/21					Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Herbicide - 6/12/21
<b>Cobblers Peg</b>	Hand Removal - 21/09/21	Hand Removal - 27/10/21	Hand Removal - 16/11/2021	Hand Removal - 6/12/2021					Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Hand Removal - 6/12/2021
<b>Crofton Weed</b>	Slashing - 27/10/21	Herbicide - 16/11/2021	Herbicide - 6/12/2021						Slashing - 27/10/21	Slashing - 16/11/2021	Slashing - 6/12/2021	
<b>Fireweed</b>	Hand Removal - 27/10/21	Hand Removal - 16/11/2021	Hand Removal - 6/12/2021						Slashing - 27/10/21	Hand Removal - 27/10/21	Hand Removal - 16/11/2021	Hand Removal - 6/12/2021
<b>Lantana</b>	Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Herbicide - 6/12/21					Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Herbicide - 6/12/21
<b>Paspalum</b>	Slashing - 27/10/21	Slashing - 16/11/2021	Slashing - 6/12/2021						Slashing - 27/10/21	Slashing - 16/11/2021	Slashing - 6/12/2021	
<b>Rhodes Grass</b>	Slashing - 27/10/21	Slashing - 16/11/2021	Slashing - 6/12/2021						Slashing - 27/10/21	Slashing - 16/11/2021	Slashing - 6/12/2021	
<b>Whiskey Grass</b>	Hand Removal - 21/09/21	Hand Removal - 27/10/21	Hand Removal - 16/11/2021	Hand Removal - 6/12/2021					Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Hand Removal - 6/12/2021

**Plan of:** Weed Management October 2021 - Maroota Sand Quarry  
**Figure:** TWO  
**Version/Date:** V0 18/11/2021  
**Our Ref:** 11340\_HMA\_WeedSurvey\_Q01\_V0\_F2\_Oct2021

**Location:** Maroota Quarry, Roberts Road, Maroota, NSW  
**Council:** Hills Shire Council  
**Tenure:** Not Applicable  
**Client:** Hodgson Quarries & Plant Pty Ltd

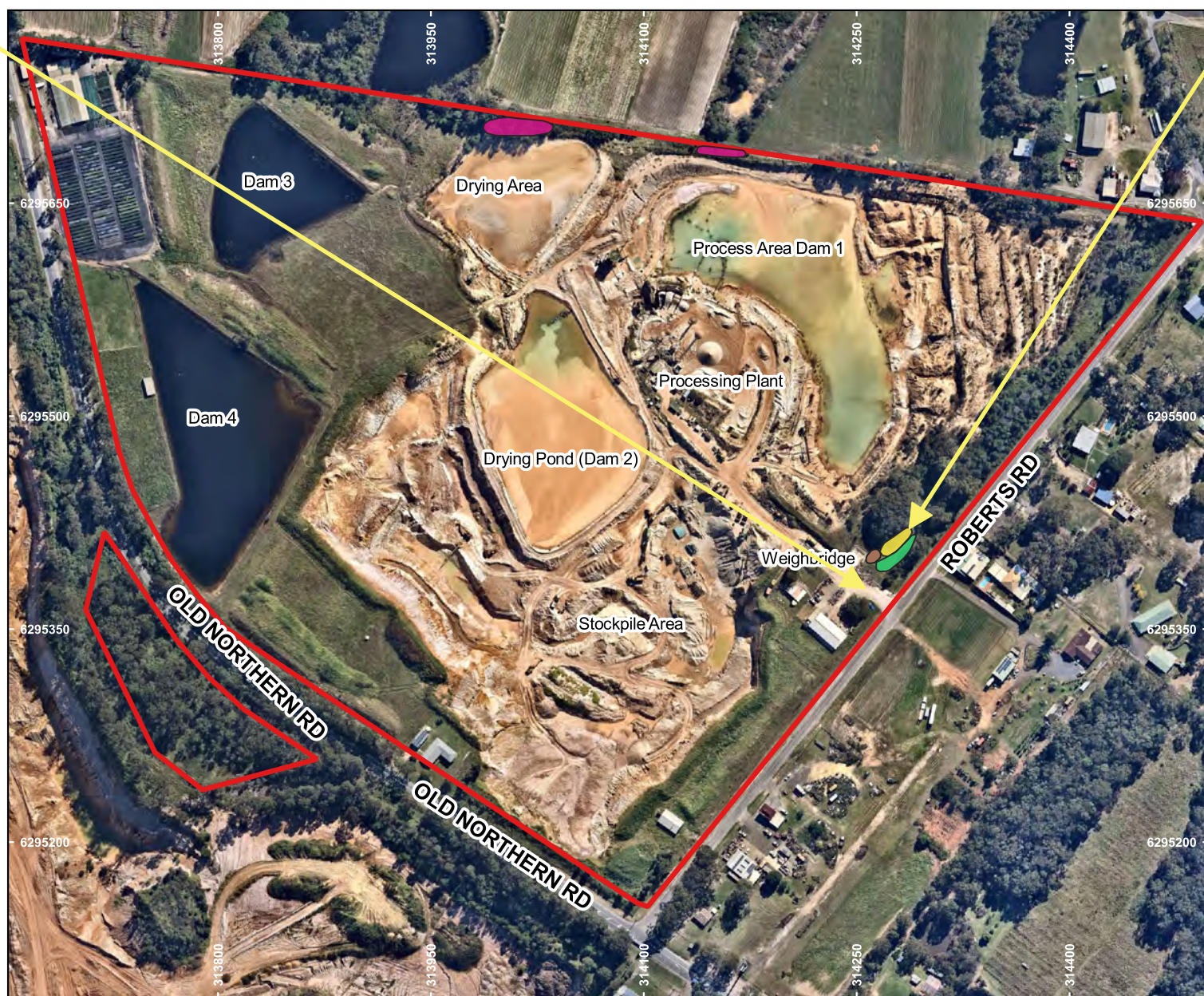
**Source:** nearmap - Image Date 22/04/2021 Zone MGA 56  
**Survey:** Lot Boundary NSW Clip & Ship  
**Projection:** GDA2020/MGA Zone 56 EPSG:7856  
**Contour Interval:** Not Applicable

**Plan By:** SK  
**Project Manager:** LT



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**Application method:**



**Weed Name:** Blackberry, Crofton Weed and Whiskey Grass  
**Treatment Date:** 27th October 2021  
**Herbicide:** SureFire Metsulfuron Methyl  
**Photography:**

Spraying of weed areas adjacent Roberts Road



**Legend**  
 Property Boundary  
 Lot  
 2021 Oct - Handpulled Areas

**Treatment Areas**  
**2021 October Treatment Areas**  
 Blackberry  
 Crofton Weed and Whiskey Grass  
 Lantana

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
African Lovegrass	Herbicide - 21/09/21	Herbicide	Slashing	Slashing	Slashing				Herbicide - 27/10/21	Herbicide - 16/11/2021	Herbicide - 6/12/21	Herbicide - 6/12/21
Blackberry	Herbicide - 21/09/21	Herbicide	Herbicide						Herbicide - 27/10/21	Herbicide - 16/11/2021	Herbicide - 6/12/21	Herbicide - 6/12/21
Cobblers Peg	Hand Removal - 21/09/21	Hand Removal	Hand Removal	Hand Removal					Herbicide - 27/10/21	Herbicide - 16/11/2021	Herbicide - 6/12/2021	Hand Removal - 6/12/2021
Crofton Weed	Slashing	Herbicide	Herbicide	Herbicide	Herbicide				Slashing - 27/10/21	Slashing - 16/11/2021	Slashing - 6/12/2021	Slashing - 6/12/2021
Fireweed	Hand Removal	Hand Removal	Hand Removal	Slashing	Slashing	Slashing	Slashing	Slashing	Slashing	Hand Removal - 27/10/21	Hand Removal - 16/11/2021	Hand Removal - 6/12/2021
Lantana	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide				Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Herbicide - 6/12/21
Paspalum	Slashing	Slashing	Slashing	Herbicide	Herbicide	Herbicide			Slashing - 27/10/21	Slashing - 16/11/2021	Slashing - 6/12/2021	Slashing - 6/12/2021
Rhodes Grass	Slashing	Slashing	Slashing	Slashing	Slashing	Slashing	Slashing	Slashing	Slashing	Slashing - 27/10/21	Slashing - 16/11/2021	Slashing - 6/12/2021
Whiskey Grass	Hand Removal	Hand Removal	Hand Removal	Hand Removal	Hand Removal	Hand Removal	Hand Removal	Hand Removal	Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Hand Removal - 6/12/2021

**Plan of:** Weed Management November 2021 - Maroota Sand Quarry  
**Figure:** THREE  
**Version/Date:** V1 06/12/2021  
**Our Ref:** 11340\_HMA\_WeedSurvey\_Q02\_V1\_F3\_Nov2021

**Location:** Maroota Quarry, Roberts Road, Maroota, NSW  
**Council:** Hills Shire Council  
**Tenure:** Not Applicable  
**Client:** Hodgson Quarries & Plant Pty Ltd

**Source:** nearmap - Image Date 22/04/2021 Zone MGA 56  
**Survey:** Lot Boundary NSW Clip & Ship  
**Projection:** GDA2020/MGA Zone 56 EPSG:7856  
**Contour Interval:** Not Applicable

**Plan By:** SK/JD  
**Project Manager:** LT

**vgt** environmental compliance solutions and laboratories

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0 50 100 150 200 250 m

**Weed Name:** Lantana  
**Treatment Date:** 16th November 2021 and week prior  
**Herbicide:** SureFire Metsulfuron Methyl  
**Photography:**

Lantana discolouration post-treatment



**Weed Name:** Blackberry  
**Treatment Date:** 16th November 2021 and week prior  
**Herbicide:** SureFire Metsulfuron Methyl  
**Photography:**

Blackberry spraying and discolouration post-treatment



**Weed Name:** Crofton Weed and Whiskey Grass  
**Treatment Date:** 16th November 2021 and week prior  
**Herbicide:** SureFire Metsulfuron Methyl  
**Photography:**

Spraying whiskey grass      Spraying crofton weed



**Weed Name:** Fireweed  
**Treatment Date:** 16th November 2021 and week prior  
**Removal method:** Hand pulled  
**Photography:**

Pulled up fireweed



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>African Lovegrass</b>	Herbicide	Herbicide	Slashing	Slashing	Slashing				Herbicide	Herbicide	Herbicide - 16/11/2021	Herbicide
<b>Blackberry</b>	Herbicide	Herbicide	Herbicide						Herbicide	Herbicide	Herbicide - 16/11/2021	Herbicide
<b>Cobblers Peg</b>	Hand Removal	Hand Removal	Hand Removal	Hand Removal					Herbicide	Herbicide	Herbicide - 16/11/2021	Hand Removal
<b>Crofton Weed</b>	Slashing	Herbicide	Herbicide	Herbicide	Herbicide				Slashing	Slashing	Slashing - 16/11/2021	Slashing
<b>Fireweed</b>	Hand Removal	Hand Removal	Hand Removal	Slashing	Slashing	Slashing	Slashing	Slashing	Slashing	Hand Removal	Hand Removal - 16/11/2021	Hand Removal
<b>Lantana</b>	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide				Herbicide	Herbicide	Herbicide - 16/11/2021	Herbicide
<b>Paspalum</b>	Slashing	Slashing	Slashing	Herbicide	Herbicide	Herbicide			Slashing	Slashing	Slashing - 16/11/2021	Slashing
<b>Rhodes Grass</b>	Slashing	Slashing	Slashing	Slashing	Slashing	Slashing	Slashing	Slashing	Slashing	Slashing	Slashing - 16/11/2021	Slashing
<b>Whiskey Grass</b>	Hand Removal	Hand Removal	Hand Removal	Hand Removal	Hand Removal	Hand Removal	Hand Removal	Hand Removal	Herbicide	Herbicide	Herbicide - 16/11/2021	Hand Removal

**Legend**  
 Property Boundary  
 Lot  
 2021 Nov - Handpulled Areas

**Treatment Areas**  
**2021 November Treatment Areas**  
 Blackberry  
 Crofton Weed and Whiskey Grass  
 Lantana

**Plan of:** Weed Management December 2021 - Maroota Sand Quarry  
**Figure:** FOUR  
**Version/Date:** V0 16/12/2021  
**Our Ref:** 11340\_HMA\_WeedSurvey\_Q03\_V0\_F4\_Dec2021

**Location:** Maroota Quarry, Roberts Road, Maroota, NSW  
**Council:** Hills Shire Council  
**Tenure:** Not Applicable  
**Client:** Hodgson Quarries & Plant Pty Ltd

**Source:** nearmap - Image Date 22/04/2021 Zone MGA 56  
**Survey:** Lot Boundary NSW Clip & Ship  
**Projection:** GDA2020/MGA Zone 56 EPSG:7856  
**Contour Interval:** Not Applicable

**Plan By:** SK/JD  
**Project Manager:** LT

**vgt** environmental compliance solutions and laboratories

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0 50 100 150 200 250 m

**Weed Name:** Lantana  
**Treatment Date:** 6th December 2021 and week prior  
**Herbicide:** SureFire Metsulfuron Methyl  
**Photography:**

Lantana discolouration post-treatment



**Weed Name:** Blackberry  
**Treatment Date:** 6th December 2021 and week prior  
**Herbicide:** SureFire Metsulfuron Methyl  
**Photography:**

Blackberry spraying and discolouration post-treatment



**Weed Name:** Crofton Weed and Whiskey Grass  
**Treatment Date:** 6th December 2021 and week prior  
**Herbicide:** SureFire Metsulfuron Methyl  
**Photography:**

Spraying whiskey grass      Spraying crofton weed



**Weed Name:** Fireweed  
**Treatment Date:** 6th December 2021 and week prior  
**Removal method:** Hand pulled  
**Photography:**

Pulled up fireweed



**Legend**  
 Property Boundary  
 Lot  
 2021 December Handpulled Areas

**Treatment Areas**  
**2021 - December Treatment Areas**  
 Blackberry  
 Crofton Weed and Whiskey Grass  
 Lantana

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>African Lovegrass</b>	Herbicide - 21/09/21	Herbicide - 27/10/21	Slashing - 16/11/2021	Slashing - 16/11/2021	Slashing - 16/11/2021				Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Herbicide - 6/12/21
<b>Blackberry</b>	Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021						Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Herbicide - 6/12/21
<b>Cobblers Peg</b>	Hand Removal - 21/09/21	Hand Removal - 27/10/21	Hand Removal - 16/11/2021	Hand Removal - 16/11/2021					Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Hand Removal - 6/12/2021
<b>Crofton Weed</b>	Slashing - 27/10/21	Herbicide - 16/11/2021	Herbicide - 16/11/2021	Herbicide - 16/11/2021	Herbicide - 16/11/2021				Slashing - 27/10/21	Slashing - 16/11/2021	Slashing - 16/11/2021	Slashing - 6/12/2021
<b>Fireweed</b>	Hand Removal - 21/09/21	Hand Removal - 27/10/21	Hand Removal - 16/11/2021	Slashing - 16/11/2021	Slashing - 16/11/2021	Slashing - 16/11/2021	Slashing - 16/11/2021	Slashing - 16/11/2021	Slashing - 27/10/21	Hand Removal - 27/10/21	Hand Removal - 16/11/2021	Hand Removal - 6/12/2021
<b>Lantana</b>	Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Herbicide - 16/11/2021	Herbicide - 16/11/2021				Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Herbicide - 6/12/21
<b>Paspalum</b>	Slashing - 27/10/21	Slashing - 16/11/2021	Slashing - 16/11/2021	Herbicide - 16/11/2021	Herbicide - 16/11/2021	Herbicide - 16/11/2021			Slashing - 27/10/21	Slashing - 16/11/2021	Slashing - 16/11/2021	Slashing - 6/12/2021
<b>Rhodes Grass</b>	Slashing - 27/10/21	Slashing - 16/11/2021	Slashing - 16/11/2021	Slashing - 16/11/2021	Slashing - 16/11/2021	Slashing - 16/11/2021	Slashing - 16/11/2021	Slashing - 16/11/2021	Slashing - 27/10/21	Slashing - 16/11/2021	Slashing - 16/11/2021	Slashing - 6/12/2021
<b>Whiskey Grass</b>	Hand Removal - 21/09/21	Hand Removal - 27/10/21	Hand Removal - 16/11/2021	Hand Removal - 16/11/2021	Hand Removal - 16/11/2021	Hand Removal - 16/11/2021	Hand Removal - 16/11/2021	Hand Removal - 16/11/2021	Herbicide - 21/09/21	Herbicide - 27/10/21	Herbicide - 16/11/2021	Hand Removal - 6/12/2021

# Appendix M

# Induction Checklist

# **Hodgson Quarries & Plant Pty Ltd**

## **S.M.S Index**

1. Work Health & Safety Policies
2. Responsibilities and Accountabilities
3. Emergency Response Procedure
4. Consultation and Communication
5. Fitness for Work
6. Work Environment
7. Risk Assessment / Management
8. Hazard Reporting
9. Workplace Inspections
10. Safe Work Procedures (SWP)
11. Job Safety Analysis
12. Training and Development
13. Accident / Incident Reporting
14. Contractor Management
15. Document Control
16. Principle Hazard Management Plans
17. Health Control Plan / Health Monitoring Form
18. Environmental Policy
19. Environmental Induction Checklist
20. Vehicle Maintenance Records
21. Principle Hazard Management Plan & Airbourne Contaminants

I \_\_\_\_\_ of \_\_\_\_\_ acknowledge the SMS of Hodgson Quarries & Plant Pty Ltd and will work within those perimeters at all times

\_\_\_\_\_ Dated \_\_\_\_\_



# Hodgson Quarries & Plant Pty Ltd

## Workplace Environmental Check List

Date: \_\_\_\_\_ Inspected by: \_\_\_\_\_

*Please circle the appropriate to indicate compliance or noncompliance.*

### Workshop Bulk Oils

Are all drums sealed and in good condition	Yes	No
Are all drums clear of residue oil	Yes	No
Are all floor surfaces clear of oil spills or residue	Yes	No
Are disused drums drained and stored safely	Yes	No
Is the area cleared of rubbish / oily rags	Yes	No
Is there oil sorb available for spills	Yes	No
Are all transfer hoses and pumps in good working order	Yes	No
Are all drums clearly marked or labelled	Yes	No

Comments: \_\_\_\_\_

### Chemical Storage Bay

Is the storage bay in good order with no leaks or damage	Yes	No
Are all the drums sealed and in good condition	Yes	No
Are all drums clear of chemical residue	Yes	No
Are all drums clearly marked or labelled	Yes	No

Comments: \_\_\_\_\_

### Waste Oil Bay

Inspected and clear of any leaks	Yes	No
Is the area clear of any spills or oil residue	Yes	No
Are storage containers (IBC's) in good condition and free of leaks	Yes	No
Are waste containers stored in an appropriate manner	Yes	No
Are suitable containers available for collecting waste oil	Yes	No
Is the area clear of oily rags or other rubbish	Yes	No

Comments: \_\_\_\_\_

# Hodgson Quarries & Plant Pty Ltd

## Container Oil Storage

Are all drums sealed and in good condition	Yes	No
Are all drums clear of oil residue	Yes	No
Are all floor surfaces clear of oil spills or residue	Yes	No
Are the bund drums in good order and clear of oil residue	Yes	No
Are all drums stored in the bund drums	Yes	No
Is the oil clear of rubbish / oily rags	Yes	No
Is there oil sorb available for oil spills	Yes	No
Are all transfer hoses and pumps in good working order	Yes	No
Are all drums clearly marked or labelled	Yes	No

Comments: \_\_\_\_\_

---

## Diesel Storage Area

Tanks inspected and clear of any leaks	Yes	No
Bund area inspected and clear of any leaks or damage	Yes	No
Are there any evidence of leaks or spills in the area	Yes	No
Is the bowser hose and pump in good order	Yes	No

Comments: \_\_\_\_\_

---

## General Site Inspection

Are there any visible oil or grease stains on site	Yes	No
Are there any oil, chemical, grease drums or cartridges littering site	Yes	No
Are there any oily or greasy rags littering site	Yes	No
Are all oil, chemical, grease drums or cartridges stowed correctly	Yes	No
Are machine leaks been captured by waste oil drums	Yes	No
Is there any significant erosion that needs attention / repair	Yes	No

Comments: \_\_\_\_\_

---

# Hodgson Quarries & Plant Pty Ltd

## Consultation and Communication

### 1.0 Purpose

The purpose of this document is to ensure good communication on health and safety throughout the workplace.

### 2.0 SCOPE

To ensure all employees have the opportunity to have input into health and safety matters through the use of toolbox meetings.

### 3.0 DEFINITIONS

Consultation seek information or advice from another person taking into account their feelings, interests and expertise

Communication process of passing on information in a variety of ways so that the receiver understands the same message as the transmitter intended to give.

Information	Who's to Receive	When	How	Sent By
Safety Alerts	All	As Received	Notice boards, internal mail	Manager
Safety statistics	Committee, All	Monthly	Notice board, reports	Manager
Current incidents	All	As occurs	Tool box meetings	Manager, Team Leader
Updates to legislation	Supervisors, Committee	As occurs	Committee meetings, reports	Manager
Health and Safety information	All	At least monthly	Notice boards, toolbox meetings	All to contribute
Changes to Safety Management System	All	As occurs	Toolbox meetings, notice boards MSMP manual	Manager, Team Leader

Hodgson Quarries & Plant Pty Ltd  
**CONSULTATION AND COMMUNICATION**

Author: Stuart Reed

Approved by: Martin Hodgson

DATE OF ISSUE: 10/11/17

ISSUE NUMBER: 3.0

PAGE NUMBER: 1 of 2

# Hodgson Quarries & Plant Pty Ltd

## Toolbox Meeting Minutes

<b>Participants:</b>	<b>Date:</b>	<b>Time:</b>	
	<b>Supervisor:</b>		
	<b>Issues Discussed:</b>		
	<b>Key Points Arising:</b>		
<b>Points Requiring Follow Up:</b>	<b>Who:</b>	<b>When:</b>	



# Appendix N

# Correspondence



Hodgson Quarries & Plant Hire P/L  
Stuart Reed – Environmental Officer  
PO Box 1778  
Gosford New South Wales 2250

16/07/2021

Dear Mr Reed

**Roberts Road Quarry (DA267-11-99)  
Annual Review 2020**

Reference is made to the Annual Review for the period 1 January 2020 to 31 December 2020, submitted to the Department of Planning, Industry and Environment (the **Department**) on 26 March 2021, as required under Schedule 2, Condition 66 of DA267-11-99, as modified (**Consent**).

The Department has reviewed the Annual Review and considers it to generally satisfy the reporting requirements of the Consent. Please make publicly available a copy of the 2020 Annual Review on the company website.

However, for future Annual Reviews, under the provisions of Schedule 2, Condition 3 of the Consent, please include the following additional information:

1. Details of any landscape rehabilitation that was carried out for reporting period, and details of rehabilitation proposed to be carried out over the next reporting period
2. Details of weed control management measures implemented at the site for the reporting period and details of the effectiveness of those measures
3. List all relevant statutory requirements, limits or performance measures and criteria for rehabilitation of the site and detail how these have been satisfied
4. A comprehensive review of the monitoring results of the development for the reporting period, including a comparison of these results against the EIS, Modification 1 and Modification 2
5. Identify any trends in the monitoring data for the life of the development, with particular focus on previous 5-year period.

Please note that the Department's acceptance of this Annual Review is not endorsement of the compliance status of the project. Non-compliances identified in the Annual Review will be assessed in accordance with the Department's Compliance Policy. Further correspondence may be sent in relation to non-compliances.

Should you need to discuss the above, please contact Maris Divis on 08 8275 1156 or email [Maris.Divis@planning.nsw.gov.au](mailto:Maris.Divis@planning.nsw.gov.au).

Yours sincerely

A handwritten signature in black ink, appearing to read 'J Pope', written in a cursive style.

Julia Pope  
Team Leader Compliance - Metro  
Compliance

As nominee of the Planning Secretary





Mr Stuart Reed  
Environmental Officer  
Hodgson Quarries and Plant Hire Pty Ltd

Via Email ONLY: [hodgsonquarries@gmail.com](mailto:hodgsonquarries@gmail.com)

29/07/21

Dear Mr Reed

**Roberts Road Sand Quarry (DA 267-11-99)  
REHABILITATION INSPECTION**

Thank you for your time in facilitating the Department of Planning, Industry and Environment's (the Department's) inspection of the Roberts Road Sand Quarry on 2 June 2021 as part of our rehabilitation review of select quarries across NSW.

The review focussed on compliance with consent conditions and management plans relating to:

- Vegetation and landscape management
- Rehabilitation
- Land management and
- Visual impact management.

During the review and inspection, Department officers noted the following:

- Waste was being stored on the site (chemical containers, old machinery, metal waste).
- The Water Management Plan (WMP) has not been updated in consultation with the Department as required under Condition 42 of the Consent:  
*42. The Applicant shall prepare a Water Management Plan for the development to the satisfaction of the Secretary. This plan must ...be updated on an annual basis in consultation with DPI-Water for three years from the date of approval of Modification 2 and thereafter as agreed with by the Secretary.*
- The Conservation and Rehabilitation Bond (Bond) has not been lodged with the Department in accordance with Condition 61 of the Consent:  
*61. By 31 December 2017, the Applicant shall lodge a Conservation and Rehabilitation Bond with the Department to ensure that the management of biodiversity and the rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the Flora and Fauna Management Plan and Landscape and Rehabilitation Plan. The sum of the bond shall be determined by:*  
*(a) calculating the cost of rehabilitating the site taking into account the likely surface disturbance over the following 3 years of quarrying operations; and*  
*(b) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary.*
- Weeds were prevalent at the time of inspection, particularly along the northern boundary bund wall, and to the north of the Roberts Road entry along the eastern boundary of the site.



As an outcome of the review, the Department requests the following actions be undertaken by **1 November 2021**:

1. Remove all waste from the site. Should you wish to retain any waste on the site, provide details of the waste type, and purpose for waste retention. For waste remaining on the site, waste should be stored in a single location in a neat and tidy manner. Provide photographic evidence noting before and after waste removal, and /or storage of waste.
2. Submit the updated WMP for consultation with the Department as required under Condition 42 of the Consent.
3. Reference is made to your letter dated 23 October 2020, in which you requested instructions from the Department on the process for submission of the Bond. The Department did not respond to this matter as the Department was not in receipt of said letter. I advise that the Bond and supplementary documentation (as required under Condition 61 (a) and (b)) is to be hand delivered to the Department by the Proponent, or sent via secure post, to the Department. However, due to Covid-19 restrictions currently in place, the Department's mailroom is currently closed. As such, it is please email the Department's Mailroom: [Admin\\_PlanningServices@planning.nsw.gov.au](mailto:Admin_PlanningServices@planning.nsw.gov.au) prior to delivery of the Bond to the Department, to ensure that Departmental staff will be available to receive the delivery. Please also copy [compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au) into the email.
4. Conduct a weed survey of the site, and provide evidence of compliance to the Department with the following:
  - Section 7, Table 33 of the approved Landscape and Rehabilitation Plan (LRP) - *Rehabilitation Objectives and Completion Criteria*, with specific reference to weed cover and weed prevention percentages present on the site;
  - Section 8.7 of the LRP - *The Monitoring and Maintenance Schedule* for weeds on the site;
  - Section referenced: 8 Appendix, Appendix D of the Annual Biodiversity Monitoring Report 2020 (at Appendix J of the Annual Review 2020 - *Flora Monitoring Results*) which tables the recommended weed control methods for the site for each month of the year.

The Department requests a progress update on the above issues to be submitted via the Major Projects Portal by **27 August 2021**, and then an annual update in the site's Annual Review until all actions have been completed.

Should you need to discuss the above, please contact Maria Divis, Senior Compliance Officer on 02 8275 1156 or email [compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)

Yours sincerely

**Heidi Watters**  
**Team Leader**  
**Compliance**

28<sup>th</sup> October 2021



Secretary

Department of Planning, Industry and Environment  
4 Parramatta Square  
12 Darcy Street  
Parramatta NSW 2150

Dear Ms Divis,

## RE: Rehabilitation Inspection, Follow Up

### Roberts Road Sand Quarry (DA 267-11-99)

VGT Environmental Compliance Solutions Pty Ltd have been engaged by Hodgson Quarries and Plant Pty Ltd (the Proponent) to respond to your letter dated 29/07/21 regarding a site inspection undertaken in June 2021. The letter requests 4 action points be undertaken by 1<sup>st</sup> November. This letter serves as an update on those actions.

Action No	VGT Ref	Action Description	Tasks Undertaken
1	11337	Remove all waste from the site. Should you wish to retain any waste on the site, provide details of the waste type, and purpose for waste retention. For waste remaining on the site, waste should be stored in a single location in a neat and tidy manner. Provide photographic evidence noting before and after waste removal, and /or storage of waste	A letter outlining actions was submitted and received 24/8/21 – DA267-11-99-PA12. The actions undertaken are included in Appendix A.
2	11338	Submit the updated WMP for consultation with the Department as required under Condition 42 of the Consent	The updated WMP was submitted for consultation in February, April and August 2021 (DA267-11-99-PA11) as documented in submitted response number DA267-11-99-PA-13. An email request to NRAR for comment was sent again on 12/10/21 with a response received 26/10/21 that the matter is currently being reviewed. See Appendix B.
3	11339	Reference is made to your letter dated 23 October 2020, in which you requested instructions from the Department on the process for submission of the Bond. The Department did not respond to this matter as the Department was not in receipt of said letter. I advise that the Bond and supplementary documentation (as required under Condition 61 (a) and (b)) is to be hand	Details of communications regarding this matter were included in submitted response number DA267-11-99-PA-14. On the 5/10/21 a request for approval of the expert and method for calculating the bond was submitted DA267-11-99-PA-16. A request for

Action No	VGT Ref	Action Description	Tasks Undertaken
		<p>delivered to the Department by the Proponent, or sent via secure post, to the Department.</p> <p>However, due to Covid-19 restrictions currently in place, the Department's mailroom is currently closed. As such, it is please email the Department's Mailroom:</p> <p>Admin_PlanningServices@planning.nsw.gov.au prior to delivery of the Bond to the Department, to ensure that Departmental staff will be available to receive the delivery. Please also copy compliance@planning.nsw.gov.au into the email.</p>	<p>more information was received 25/10/21 and was replied to 28/10/21. See Appendix C.</p>
4	11340	<p>Conduct a weed survey of the site, and provide evidence of compliance to the Department with the following:</p> <ul style="list-style-type: none"> <li>• Section 7, Table 33 of the approved Landscape and Rehabilitation Plan (LRP) - Rehabilitation Objectives and Completion Criteria, with specific reference to weed cover and weed prevention percentages present on the site;</li> <li>• Section 8.7 of the LRP - The Monitoring and Maintenance Schedule for weeds on the site;</li> <li>• Section referenced: 8 Appendix, Appendix D of the Annual Biodiversity Monitoring Report 2020 (at Appendix J of the Annual Review 2020 - Flora Monitoring Results) which tables the recommended weed control methods for the site for each month of the year.</li> </ul>	<p>A Biodiversity Report was prepared in October 2021 including assessment of weeds, and is included in Appendix D. Evidence of weed management being undertaken is given in Appendix E.</p>

If you have any questions please do not hesitate to contact me.

Regards,



Lisa Thomson, BAppSc (Chem), MIQA, CChem MRACI  
 Environmental Consultant  
 Direct Email: [lisa@vgt.com.au](mailto:lisa@vgt.com.au)  
 Mobile: 0427 334471

# Appendix A: Waste Removal

“Remove all waste from the site. Should you wish to retain any waste on the site, provide details of the waste type, and purpose for waste retention. For waste remaining on the site, waste should be stored in a single location in a neat and tidy manner. Provide photographic evidence noting before and after waste removal, and /or storage of waste.”

Waste near front gate:



Front gate area 28/10/21



Empty IBC's in Chemical Storage Area



Chemical Storage Area 28/10/21





# **Appendix B: Emails from NRAR and DPIE Water**

**From:** [Jessica Braden](#)  
**To:** [Submissions](#)  
**Subject:** RE: Roberts Road Quarry Water Management Plan - Due Date Reminder trk:00910000294  
**Date:** Tuesday, 26 October 2021 2:56:54 PM  
**Attachments:** [image004.png](#)

---

Hi Lisa,  
Apologies for the delayed response. The matter is currently being reviewed by DPIE Water.

Kind regards,  
Jessica

---

**From:** Submissions <[Submissions@vgt.com.au](mailto:Submissions@vgt.com.au)>  
**Sent:** Tuesday, 12 October 2021 6:36 PM  
**To:** Jane Curran <[jane.curran@nrar.nsw.gov.au](mailto:jane.curran@nrar.nsw.gov.au)>; Lisa Thomson <[Lisa@vgt.com.au](mailto:Lisa@vgt.com.au)>  
**Cc:** NRAR Coordination Mailbox <[coordination@nrar.nsw.gov.au](mailto:coordination@nrar.nsw.gov.au)>; Luke Mclver <[luke.mciver@dpi.e.nsw.gov.au](mailto:luke.mciver@dpi.e.nsw.gov.au)>; Jessica Braden <[jessica.braden@nrar.nsw.gov.au](mailto:jessica.braden@nrar.nsw.gov.au)>  
**Subject:** RE: Roberts Road Quarry Water Management Plan - Due Date Reminder trk:00910000294

Hi Jane,  
Just wondering how this review is progressing.

Regards,  
Lisa Thomson  
BAppSc, CChem

Phone: (02) 4028 6412 | Mobile: 0427 334471  
[www.vgt.com.au](http://www.vgt.com.au)



---

**From:** Jane Curran <[jane.curran@nrar.nsw.gov.au](mailto:jane.curran@nrar.nsw.gov.au)>  
**Sent:** Thursday, 5 August 2021 10:42 AM  
**To:** Submissions <[Submissions@vgt.com.au](mailto:Submissions@vgt.com.au)>  
**Cc:** NRAR Coordination Mailbox <[coordination@nrar.nsw.gov.au](mailto:coordination@nrar.nsw.gov.au)>; Luke Mclver <[luke.mciver@dpi.e.nsw.gov.au](mailto:luke.mciver@dpi.e.nsw.gov.au)>; Jessica Braden <[jessica.braden@nrar.nsw.gov.au](mailto:jessica.braden@nrar.nsw.gov.au)>  
**Subject:** FW: Roberts Road Quarry Water Management Plan - Due Date Reminder trk:00910000294

Hi Lisa,

This report is currently awaiting review with DPIE-Water. NRAR do not have a due date at this point in time for the return of DPIE-Waters comments.

Thank you

Kind regards,

**Jane Curran**

**A/Manager Licensing & Approvals (East)**

Natural Resources Access Regulator | Department of Planning, Industry and Environment

**P:** 02 4275 9327 | **M:** +61 437 832 227 | **E** [jane.curran@nrar.nsw.gov.au](mailto:jane.curran@nrar.nsw.gov.au)

Level 0, 84 Crown Street, Wollongong NSW 2500

PO Box 53 Wollongong NSW 2520

[www.industry.nsw.gov.au/nrar](http://www.industry.nsw.gov.au/nrar)



**To contact the NRAR Hotline and make a report call: 1800 633 362**

**[Read the NRAR Progress Report 2019-20](#)**

*The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.*

---

----- Original Message -----

**From:** [no-reply@majorprojects.planning.nsw.gov.au](mailto:no-reply@majorprojects.planning.nsw.gov.au) <[no-reply@majorprojects.planning.nsw.gov.au](mailto:no-reply@majorprojects.planning.nsw.gov.au)>;

**Received:** Wed Jul 28 2021 00:46:36 GMT+1000 (Australian Eastern Standard Time)

**To:** NRAR Industry mailbox <[nrar.servicedesk@industry.nsw.gov.au](mailto:nrar.servicedesk@industry.nsw.gov.au)>;

**Subject:** Roberts Road Quarry Water Management Plan - Due Date Reminder

This is a reminder that your advice for the Roberts Road Quarry - Water Management Plan is due on 07/04/2021.

If you cannot complete this task by this date, please contact Lisa Thomson at [submissions@vgt.com.au](mailto:submissions@vgt.com.au).

To sign in to your account click [here](#) or visit the [Major Projects Website](#).

Please do not reply to this email.

Kind regards

The Department of Planning, Industry and Environment



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This email is intended for the addressee(s) named and may contain confidential and/or privileged information.

If you are not the intended recipient, please notify the sender and then delete it immediately.

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

# **Appendix C: Emails regarding Rehabilitation Bond Approval of Expert**

**From:** [Submissions](#)  
**To:** [Lisa Thomson: Lincoln.deHaas@dpie.nsw.gov.au](mailto:Lincoln.deHaas@dpie.nsw.gov.au)  
**Cc:** [hodgsonquarries](#)  
**Subject:** RE: Roberts Road Quarry - Sch. 2 Cnd. 61 Approval of Rehab Expert DA267-11-99-PA-16 - Request for Additional Information  
**Date:** Thursday, 28 October 2021 4:39:00 PM  
**Attachments:** [Resume LGT 2021.pdf](#)  
[image003.png](#)  
[Resume Gregory Vincent Thomson resource asses.pdf](#)

---

Dear Lincoln,

I believe you have requested a copy of the resume of the person to be calculating the Rehabilitation Bond for Roberts Rd Quarry Maroota.  
Please find my resume attached along with Greg Thomson, our geologist and Director.

I would greatly appreciate your acknowledgement of receiving this information.  
Please feel free to contact me with any further requests.

Regards,  
Lisa Thomson  
BAppSc, CChem

Phone: (02) 4028 6412 | Mobile: 0427 334471  
[www.vgt.com.au](http://www.vgt.com.au)



---

**From:** no-reply@majorprojects.planning.nsw.gov.au <no-reply@majorprojects.planning.nsw.gov.au>  
**Sent:** Monday, 25 October 2021 2:17 PM  
**To:** Submissions <Submissions@vgt.com.au>  
**Cc:** Lincoln.deHaas@dpie.nsw.gov.au  
**Subject:** Roberts Road Quarry - Sch. 2 Cnd. 61 Approval of Rehab Expert DA267-11-99-PA-16 - Request for Additional Information

Dear Lisa Thomson,

The Department is requesting that you provide additional information in relation to the Roberts Road Quarry - Sch. 2 Cnd. 61 Approval of Rehab Expert.

Please access your profile for details of this request and to upload your response. You are requested to provide this response by 22/10/2021 .

If you have any enquiries, please contact Dehaas at [Lincoln.deHaas@dpie.nsw.gov.au](mailto:Lincoln.deHaas@dpie.nsw.gov.au) .

To sign in to your account click [here](#) or visit the [Major Projects Website](#).

Please do not reply to this email.

Kind regards

The Department of Planning, Industry and Environment



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-----  
This email is intended for the addressee(s) named and may contain confidential and/or privileged information.

If you are not the intended recipient, please notify the sender and then delete it immediately.

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

# **Appendix D: Biodiversity Report 2021**

**ANNUAL  
BIODIVERSITY  
MONITORING  
REPORT  
2021**

**Prepared for Hodgson Quarries and Plant Pty Ltd**

**October 2021 V.1**





ABN: 13 927 340 723  
12 Harts Road  
Krawarree NSW 2622  
Tel: 02 4847 1207  
Mob: 0411 812 775  
Email: [mass@southeastenvironmental.com.au](mailto:mass@southeastenvironmental.com.au)  
Website: [www.southeastenvironmental.com.au](http://www.southeastenvironmental.com.au)

# **Annual Biodiversity Monitoring Report 2021**

**Hodgson Quarries and Plant Pty Ltd  
Roberts Road Maroota NSW**

This assessment has been prepared by

---

South East Environmental

October 2021 V.1

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## Abbreviations

Abbreviation	Description
BC Act	<i>Biodiversity Conservation Act 2016</i>
DPIE	Department of Planning, Industry and Environment
EEC	Endangered Ecological Community
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Environmental Protection and Biodiversity Conservation Act 1999</i>
HTW	High Threat Weed
KPI	Key Performance Indicators
KTP	Key Threatening Processes
LEP	Local Environmental Plan
NSW OES	New South Wales Office of Environment, Energy and Science
OEMP	Operational Environmental Management Plan
ONR	Old Northern Road
PCT	Plant Community Type
SEPP	State Environmental Planning Policy
THSC	The Hills Shire Council
VIS	Vegetation Information System
WoNS	Weeds of National Significance

# 1 INTRODUCTION

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This Annual Biodiversity Monitoring Report presents the findings of the annual monitoring of the biodiversity value within the Hodgson Quarries operation at Roberts Road Maroota.

## 1.1 BACKGROUND

Hodgson Quarries and Plant Pty Ltd operates a sand extraction and processing operation on a 28 hectare site including Lot 1 and 2 of DP228308 and Lot 2 of DP312327 Roberts Road Maroota. The quarry operates in compliance to Development Consent File No. S98/00772 issued by the Minister for Urban Affairs and Planning in 2000.

Several modifications have been made to the Development Consent, the most recent (Mod 4) being approved in 2021. Modification 3 triggered a review of the Operational Environmental Management Plan (OEMP) which included the update of a Flora and Fauna Management Plan. A requirement of the Flora and Fauna Management Plan, as addressed in Schedule 2 Condition 55 of the consent, is to develop an ongoing monitoring program for existing vegetated areas to assess their floristic structure, diversity, resilience, robustness to disturbance and fauna species diversity.

## 1.2 OBJECTIVES

The objectives of this Annual Biodiversity Monitoring Report is to describe the current condition of the vegetation found throughout the site and to advise Hodgson Quarries on the appropriate management measures that should be implemented to meet the expectations of the Flora and Fauna Management Plan (2016) prepared by VGT Pty Ltd.

This report will:

- identify native flora and fauna species, populations and ecological communities known to or likely to occur within the site;
- describe the native vegetation and habitats within the site;
- describe the current condition of the threatened flora and its habitat found within the site;
- determine the legislative and conservation significance of species, populations and ecological communities known or likely to occur within the site with reference to the Commonwealth *EPBC Act 1999* and the *NSW BC Act 2016*;
- recommend appropriate biodiversity and environmental management measures that should be implemented to reach criteria for monitoring success set by the Flora and Fauna Management Plan for the Sand Quarry, Roberts Road Maroota, NSW (2016);
- provide an independent monitoring report for inclusion as part of the external reporting for the quarry Annual Review.

## 2 METHODOLOGY

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### 2.1 SITE HISTORY

#### 2.1.1 Agricultural use

Much of the undisturbed area on the Roberts Road quarry site is agricultural land. Approximately 9 hectares is currently in use for this purpose, with approximately 0.5 hectares currently under active rehabilitation within the agricultural land area as will be discussed further in this report.

The remaining vegetation within the agricultural land area has had ongoing disturbance over many years which has including timber removal, livestock grazing and fruit orchards. As a result, exotic weed species are common. Farm dams have been dug which once provided irrigation to the fruit orchards and now provide water to livestock and Sunrise Plant Nursery which is located in the north/west corner of the property. They also provide a water source for native and exotic species that occur in the immediate area.

#### 2.1.2 Remnant native vegetation

An area immediately north of the entrance gate along Roberts Road contains remnant native vegetation which has been excluded from the sand extraction operational area. Although this area shows signs of past disturbance, it remains relatively intact and appears to be supporting a reasonable diversity of native flora and fauna given its small size of approximately 1 hectare.

The remnant native vegetation consists of a Sandstone Gully Forest type which was most likely once a moist open forest at the head of the catchment for Coopers Creek which extends further to the north. This vegetation type would have supported several species of canopy tree which were likely to have been harvested for fence post timber in the early European settlement era. Remaining canopy species are most likely regrowth from a clearing event in the early 1900's and provide ample protection for the lower stratum. Fencing to exclude livestock has improved the ability for native species, particularly the ground cover stratum, to flourish.

#### 2.1.3 Threatened flora habitat

An area in the north eastern corner of the site contains a threatened flora species which has previously been identified and monitored. The area where this species has been located has had severe disturbance in the past from clearing, grazing and most recently the sand quarry operations.

The area immediately surrounding the threatened species consists of pushed up crushed sandstone material which has resulted in an extremely compacted ground surface. Native shrubs from the soil seed bank and surrounding areas are becoming established despite the harsh growing conditions. It is expected that over time without intervention this area will establish as an extension of the remnant native vegetation adjacent although the plant community type may remain different indefinitely due to the change in surface geology.

### 2.2 FIELD SURVEY

Botanical surveys of the study area were conducted during October 2021. The survey consisted of a random meander throughout the areas of the property not in current use by quarry operations.

A targeted threatened flora survey was undertaken to locate *Acacia bynoeana* onsite. All flora species recorded are listed in Appendix A of this report.

Opportunistic sightings were also undertaken for indirect evidence of native fauna, including scratches, scats, nests, hollows in use, camps, roosts, den sites etc. Opportunistic sightings of all fauna species were recorded throughout the survey period.

There is no requirement for targeted threatened fauna surveys within the site however incidental sightings from previous reporting periods has been considered for this report.

### 2.3 CRITERIA TO MONITOR SUCCESS

VGT Pty Ltd 2016 have outlined the Key Performance Indicators (KPI) to measure success of the biodiversity and rehabilitation effort of the flora and fauna management within the Roberts Road quarry site. The following tables depict the performance and completion criteria for the site.

**Table 1.** Performance and completion criteria for Roberts Road quarry (taken from VGT Pty Ltd 2016)

<i>Performance Criteria being monitored</i>	
<i>Native Vegetation monitoring</i>	Demonstrated use of native plant species naturally occurring in the Maroota area used in all progressive revegetated and rehabilitated areas.
	Low mortality of plants used in progressive revegetation with 75% becoming established 3 years after planting.
	Installation of high durability fencing, with low maintenance requirements and suitable for excluding cattle and other livestock, to be installed prior to the completion of revegetation work areas.
	Fencing surrounding revegetated and rehabilitated areas are maintained in working condition.
	Installation of fencing along the southern fence line and to the north of the site entrance completed during dewatering of the fines ponds and prior to the construction of the new access track.
	Vegetation is retained.
	Low evidence of native vegetation disturbance surrounding the bund walls at the corner of Old Northern Road and Roberts Road.
<i>Fauna Monitoring</i>	Weeds, pests and feral animals are to be controlled.
	Weeds, pests and feral animals are to be controlled.
	Connectivity between current and future rehabilitated areas are established adjacent to existing and future areas of vegetation. Patches are not to be separated by more than 10 metres.
	Evidence of varying sized rocks between 20mm and greater than 200mm spread over rehabilitated areas.
	Evidence of logs and other fallen timber spread over rehabilitated areas.
	Ground dwelling fauna species of similar diversity to adjacent areas of similar habitat.
	On completion of the rehabilitation, a suitably qualified ecologist has determined the requirement on whether nest boxes are required. If nest boxed required to be installed a nest box management plan has been prepared.

## 2.4 SURVEY LIMITATIONS

The survey was conducted within a short timeframe during spring. Therefore some plant species may not have been identified due to the survey being performed when not in flower, or when dormant. It is noted that some flora species are seasonal, and may not have been visible at the time of the surveys.

The survey limitations have been addressed through:

- consideration of flora and fauna species known to occur in the locality (including number of records from BioNet);
- consideration of habitat suitability present within the study areas and connectivity to other areas of habitat in the local landscape;
- consideration of past and current weather conditions;
- A conservative approach in assuming the presence of a species that could potentially be present in the study areas.

Where the study area contains potential habitat for threatened fauna species known to occur in the locality, and where survey areas support a likelihood of occurrence, it has been assumed on a conservative approach that such species may occur in the study area.

## 3 RESULTS

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Results from the field surveys conducted over October 2021 have been separated into three distinct areas to enable quantification of condition for each specific location and its monitoring objectives.

### 3.1 REMNANT NATIVE VEGETATION

The remnant native vegetation is a disturbed patch of native dominant species located in the north eastern corner of the property. The condition of the remnant area can be further divided into two separate areas as determined by disturbance level and the current soil profile available for flora species.

#### 3.1.1 Immediately north of Roberts Road site entry gate

The remnant native vegetation within this area has a mature canopy of Eucalyptus and Angophora species. Lower strata are present including midstorey canopy, shrubs and ground cover. The exclusion of livestock grazing within this area has resulted in an increase of native ground cover species which over time will contribute to a much richer biodiversity value.

Biodiversity functional attributes such as size class of canopy species, litter cover, fallen timber and natural regeneration of species occurring is present within the area. Such attributes are likely to increase over time providing disturbance remains excluded within the area.



**Figure 1.** Remnant vegetation located immediately north of Roberts Road site entry gate Oct 2021

### 3.1.2 North eastern corner

The remnant vegetation within the area of the far north eastern corner of the site has undergone past disturbance which has left the canopy broken. Eucalyptus and Angophora species are recovering throughout much of the area however the mature specimens are spaced apart providing little in canopy protection to the stratum below. The shrub stratum in this area is dominant and in some areas almost impenetrable. In other areas the shrub stratum is sparse and bare ground occurs.

In severely disturbed areas species from the following genus are thriving in the harsh conditions:

- Acacia
- Allocasuarina
- Daviesia
- Dillwynia
- Hakea

Leaf litter is abundant throughout most of this area however fallen timber and size class of canopy species is limited.





**Figure 2.** Remnant vegetation located in the north eastern corner adjacent to Roberts Road Oct 2021

## 3.2 AGRICULTURAL LAND

### 3.2.1 Roberts Road Boundary

Exotic grasses dominate the agricultural land along Roberts Road. Some native species are present, particularly along the large bund wall which provides protection from the hot westerly sun, including Three-awned Speargrass *Aristida vagans*, Slender Rat's Tail Grass *Sporobolus creber* and Weeping Grass *Microlaena stipoides*. Agricultural weeds occur within the area although they are not considered to be dominant within the landscape. One Weed of National Significance (WoNS) was identified, Fireweed *Senecio madagascariensis*. However, due to no grazing pressure on grass over the past 12 month period, the Fireweed density appears to be less this reporting period due to being outcompeted by thick grass growth.

The native species which have been planted on a bund wall bordering Roberts Road and Old Northern Road are growing well. Almost all of these species have reached reproductive maturity and have had a strong flowering season this year.



**Figure 3.** Bund wall adjacent to Roberts Road.

### 3.2.2 Old Northern Road Boundary

This area of agricultural land is dominated by exotic grass species suitable for livestock grazing. Some agricultural weed species occur although they do not dominate the landscape. A WoNS species, Fireweed *Senecio madagascariensis*, was observed in low density within this area. The Common Eastern Toadlet *Crinia signifera* was heard calling from the large dam adjacent to Old Northern Road along the western boundary. Several Eastern Snake-necked Tortoise's *Chelodina longicollis* were observed foraging within the large dam while a Red-bellied Black Snake *Pseudechis porphyriacus* was commonly observed sunbaking along the edge of the same dam during the reporting period.



**Figure 4.** Agricultural land with grassed bund wall adjacent to Old Northern Road

### 3.2.3 North western corner

A plant nursery is established in the far north western corner of the site. The nursery makes use of water in the farm dams located on site. The agricultural land directly to the east of the nursery site is dominated by exotic grass species suitable for livestock grazing. One WoNS was identified in low density in this location, Fireweed *Senecio madagascariensis*.



**Figure 5.** Agricultural land along Old Northern Road in the west/south west of the site

### 3.3 PLANTED NATIVE VEGETATION

#### 3.3.1 North of Roberts Road entrance gate

Bottlebrush *Callistemon* species have been planted along the eastern boundary of the property adjacent to the existing native vegetation. These shrubs are well established and provide a screen to Roberts Road. The shrubs provide habitat for small birds and food resources for a range of mammals, birds and invertebrate.



**Figure 6.** Bund wall immediately north of Roberts Road site entrance

#### 3.3.2 Old Northern Road

The southeastern corner and southern boundary of the site has small bund walls with planted native trees and shrubs. The trees along Old Northern Road have required pruning due to their close proximity to electrical power lines. As a result some of the trees have perished. The remaining plants appear to be growing well despite the pruning. The bund walls have good coverage of native vegetation with reproduction maturity demonstrated by most species during this monitoring period.



**Figure 7.** Planted native vegetation along Old Northern Road

### 3.3.3 Northern Boundary

A variety of Bottlebrush *Callistemon* species have been planted in two locations along the northern boundary of the property. Exclusion fencing has been undertaken and success to date appears to be high. There were two WoNS species present along the fence line of the neighboring property, *Lantana* *Lantana camara* and Blackberry *Rubus fruticosus* sp. aggregate.



**Figure 8.** Planted native vegetation along northern property boundary

### 3.4 THREATENED FLORA

A single threatened flora species was previously identified within the property boundary. During the site survey in October 2021 five *Acacia bynoeana* individuals were located and identified onsite within the verge of the remnant native vegetation area and the sand quarry operational area. Plants varied in size from approximately 50mm – 200mm high, 50mm - 400mm in diameter. Four plants had multi-stems which were all healthy and had ample foliage and seed pod indicating the plant had reached reproductive maturity. The fifth plant was a small single stemmed seedling. All these plants appear to be new recruits.

NSW OES plant profile describe the habitat for the *Acacia bynoeana* as:

- Occurs in heath or dry sclerophyll forest on sandy soils;
- Seems to prefer open, sometimes slightly disturbed sites such as trail margins, edges of roadside spoil mounds and in recently burnt patches; and
- Associated overstorey species include Red Bloodwood, Scribbly Gum, Parramatta Red Gum, Saw Banksia and Narrow-leaved Apple.

The location in which these plants occurs is a spoil mound pushed up from the silt pond adjacent. There is no canopy nearby which can be associated with the habitat.

No other threatened flora species were identified onsite.



**Figure 9.** *Acacia bynoeana* identified and located onsite



**Figure 10.** Typical habitat where *Acacia bynoeana* has been identified and located onsite

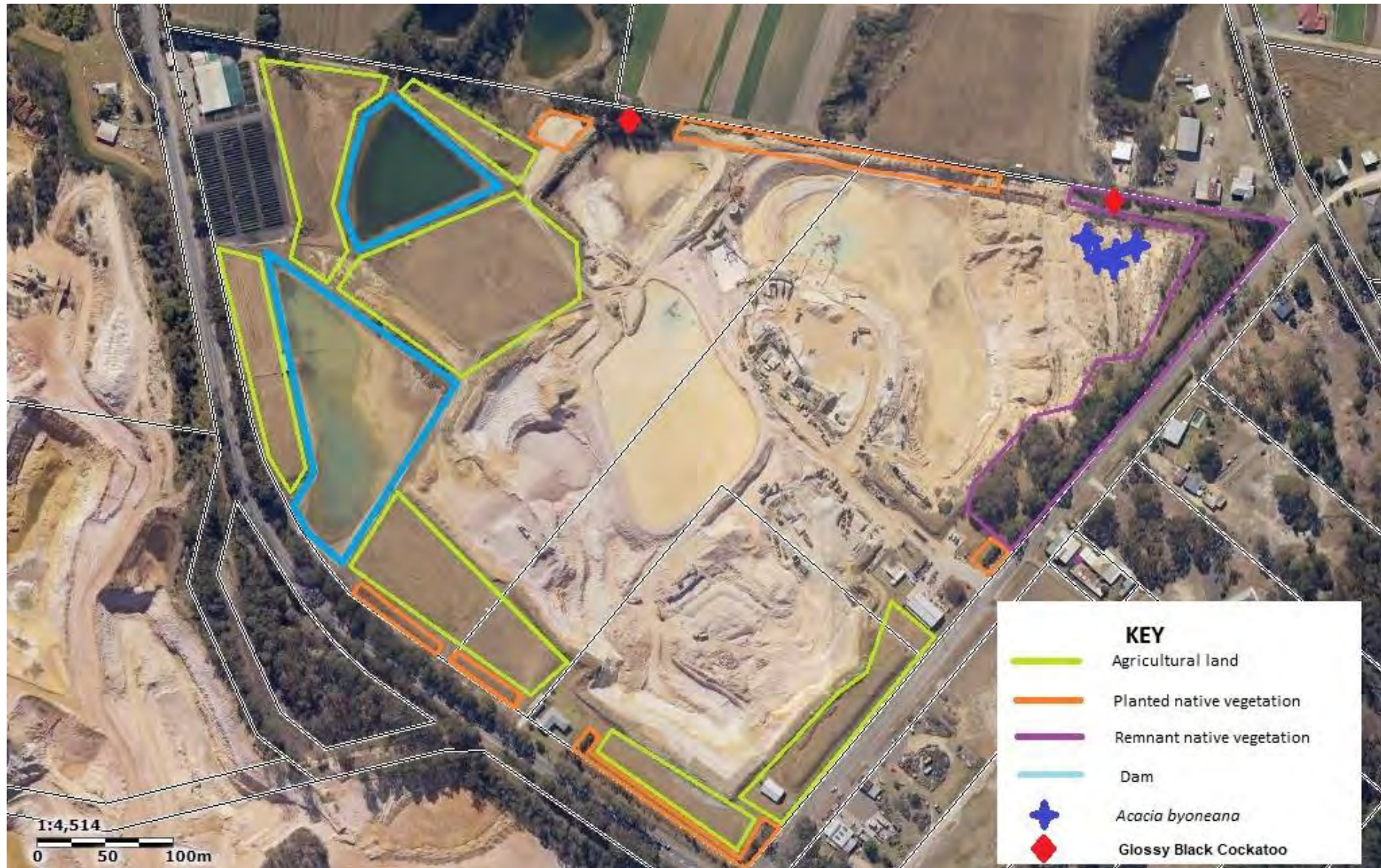


Figure 11. Location of vegetation zones within the Hodgson Quarries Roberts Road site



### 3.5 NATIVE FAUNA

There was no dedicated native fauna survey undertaken for this report. One threatened fauna species has been previously identified within the property via incidental sightings.

During the botanical survey in October 2021, and throughout the reporting period, opportunistic sightings of native fauna were recorded. In total nineteen native species were recorded onsite. One threatened fauna species was identified onsite being the Glossy Black Cockatoo. These birds were observed feeding in the *Allocasuarina littoralis* located on the northern boundary bund wall within the remnant native vegetation. A complete list of fauna observed during the monitoring period can be found in Appendix C.

Overall the condition of habitat for native fauna species within the property is considered to be low in its current state. The remnant native vegetation areas currently have the most habitat value to support a range of native fauna species however this area is small and not likely to be large enough to support any viable population. Connectivity to native vegetation in all directions is broken due to road easements or surrounding agricultural land use.



**Figure 12.** Glossy Black Cockatoo within the *Allocasuarina littoralis* on the northern boundary

## 4 DISCUSSION AND RECOMMENDATIONS

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This is the fourth Annual Biodiversity Monitoring Report produced for Hodgson Quarries Roberts Road Maroota. Rehabilitation work is in the early stages and will increase with both intensity and measurable criteria in the years that follow, particularly as the quarry operations come to an end.

The site does appear to have recovered from the dry weather conditions which persisted from mid 2017 and into early 2020. Evidence of some die back, particularly of large shrubs is still apparent although juvenile growth is reasonably prolific. Forbs and ferns which were not well represented in the previous monitoring period are now present. Native grasses have made a strong comeback in the native vegetation areas, particularly along Roberts Road.

Natural native regeneration from the soil seed bank is occurring throughout much of the remnant native vegetation areas. Fencing to exclude livestock has most likely assisted in the ability for natural regeneration to occur undisturbed. Fencing has also taken place in planted areas along the northern property boundary where planting success is high.

Weeds are present throughout the property with WoNS occurring in low density within the agricultural areas and in higher density within the planted native vegetation along the northern boundary bund wall. High Threat Weeds (HTW), as determined by the DPIE BAM Calculator, are also present although most of these weeds can be found within the agricultural land area. It is highly recommended these weeds are managed to maintain control of their growth and spread. Recommended weed control methods suitable for use throughout the year is supplied in Appendix D.

There is an intention to undertake some infill native planting over time on the bund wall along the southern end of Roberts Road and the eastern bund wall facing Old Northern Road. Due to overhead powerlines in the immediate area, low growing native shrub species suitable for planting in these locations is highly recommended.

Overall the rehabilitation and biodiversity of the site is within the expectations of the life of the quarry. Regular weed management would benefit the site, particularly the WoNS.

## 5 LIMITATIONS AND ASSUMPTIONS

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This study was limited by the timing and frequency of the survey. There may be flora and/or fauna species present at the site that were not recorded due to their seasonal, territorial or cryptic nature.

It can never be proven that threatened species have not, do not or will not use the site as habitat. The conclusions drawn in this report are a result of testing, observation and experience.

This report describes the habitat and vegetation of the site at the time of the field survey. Vegetation and habitat will change over time and therefore the findings of this report are only relevant for the current proposal and for the duration of the application.

## 6 QUALIFICATIONS AND EXPERIENCE OF THE AUTHOR AND FIELD ECOLOGIST

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The Author and Field Ecologist, Melissa Mass, has formal qualifications including a Bachelor of Applied Science (B. App. Sc.), majoring in Ecology, and a Certificate 3 in Horticulture. Her current Scientific Licence number issued from the NSW OEH is SL101441 with expiry date 31st Oct 2023. Furthermore an Animal Research Authority issued by the NSW Animal Care and Ethics Committee is current to undertake general survey work throughout NSW with expiry date 23rd Mar 2023. Melissa is an accredited Biodiversity Assessor conforming to the requirements as imposed by DPIE with Accreditation number being BAAS18053.

Melissa has been working as an Ecologist for 13 years. Her work has included targeted threatened species assessment and management, reviews of environmental factors, bush regeneration, environmental impact assessments, and environmental survey and monitoring.

Melissa has a strong focus on threatened species ecology and has actively contributed to the Long-nosed Potoroo National Recovery Plan.

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## 8 APPENDIX

### Appendix A – Native Flora identified and recorded as present onsite November 2020

Scientific Name	Common Name	Status
<i>Acacia bynoeana</i>	Bynoe's Wattle	BC Act – Endangered EPBC Act – Vulnerable
<i>Acacia linifolia</i>	White Wattle	
<i>Acacia myrtifolia</i>	Red-stemmed Wattle	
<i>Acacia parramattensis</i>	Parramatta Wattle	
<i>Acacia suaveolens</i>	Sweet Wattle	
<i>Acacia ulicifolia</i>	Prickly Moses	
<i>Allocasuarina littoralis</i>	Black She-oak	
<i>Allocasuarina paludosa</i>	Swamp She-oak	
<i>Allocasuarina torulosa</i>	Forest Oak	
<i>Amyema congener</i>	Variable Mistletoe	
<i>Angophora bakeri</i>	Narrow Leaved Apple	
<i>Angophora costata</i>	Smooth Barked Apple	
<i>Anisopogon avenaceus</i>	Oat Speargrass	
<i>Aristida vagans</i>	Three-awn Speargrass	
<i>Aristida warburgii</i>	Fine leafed wire grass	
<i>Blechnum cartilagineum</i>	Gristle Fern	
<i>Bossiaea heterophylla</i>	Variable Bossiaea	
<i>Breynia oblongifolia</i>	Coffee Bush	
<i>Callistemon citrinus</i>	Crimson Bottlebrush	
<i>Cassytha pubescens</i>	Devils Twine	
<i>Cheilanthes sieberi</i>	Mulga Fern	
<i>Clematis aristata</i>	Old Mans Beard	
<i>Cyathea australis</i>	Rough Tree Fern	
<i>Dampiera stricta</i>	Blue Dampiera	
<i>Daviesia ulicifolia</i>	Gorse Bitter Pea	
<i>Dianella caerulea</i>	Blue Flax-lily	
<i>Dichelachne micrantha</i>	Shorthair Plumegrass	
<i>Dichondra repens</i>	Kidney Weed	
<i>Dillwynia retorta</i>	Heathy Parrot Pea	
<i>Dodonaea triquetra</i>	Large Leaf Hop Bush	
<i>Drosera auriculata</i>	Sundew	
<i>Echinopogon ovatus</i>	Forest Hedgehog Grass	
<i>Einadia hastata</i>	Berry Saltbush	
<i>Entolasia marginata</i>	Bordered Panic	
<i>Eucalyptus acmenoides</i>	White Mahogany	
<i>Eucalyptus eugeniodides</i>	Thin Leaved Stringybark	
<i>Eucalyptus haemastoma</i>	Scribbly Gum	
<i>Eucalyptus notabilis</i>	Mountain Mahogany	
<i>Eucalyptus tereticornis</i>	Forest Red Gum	
<i>Eucalyptus umbra</i>	Broad-leaved White Mahogany	
<i>Euchiton sphaericus</i>	Star Cudweed	
<i>Geranium homeanum</i>	Cranesbill	

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<i>Gleichenia dicarpa</i>	Pouched Coral Fern	
<i>Glycine clandestina</i>	Twining Glycine	
<i>Grevillea buxifolia</i>	Grey Spider Flower	
<i>Grevillea speciosa</i>	Red Spider Flower	
<i>Hakea sericea</i>	Needlebush	
<i>Hardenbergia violacea</i>	False Sarsaparilla	
<i>Juncus usitatus</i>	Common Rush	
<i>Kunzea ambigua</i>	Tick Bush	
<i>Leptospermum polygalifolium</i>	Tantoon	
<i>Lindsaea microphylla</i>	Lacy Wedge Fern	
<i>Lomandra longifolia</i>	Spiny head Mat-rush	
<i>Lomandra multiflora</i>	Many-flowered Mat-rush	
<i>Microlaena stipoides</i>	Weeping grass	
<i>Microtis unifolia</i>	Onion Orchid	
<i>Notelaea longifolia</i>	Large Mock Olive	
<i>Oxalis perennans</i>	Native Sorrel	
<i>Ozothamnus diosmifolius</i>	Rice Flower	
<i>Parsonia straminea</i>	Common Silkpod	
<i>Persoonia lanceolate</i>	Lance Leaf Geebung	
<i>Petrophile pulchella</i>	Conesticks	
<i>Phyllota phyllicoides</i>	Heath Phyllota	
<i>Pittosporum undulatum</i>	Sweet pittosporum	
<i>Pratia purpurascens</i>	White Root	
<i>Pteridium esculentum</i>	Bracken Fern	
<i>Senecio linearifolius</i>	Fireweed Groundsel	
<i>Sporobolus creber</i>	Slender Rat's Tail Grass	
<i>Syncarpia glomulifera</i>	Turpentine	
<i>Themeda triandra</i>	Kangaroo Grass	
<i>Viola hederacea</i>	Ivy Leaved Violet	
<i>Xanthorrhoea media</i>	Grass Tree	

## Appendix B – Exotic flora identified and recorded as present onsite November 2020

Scientific Name	Common Name	Status
<i>Ageratina adenophora</i>	Crofton Weed	High Threat Weed (HTW)
<i>Anagallis arvensis</i>	Red Pimpernel	
<i>Andropogon virginicus</i>	Whisky Grass	HTW
<i>Araujia sericifera</i>	Moth Vine	HTW
<i>Bidens pilosa</i>	Cobblers pegs	HTW
<i>Briza minor</i>	Shivery Grass	
<i>Chloris gayana</i>	Rhodes Grass	HTW
<i>Cirsium vulgare</i>	Spear Thistle	
<i>Conyza bonariensis</i>	Flax-leaf fleabane	
<i>Cynodon dactylon</i>	Couch Grass	
<i>Digitaria sanguinalis</i>	Crabgrass	
<i>Ehrharta erecta</i>	Panic Veldtgrass	HTW
<i>Eragrostis curvula</i>	African Lovegrass	HTW
<i>Gnaphalium coarctatum</i>	Cudweed	
<i>Hypochaeris radicata</i>	Catsear	
<i>Lantana camara</i>	Lantana	WoNS, HTW
<i>Ligustrum sinense</i>	Small-leaf Privet	HTW
<i>Oxalis corniculata</i>	Creeping Woodsorrel	
<i>Paspalum dilatatum</i>	Paspalum	HTW
<i>Paspalum urvillei</i>	Vasey's Grass	
<i>Pennisetum clandestinum</i>	Kikuyu Grass	
<i>Phytolacca octandra</i>	Inkweed	
<i>Plantago lanceolata</i>	Lambs Tongues	
<i>Rubus fruticosus sp. agg.</i>	Blackberry	WoNS, HTW
<i>Senecio madagascariensis</i>	Fireweed	WoNS, HTW
<i>Setaria parviflora</i>	Slender Pigeon Grass	
<i>Sida rhombifolia</i>	Paddy's Lucerne	
<i>Solanum mauritianum</i>	Wild Tobacco Bush	
<i>Solanum nigrum</i>	Black Nightshade	
<i>Solanum sisymbriifolium</i>	Sticky Nightshade	
<i>Sonchus oleraceus</i>	Common Sow Thistle	
<i>Trifolium repens</i>	White Clover	
<i>Verbena bonariensis</i>	Purpletop	
<i>Vicia sativa</i>	Common Vetch	



Appendix C – Fauna identified and recorded as present onsite 2021

Scientific Name	Common Name	Observation Type
<b>Bird</b>		
<i>Anthochaera chrysoptera</i>	Little Wattlebird	Observed
<i>Colluricincla harmonica</i>	Grey Shrike-thrush	Observed
<i>Calyptorhynchus lathami</i>	Glossy Black Cockatoo	Observed
<i>Cracticus tibicen</i>	Australian Magpie	Observed
<i>Dacelo novaeguineae</i>	Laughing Kookaburra	Observed
<i>Eopsaltria australis</i>	Eastern Yellow Robin	Observed
<i>Malurus cyaneus</i>	Superb Fairy Wren	Observed
* <i>Manorina melanocephala</i>	Noisy Minor	Observed
<i>Sericornis frontalis</i>	White-browed scrubwren	Observed
<i>Vanellus miles</i>	Masked Lapwing	Observed
<b>Mammal</b>		
* <i>Oryctolagus cuniculus</i>	European Rabbit	Scat and digs
<i>Trichosurus vulpecula</i>	Brush-tailed Possum	Scat
* <i>Vulpes vulpes</i>	European Red Fox	Scat
<i>Wallabia bicolor</i>	Swamp Wallaby	Scat
<b>Reptile</b>		
<i>Chelodina longicollis</i>	Snake-necked Turtle	Observed
<i>Ctenotus taeniolatus</i>	Copper-tailed Skink	Observed
<i>Intellagama lesueurii</i>	Water Dragon	Observed
<i>Lampropholis guichenoti</i>	Common Skink	Observed
<i>Pseudechis porphyriacus</i>	Red-bellied Black Snake	Observed
<b>Amphibian</b>		
<i>Crinia signifera</i>	Common Eastern Toadlet	Heard call
<i>Litoria peronii</i>	Peron's Tree Frog	Observed

\*Pest species

## Hodgson Quarries Maroota - Biodiversity Monitoring Report 2021

### Appendix D – Recommended weed control for each month of the year (WoNS and HTW only)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>African Lovegrass</b>	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide				Herbicide	Herbicide	Herbicide	Herbicide
<b>Blackberry</b>	Herbicide	Herbicide	Herbicide						Herbicide	Herbicide	Herbicide	Herbicide
<b>Cobblers Pegs</b>	Hand removal	Hand removal	Hand removal	Hand removal					Herbicide	Herbicide	Herbicide	Hand removal
<b>Crofton Weed</b>	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide				Herbicide	Herbicide	Herbicide	Herbicide
<b>Fireweed</b>	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal
<b>Lantana</b>	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide				Herbicide	Herbicide	Herbicide	Herbicide
<b>Paspalum</b>	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide			Herbicide	Herbicide	Herbicide	Herbicide
<b>Rhodes Grass</b>	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide	Herbicide
<b>Whiskey Grass</b>	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Hand removal	Herbicide	Herbicide	Herbicide	Hand removal

Herbicide – Foliar spray with an appropriate product as per the instructions on the label. Foliar spray should be carried out during active growing season.  
 Hand removal – Necessary when targeted species have reached flowering maturity. Entire plant can be removed or flowering heads may be cut. Removed material should be immediately bagged to prevent spread of seed and appropriately disposed of.

This table should be considered a guide for appropriate treatment during different months of the year. It does not indicate a specified work schedule.

# Appendix E: Weed Treatment Evidence



















Stuart Reed  
Environmental Officer  
Hodgson Quarries and Plant Hire Pty Ltd  
PO Box 1778  
Gosford, NSW, 2250

02/11/2021

Dear Mr. Reed

**Roberts Road Quarry (DA267-11-99)  
Traffic Management Plan Extension**

I refer to your request for an extension of time to submit the Traffic Management Plan as required under condition 50A of Schedule 2 for the Roberts Road Quarry (DA267-11-99).

I note you have had limited site access due to Covid-19 lockdown restrictions as the primary reason for requesting this extension.

Accordingly, I grant an extension of time until the 10<sup>th</sup> of December 2021 for the submission of the Traffic Management Plan.

If you wish to discuss the matter further, please contact Lincoln de Haas at  
[Lincoln.deHaas@dpie.nsw.gov.au](mailto:Lincoln.deHaas@dpie.nsw.gov.au)

Yours sincerely

A handwritten signature in black ink that reads 'Jessie Evans'.

Jessie Evans  
Director  
Resource Assessments

As nominee of the Secretary



Lisa Thomson  
VGT Environmental Compliance Solutions Pty Ltd.  
PO Box 2335  
Greenhills, New South Wales, 2323

02/11/2021

Dear Lisa

**Roberts Road Quarry (DA267-11-99)  
Approval of Qualified Experts**

I refer to your letter dated 5 October 2021 requesting approval of suitably qualified persons to prepare the Conservation and Rehabilitation Bond as required by condition 61 of Schedule 2 for the Roberts Road Quarry.

I have reviewed the nominations and information you have provided and consider that the nominees are suitably qualified and experienced. Consequently, I can advise that I approve the appointment of Lisa Thomson and Greg Thomson to prepare the Conservation and Rehabilitation Bond.

Regarding your question about the Rehabilitation Cost Estimation (RCE) Tool, I refer you to condition 61(b) of Schedule 2 which states the sum of the bond shall be determined by suitably qualified expert.

If you have any further questions, please contact Lincoln de Haas on [Lincoln.deHaas@dpie.nsw.gov.au](mailto:Lincoln.deHaas@dpie.nsw.gov.au)

Yours sincerely

A handwritten signature in black ink that reads 'Jessie Evans'.

Jessie Evans  
Director  
Resource Assessments

As nominee of the Secretary



## ***Beyond Compliance***

**VGT Environmental Compliance Solutions Pty Ltd**  
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