



ENVIRONMENTAL COMPLIANCE AUDIT 2014 - 2017

MAROOTA SAND QUARRY

Prepared for:

Hodgson Quarries and Plant Pty Ltd C/O Lisa Thomson VGT Pty Ltd 17-022

By:

Newport Technical Services Pty Ltd 8th August 2017

Any representation, statement, opinion or advice expressed or implied in this report is made in good faith, but on the basis that liability (whether by reason of negligence or otherwise) is strictly limited to that expressed within

DATE	REV.	FINAL	PREPARED BY	REVIEWED BY	APPROVED BY - NTS	APPROVED BY - CLIENT
06.07.17	1	Draft	L Cross	A Hills	J Johnson	L Thomson
31.07.17	2	Final	L Cross	A Hills	J Johnson	L Thomson
08.08.17	3	Final	L Cross	A Hills	J Johnson	L Thomson



IMPORTANT NOTICE

This report was prepared by Newport Technical Services Pty Ltd (the consultant) for the sole use of the client in support of their own consideration of whether and how to proceed with the subject of this report. Except where specifically stated otherwise in the report, the information contained herein was provided to the consultant by the client and others and has not been independently verified or otherwise examined to determine its accuracy, completeness or financial feasibility.

Neither the consultant, the client, nor any person acting on behalf of either assumes any liabilities with respect to the use of or for damages resulting from the use of any information contained in this report. The consultant does not represent that any assumed conditions will come to pass. This report speaks only as of the date herein and the consultant has no responsibility to update this report.

This report is integral and must be read in its entirety.

Without the consultant's prior approval, the client shall not disclose in writing the contents of this report, in whole or in part except for client's internal use. The client shall obtain the prior written approval from the consultant for any quotation of any part of this report, or any summarisation or abstraction of this report, by any party.

This report may not be relied upon by others.

This notice must accompany every copy of this report.



CONTENTS

	Page
1. INTRODUCTION	5
 1.1 GENERAL 1.2 BACKGROUND 1.3 AUDIT OBJECTIVES AND SCOPE 1.4 AUDIT CRITERIA 	
2. AUDIT METHODOLOGY	7
 2.1 AGENCY CONSULTATION	7 7
2.3.2 Document reviewed 2.3.3 Site inspection 2.4 REPORTING	9
3. AUDIT FINDINGS	10
3.1 COMPLIANCE ASSESSMENT3.2 2011 – 2014 AUDIT RECOMMENDATIONS	
4. SUMMARY	16
 4.1 RISK LEVELS 4.2 ENVIRONMENTAL PERFORMANCE	
APPENDIX A – CONSULTATION	18
APPENDIX B – COMPLIANCE CHECKLIST	19
APPENDIX C – AUDITOR CERTIFICATION	



Terms and Acronyms

Administrative non-compliance	Refer Table 1 for definition.
Compliance	Refer Table 1 for definition.
Council	Hills Shire Council.
DA	Development Application.
DPE	Department of Planning and Environment.
DPI-Water	Department of Primary Industries, Water.
EPA	Environment Protection Authority.
High environmental risk	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence.
Low environmental risk	Non-compliance with:
	• potential for moderate environmental consequences, but is unlikely to occur; or
	• potential for low environmental consequences, but is likely to occur.
Medium environmental risk	Non-compliance with:
	• potential for serious environmental consequences, but is unlikely to occur; or
	•potential for moderate environmental consequences, but is likely to occur.
Non-compliance	Refer Table 1 for definition.
Not triggered	Refer Table 1 for definition.
Note	Refer Table 1 for definition.
Not verified	Refer Table 1 for definition.
Observation	Refer Table 1 for definition.
OEH	Office of Environment and Heritage.



1. INTRODUCTION

1.1 General

Hodgson Quarries and Plant Pty Ltd (Hodgson Quarries) commissioned Newport Technical Services Pty Ltd (Newport) to undertake an independent environmental compliance audit at the Maroota sand quarry at 28 Roberts Road, Maroota NSW (herein referred to as the Maroota Quarry). The audit has been undertaken to meet the requirements of Condition 70 of Development Application 267-11-99 (DA 267-11-99) for the reporting period 16 March 2014 to 15 March 2017.

Leanne Cross (lead auditor) and Andrew Hills (support auditor) were the audit team, whose appointment was approved by the Secretary for the Department of Planning and Environment (DPE) in a letter dated 13/03/17.

1.2 Background

The Maroota Quarry extracts sand from the Maroota Sand geological formation located on the Hornsby Plateau, north west of Sydney. The Maroota Quarry has been in operation since the 1990's supplying sand to the building and construction industry.

DA 267-11-99 was originally lodged with the Department of Urban Affairs and Planning and determined in 2000. Since then 3 modifications have been approved for the Maroota Quarry, the last two were within this audit report period. The two recent modifications are:

- Modification 3 approved 18th August 2015, seeking approval to extend the life of operations for 1 year; and
- Modification 2 approved 18th March 2016, sought to amend the dam construction process from two stages to three stages, modify the sequence and process of extraction and extend the life of extraction until 2025.

Following approval of Modification 2 and 3, Maroota Quarry has revised a number of environmental management plans and undertaken consultation with relevant government agencies. Where necessary, approval has been sought for the amended plans.

1.3 Audit objectives and scope

In accordance with condition 70 of DA 267-11-99, this audit:

- Assesses the environmental performance of the development and compliance with the requirements of the consent and EPL 6535;
- Reviews the adequacy of strategies, plans / programs required under relevant approvals; and
- Recommends appropriate measures or actions to improve the environmental performance of the development and/or any assessment, plan or program required under the abovementioned approvals.

The audit has been undertaken consistent with DPEs *Independent Audit Guideline: Post-approval requirements for State significant developments*, October 2015 (the Audit Guideline) and *ISO 19011: 2014 Guidelines for auditing management systems.*

The audit findings presented in this report are based on the condition of the site at the time of the site inspection, consultation with relevant agencies, documentation publicly available and that provided by Hodgson Quarries. All reasonable efforts have been made to gather adequate evidence which is current and relevant to the site for this audit.



1.4 Audit criteria

The Audit criteria used to audit Maroota Quarry is provided in the Audit Guideline and reproduced in Table 1, below.

Table 1. Compliance Assessment Criteria

Compliance	Where the auditor has collected sufficient verifiable evidence to demonstrate
-	that the intent and all elements of the requirement of the regulatory approval
	have been complied with within the scope of the audit.
Not verified	Where the auditor has not been able to collect sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit. In the absence of sufficient verification the auditor may in some instances be able to verify by other means (visual inspection, personal communication, etc) that a requirement has been met. In such a situation, the requirement should still be assessed as not verified. However, the auditor could note in the report that they have no reason to believe that the operation is
	noncompliant with that requirement.
Non-Compliance	Where the auditor has collected sufficient verifiable evidence to demonstrate that the intent of one or more specific elements of the regulatory approval have not been complied with within the scope of the audit.
Administrative A technical non-compliance with a regulatory approval that would no	
non-compliance	on performance and this is considered minor in nature (eg report submitted but not on the due date, failed to monitor or late monitoring session). This would not apply to performance-related aspects (e.g. exceedance of a noise limit) or where a requirement had not been met at all (e.g. noise management plan not prepared and submitted for approval).
Not Triggered	A regulatory approval requirement has an activation or timing trigger that had not been met at the time of the audit inspection, therefore a determination of compliance could not be made.
Observation	Observations are recorded where the audit identified issues of concern which do not strictly relate to the scope of the audit or assessment of compliance. Further observations are considered to be indicators of potential non-compliances or areas where performance may be improved.
Note	A statement or fact, where no assessment of compliance is required.



2. AUDIT METHODOLOGY

2.1 Agency Consultation

Relevant government agencies were informed of the audit via email and given the opportunity to provide comment and advice on issues of concern.

The consultation is summarised below in Table 2 and copies provided in Appendix A. Comments received from the Hills Shire Council and the Department of Primary Industries – Water are addressed in Section 4.2.

Table 2. Consultation Summary

Agency	Consultation log
Environment Protection	EPA advised that they had no comment (email response dated
Authority (EPA)	29/06/17).
Department of Planning and	DPE advised that the audit pay attention to groundwater and
Environment (DPE)	extraction depth (email response 21/06/17).
Department of Primary	DPI - Water advised they would provide comment by the
Industries – Water (DPI-	21/07/17 (phone call received 12/07/17). No comment from DPI
Water)	- Water was received and a follow up email was sent to them
	26/07/17 requesting comment. A written response was received
	31/07/17 and requested that the audit considers compliance with
	the relevant water licensing requirements for the sand quarry
	operation.
Office of Environment and	OEH advised that they would not provide comment (email
Heritage (OEH)	response dated 30/06/17).
Hills Shire Council (Council)	Council raised the provision and maintenance of bunding and
	landscape screening around the site and resultant visual impact
	from external properties (email response dated 03/07/17).

2.2 Approvals and documents audited

The Maroota Quarry Development Consent, DA 267-11-99 Modification 2, issued by the Minister for Urban Affairs and Planning, 18th March 2016, was the primary approval document audited. Various elements of the following documents, were also audited to assess compliance against it:

- Environmental Assessment Section 75W Modification (2) DA 267-11-99, Hodgson Quarries and Plant Pty Ltd: Roberts Road, Maroota (Volumes 1 and 2), 23 September 2015 prepared by Nexus Environmental Planning Pty Ltd (EA Modification 2); and
- Environmental management commitments made in the *Operational Environmental Management Plan*, November 2016, prepared by VGT (OEMP 2016).

2.3 Methodology

At the commencement of the audit a preliminary review of the new approval documentation was undertaken which included EA Modification 2 and Environmental Assessment Section 75W *Modification (3) DA 267-11-99, Hodgson Quarry Products Pty Ltd: Roberts Road, Maroota,* 17 May 2015 prepared by Nexus Environmental Planning Pty Ltd (EA Modification 3 2015), DA 267-11-99 modification 2 (18 March 2016) and modification 3 (18 August 2015) and the revised *Operational Environmental Management Plan* (which contains the construction environmental management plan and sub environmental management plans).



This was followed by a site inspection, key personnel interviews and further document review against a prepared table of compliance. An opening meeting was held and attended by Martin Hodgson (Director) and Stuart Reed (Supervisor) of Maroota Quarry, Lisa Thomson (Principal Environmental Consultant) and Sinead Kelly (Environmental Scientist) of VGT (Maroota Quarries' environmental consultant) and Leanne Cross (environmental consultant) and Andrew Hills (environmental consultant) of Newport.

A large number of documents and data were reviewed onsite, and where possible, compliance verified at the time of the site inspection. Other documentation has been made available to the audit team for offsite review and reporting and additional documents provided at the request of the audit team.

Findings have been reported in the table of compliance using the criteria provided in Audit Guideline (as reproduced in Table 1 above).

2.3.1 Interviews

Interviews were conducted on the day of the site inspection with Martin Hodgson, Stuart Reed and Lisa Thomson. A follow up interview was had with Lisa Thomson on the 21st June 2017.

2.3.2 Document reviewed

In addition to the approvals and documents audited (as listed above in section 2.2), other documentation sighted / reviewed are as follows:

- Dundon Consulting, *Groundwater Monitoring Program.* Roberts Road Maroota Sand *Quarry* (August 2016);
- Dundon Consulting, Groundwater Study Report. October 2016 (October 2016);
- Dundon Consulting, *Groundwater Study Report.* Roberts Road Maroota Sand Quarry (February 2017);
- Environmental Protection Licence 6535, EPA;
- Global Acoustics, letter Re Hodgson Quarry Excavator Noise Levels, dated 26 May 2014;
- Global Acoustics, Plant Sound Power Survey (December 2013);
- Muller Acoustic Consulting, *Noise monitoring assessment*, Maroota Quarry (May 2016);
- Muller Acoustic Consulting, *Operational and Road Noise Management Plan* (November 2016);
- Newport Technical Services Pty Ltd, *Environmental Compliance Audit 2011 2014 Maroota Sand Quarry* (June 2014);
- VGT Pty Ltd, Air Quality Management Plan for the Sand Quarry, Roberts Rd Maroota, NSW (November 2016);
- VGT Pty Ltd, Annual Review and Compliance Report 2016 Roberts Road, Maroota Sand Quarry DA 267 11 99 (March 2017);
- VGT Pty Ltd, Conditions Compliance Report HB Maroota Quarry Maroota: Reporting period February 2013 to December 2015, (2016);
- VGT Pty Ltd, Construction Environmental Management Plan for the Sand Quarry, Roberts Rd Maroota, NSW (July 2016);
- VGT Pty Ltd, Environmental Management Strategy for the Sand Quarry, Roberts Rd Maroota, NSW (July 2016);



- VGT Pty Ltd, Flora and Fauna Management Plan for the Sand Quarry, Roberts Rd Maroota, NSW (November 2016);
- VGT Pty Ltd, Operational Environmental Management Plan, Roberts Rd Maroota Quarry (November 2016);
- VGT Pty Ltd, Pollution and Incident Response Management Plan 2016 EPA Licence Number 6535, Sand Quarry, Roberts Rd Maroota, NSW (July 2016);
- VGT Pty Ltd, *Rehabilitation Management Plan for the Sand Quarry, Roberts Rd Maroota, NSW* (June 2016);
- VGT Pty Ltd, *Surface Water Management Plan, Maroota Quarry via Maroota* (January 2017); and
- VGT Pty Ltd, Water Quality Management Plan for the Sand Quarry, Roberts Rd Maroota, NSW (June 2016).

2.3.3 Site inspection

A site visit was conducted on the 22nd May 2017 at the Maroota Quarry. During the site visit the following was sighted / inspected:

- extraction cells, sediment and process water dams and water storage dams;
- plant and equipment;
- monitoring equipment and meteorological monitoring station;
- site office, workshop and storage areas;
- site entry, weigh bridge and access tracks;
- site signage;
- perimiter bund; and
- vegetation.

Observations were made in relation to the site's general environmental management and performance including air, noise, water, visual amenity, waste, soil and erosion, and vegetation.

2.4 Reporting

Following the site inspection, interviews and document review, the compliance checklist was completed and assessed each condition and sub condition against the compliance assessment criteria (Table 1). Appendix B contains the full compliance checklist with the compliance assessment criteria. Section 3, below, details each of the non-compliances, administrative non-compliances and those that were classified not verified.

Section 4 provides a risk ranking, for each of the non-compliances, in accordance with the 'risk levels for non-compliances' in the Audit Guidelines and a summary of recommendations in relation to the sites environmental performance and future improvements.

The Audit Certification per the Audit Guidelines is contained in Appendix C.



3. AUDIT FINDINGS

3.1 Compliance assessment

In summary, the audit found:

- 46 Compliant;
- 5 Non-compliant;
- 4 Administrative non-compliances;
- 1 Not verified; and
- 14 Not triggered.

The non-compliances, administrative non-compliance and not verified are provided below. The non-compliances have also been assigned a risk level in accordance with the Audit Guidelines and as defined in Table 1.

Condition 2 – Non-compliance

2. The Applicant shall:

- (a) carry out the development generally in accordance with the EIS, 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.

5 non-compliances, 4 administrative non-compliances and 1 not verified were identified during the audit per the detail below.

This is considered a medium risk and so classified based on the highest risk level identified for each of the flowing non-compliance.

Recommendation

Detailed recommendations are provided below for each condition. Refer below.

Condition 4 – Administrative Non-compliance

4. The Applicant shall ensure that all contractors and sub-contractors are aware of, and comply with, the Conditions of this Consent.

Maroota Quarry inform their contractors and sub-contractors of site requirements by site induction. During the audit, the induction material and induction records were sighted and reviewed. The content of the induction did not address environmental management requirements and there was no evidence to demonstrate how the contractors and subcontractors are made aware of the Conditions of Consent.

It is noted that Section 7.2 of the OEMP, outlines induction and training requirements and Appendix H includes an induction checklist. Despite this, there was no evidence provided that the induction checklist was being used for all contractors and sub-contractors.



Recommendation

Update induction material to include environmental requirements ensuring the contractors and subcontractors are aware of and comply with the consent. Induction procedures and requirements are to be consistent with those detained in the OEMP.

Condition 17 – Not Verified

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 in the site (see condition 39(d) and 44).

The wet weather high groundwater level of the regional aquifer is yet to be agreed and determined. Per condition 39(d) and 44, a groundwater study has been prepared and interim contour maps prepared to map the wet weather high groundwater level however as yet, consultation with DPI-Water is ongoing and agreement is pending.

Currently the Maroota Quarry is working to the previously approved extraction level of 186m AHD. Regular spot checks are undertaken and surveys of the operations extent and depth are conducted by a registered surveyor. During the site inspection, there was no evidence of groundwater inflow into the extraction area and it was advised, during interviews, that there has been no history of groundwater inflow into operating extraction areas.

Recommendation

It is recommended that agreement on the wet weather high groundwater level is reached with DPI-Water as soon as possible. Until such time, continue spot checks and survey against extraction level.

Condition 20 – Administrative Non-compliance

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 and Noise Management Plan (Condition 48);
- (f) the Flora and Fauna Management Plan (Condition 55); and
- (g) the Rehabilitation Plan (Condition 58).

The Operational EMP has not yet been approved by the DPE and is pending approval of the Water Management Plan and Rehabilitation Plan, as stated in their letter dated 9/12/16.

The Water Management Plan has not been approved by the Secretary. It is currently in draft form and consultation with DPI-Water is ongoing. This is further discussed below in Condition 40.

It was observed that the Operational EMP did include a Rehabilitation Plan but the Landscape and Rehabilitation Management Plan per condition 60, was not included. It appears that the reference to the Rehabilitation Plan (Condition 58) in Condition 20, is in error and should instead refer to Condition 60 Landscape and Rehabilitation Management Plan.



Recommendation

Continue to consult with DPI-Water to seek their comments on the Water Management Plan. Once comments have been sought, submit the Water Management Plan to the Secretary for approval per Condition 42.

The Landscape and Rehabilitation Management Plan has subsequently been submitted to the Secretary per Condition 60 and prior to the 30 June 2017.

Condition 32 – Non-compliance

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.

A sprinkler system was not installed, operated or maintained.

This non-compliance has been assigned a low risk level based on the potential for moderate environmental consequence for dust impacts and the potential to cause nuisance. It is considered unlikely to occur however given the history of the site, air quality monitoring results and use of alternate dust suppression management measures.

Recommendation

Re-install sprinkler system to adequately water all cleared areas and stockpiles. Alternatively, seek modification or removal of condition based upon long-term dust monitoring results which indicate current dust suppression measures (such water cart usage and manual hose down) are sufficient in maintaining acceptable dust levels.

Condition 40 – Non-compliance

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.

The report of the study was not submitted within 6 months of commissioning the groundwater study as required by the condition. It is noted however, that a groundwater study progress report was submitted to DPE and DPI-Water on the 31/10/2016. On the 28/02/2017 the study was resubmitted to both agencies and written comments provided from DPI – Water.

DPI – Water provided 5 recommendations in their correspondence and state that the report is inadequate in determining the location of the wet weather high groundwater table and further information is required.

The report and Groundwater Management Improvement Program is yet to be finalised.



This non-compliance is considered to have a moderate risk level. Without having an approved Plan to the satisfaction of the Secretary, there is potential for moderate environmental consequence. It is however considered unlikely, given the Plan is partially complete and consultation with DPI-Water is underway.

Recommendation

It is recommended that the report is completed and the Groundwater Management Improvement Program prepared and implemented to the secretary's satisfaction.

Condition 42 - Non-compliance

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 experienced person/s whose appointment has been approved by the Secretary, and be submitted to the Secretary 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
- (b) Surface Water Management Plan, that includes.....
- (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 an Petroleum Exploration Activities (DPI 2014) and includes....

The draft Water Management Plan was submitted to the Secretary 31/01/17 following approval of an extended submission date (letter from DPE dated 29/11/16). The Water Management Plan is currently in draft and consultation ongoing with DPI-Water.

The Water Management Plan does not include the Groundwater Management Plan (Condition 42(c)) and not all of the requirements of the Surface Water Management Plan (Condition 42(b)) have been met. For example, a program to monitor surface water level and quality in the Process Water Dam and a detailed description of the design and construction criteria for it has not been included.

This non-compliance is considered to have a moderate risk level. Without having an approved Water Management Plan to the satisfaction of the Secretary, there is potential for moderate environmental consequence. It is however considered unlikely, given the Plan is being prepared and discussed with DPI-Water.

Recommendation

Update Water Management Plan in accordance with consultation requirements from DPI-Water including the Groundwater Management Plan and requirements per the Conditions of approval and submit to the Secretary.



Condition 43 – Administrative Non-compliance

- 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 of the overall extraction footprint) in proximity to extraction Phase 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.

The Groundwater Monitoring Program was submitted to the Secretary for approval on the 23/08/16 and conditionally approved on the 28/11/16. This was outside the four month period per Condition 43(a).

It was also noted that the bore locations identified in Figure 1 and 2 of the Groundwater Monitoring Program were not consistent with those in Table 7.

Recommendation

It is recommended that the Groundwater Monitoring Program is amended to ensure consistent bore locations and references in Figure 1 and 2 and Table 7. As well incorporate amendments per DPE's conditional approval, to reflect the actual locations of boreholes and provide accurate contour plans.

Condition 45 – Non-compliance

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).

Assessment of the Process Water Dam has not been undertaken.

Recommendation

Engage a suitably qualified engineer to assess the designed and construction of the Process Water Dam. Consult with Dam Safety Committee to ensure dam construction compliance. Expand Section 8 of Surface Water Management Plan including advice and recommendations from Engineer's report (if any).

This non-compliance is considered to have a low risk level as it has the potential for moderate risk level but is unlikely to occur.



Condition 47 – Administrative Non-compliance

47(c) A noise compliance investigation is to be undertaken within one month of the installation of the equipment to demonstrate compliance with the noise limits stated in Condition 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 investigation.

Four excavators and one on-site generator were observed during the site inspection. There are noise monitoring and compliance reports available from December 2013 and March 2014, however these reports did not include an assessment of the on-site generator and it is not clear if all excavators have been included in compliance investigations.

Recommendation

Undertake a noise compliance investigation against relevant criteria to for all excavators and onsite generators that have not previously been assessed.

3.2 2011 – 2014 audit recommendations

Many of the 2011 - 2014 audit non-compliances identified, have been closed out or become redundant given Modification 2 and 3 and the revision of the conditions. It is evident that management plans have been revised and approval sought accordingly, approval of air quality monitoring sites has been obtained and total suspended particulate (TSP) monitoring has commenced for example.

The only non-compliance that is a repeat, is Condition 32 which requires the installation, operation and maintenance of a sprinkler system.



4. <u>SUMMARY</u>

4.1 Risk Levels

Consistent with the Audit Guidelines and the definitions provided in Table 1, the following risk levels have been assigned to each on the non-compliances:

- High risk level nil;
- Medium risk level Condition 2, 40 and 42; and
- Low risk level Condition 32 and 45.

4.2 Environmental performance

The environmental performance of the Maroota Quarry was found to be generally good. During the site visit there were no areas of concern identified (e.g. there were no observations of visual dust emissions, excessively noisy plant, erosion or pollution). Site staff were aware of environmental requirements and relevant documentation and records were kept on site.

Annual returns for EPL 6535 had been submitted for each reporting period and recorded nil noncompliances. Nil environmental incidents and complaints were also recorded during the audit period.

No high-risk level non-compliances were identified with a total of 5 non-compliances and 4 administrative non-compliances identified. A number of the non-compliances identified during this audit were administrative in nature and in relation to the preparation, consultation and approval of environmental management plans (which were required as a result of Modification 2 to DA 267-11-99). Approval of the Water Management Plan is outstanding and pending consultation and completion of the Groundwater Management Plan.

During consultation with government agencies, only one concerned was raised. This was by Council in relation to landscaping and maintenance of the bund. Although, this was not considered to be a non-compliance, it is an area of concern. The vegetation screen and landscape planting was observed to be sparse and not acting as a visual shield to the Maroota Quarry. It is therefore recommended that this be further considered and addressed in the Landscape and Rehabilitation Management Plan (required by Condition 60).

DPI – Water in their correspondence request consideration is given to compliance with the relevant water licensing requirements of the sand quarry operation. This correspondence was received following completion of the audit and reporting. The audit report was subsequently revised (revision 3) to incorporate the DPI - Water correspondence. In summary, there are 10 monitoring bore water licences and 1 water access licence (WAL 24163) and work approval (10WAL114817) which apply to the operations.

VGT undertake annual compliance checks against these licence conditions. The results of these compliance checks were reviewed during this audit for the 2016 calendar year for which no non-compliances were identified. It is recommended that further field assessment and document review is undertaken during the 2017 – 2020 audit to further verify compliance with the Licenses.

DPE in their comments requested that attention be given to groundwater and extraction depth. This has been noted above, in section 3 Audit Findings, with specific reference to condition 17, 40, 42 and 43.



4.3 Summary of Recommendations

A summary of the recommendations are provided below:

- update induction material to include environmental requirements ensuring the contractors and subcontractors are aware of and comply with the consent. Induction procedures and requirements are to be consistent with those detained in the OEMP;
- reach agreement on the wet weather high groundwater level with DPI-Water as soon as possible. Until such time, continue spot checks and survey against extraction level;
- continue to consult with DPI-Water to seek their comments on the Water Management Plan. Once comments have been sought, submit the Water Management Plan to the Secretary for approval per Condition 42;
- submit the Landscape and Rehabilitation Management Plan per Condition 60 to the Secretary by the 30 June 2017;
- re-install sprinkler system to adequately water all cleared areas and stockpiles. Alternatively, seek modification or removal of condition based upon long-term dust monitoring results which indicate current dust suppression measures (such water cart usage and manual hose down) are sufficient in maintaining acceptable dust levels;
- seek approval from the Secretary for the Groundwater Management Improvement Program and duly report progress in the Annual Reviews;
- update Water Management Plan in accordance with consultation requirements from DPI-Water including the Groundwater Management Plan and requirements per the Conditions of approval and submit to the Secretary;
- amend the Groundwater Monitoring Program to ensure consistent bore locations and references in Figure 1 and 2 and Table 7. As well incorporate amendments per DPE's conditional approval, to reflect the actual locations of boreholes and provide accurate contour plans;
- engage a suitably qualified engineer to assess the designed and construction of the Process Water Dam. Consult with Dam Safety Committee to ensure dam construction compliance. Expand Section 8 of Surface Water Management Plan including advice and recommendations from Engineer's report (if any);
- undertake a noise compliance investigation against relevant criteria to for all excavators and on-site generators that have not previously been assessed;
- further consider and address the landscape planting and bund in the Landscape and Rehabilitation Management Plan (required by Condition 60) to ensure adequate screening, visual appeal and maintenance; and
- Further field assessment and document review is undertaken during the 2017 2020 audit to verify compliance with water licensing requirements under the *Water Management Act 2000* or *Water Act 1912* (as applicable).



APPENDIX A – CONSULTATION



Contact Marie Schildt Phone (02) 98428640 Email marie.schildt@dpi.nsw.gov.au Our ref V15/3875#23 & OUT17/31176 Your ref DA 267-11-99

Leanne Cross Lead Environmental Scientist Newport Technical Services PO Box 163 Wickham NSW 2293 By email: leanne@newcastleport.com.au

Dear Ms Cross

Maroota Sands Quarry, Roberts Road, Maroota, Newport – Independent Audit (DA 267-11-99)

Thank you for the opportunity to comment on the planned independent audit of Maroota Sands Quarry.

DPI Water understands that the scope of the assessment as outlined under the development consent extends at least to compliance with:

- the conditions of consent;
- the statements of commitments as appended to the consent;
- any reporting or requirements within any relevant management plans prepared under the consent.
- all trigger action response plans for surface and groundwater impacts.

DPI Water requests that the audit considers compliance with the relevant water licensing requirements for the sand quarry operation, specifically:

- Assessment as to whether the project holds the required water entitlements and licences under the Water Management Act 2000 or Water Act 1912 (as applicable);
- Compliance with the conditions of any water licences/approvals held.
- Identification of all water storages for the quarry and identification of their licensing status being either exempt, subject to harvestable rights or regulated via a Water Access Licence.
- Quantification of both active and passive take by the project from each relevant water source and a comparison against previously modelled predictions.

The following questions may aid in assessing the water licensing requirements of the quarry operation:

- Does the proponent have enough licensed water entitlement to cater for active and passive take of water?
- Are adequate records kept to enable determination of the volume and source of surface and groundwater taken?

Level 3, 26 Honeysuckle Drive, Newcastle | PO Box 2213 Dangar NSW 2309 t 1800 353 104 | www.water.nsw.gov.au | www.dpi.nsw.gov.au Do any exemptions under the Water Management (General) Regulation 2011 or Harvestable Rights Order (gazetted 31 March 2006) apply to the capture of water?

I trust this information is of assistance. Please contact Marie Schildt, Water Regulation Officer (Parramatta) on (02) 98 428 640 or <u>marie.schildt@dpi.nsw.gov.au</u> if you have further enquiries regarding this matter.

Yours sincerely

Irene Zinger Regional Manager - Metro Water Regulation Operations DPI Water

31/07/2017

RE: Maroota Sands Quarry - Audit consultation

Kristine McKenzie [kmckenzie@thehills.nsw.gov.au] Sent:Monday, 3 July 2017 4:31 PM To: Leanne Cross

Hi Leanne,

Thank you for the opportunity to comment on your upcoming site audit.

The only issue I would raise is the provision and maintenance of bunding and landscape screening around the site and resultant visual impact from external properties. This is a matter I have raised previously with the Department of Planning as part of DA 267-11-99 Mod 2. My view is that the landscape works in particular have not been maintained to a reasonable standard in accordance with conditions of consent. I would request that this matter be reviewed as part of your audit.

Please don't hesitate to call or email me if you wish to discuss this matter further.

Regards, Kristine



Kristine McKenzie | Principal Executive Planner THE HILLS SHIRE COUNCIL Administration Centre, 3 Columbia Court BAULKHAM

HILLS NSW 2153 PO Box 7064 BAULKHAM HILLS BC NSW 2153 | DX 9966 Norwest NSW **Tel:** +61298430319 | **Fax:** 61298430409 | www.thehills.nsw.gov.au | **B** | **f**

From: Leanne Cross [mailto:leanne@newcastleport.com.au] Sent: Thursday, 29 June 2017 2:10 PM To: Kristine McKenzie

Subject: Maroota Sands Quarry - Audit consultation

Hi Kristina,

I have been given your name from Lisa Thomson of VGT on behalf of Maroota Sands Quarry, Roberts Road, Maroota.

Newport are in the process of undertaking an independent audit of the premises in accordance with condition 70 of development application 267-11-99. It is a requirements of the audit that consultation with relevant government agencies is undertaken.

Can you please advise if you have any comments or advice in relation to the site to assist with the audit or of you feel there are particular issues the audit team should investigate.

Can you please provide your response by 5th July. If I do not hear from you, I will assume Council had not comments to make.

I can be contacted by return email or 0477 056 801.

Regards

Leanne Cross BSc Lead Environmental Scientist

NEWPORT TECHNICAL SERVICES

21 Church Street (PO Box 163), Wickham NSW 2293 Phone/Fax: 02 4961 3390 | Mobile: 0477 056 801 Email: <u>leanne@newcastleport.com.au</u>

CONFIDENTIALITY NOTICE

The information contained in this email is strictly confidential and prepared solely for the use of the intended recipient(s). The copyright of this communication belongs to The Hills Shire Council.

If you are not the intended recipient, please do not read, use, disseminate, distribute or copy this message or attachments. If you have received this message in error, please notify the sender immediately and delete this message.

Views expressed in this message are those of the individual sender, and are not necessarily the views of The Hills Shire Council

DISCLAIMER

Before opening any attachments, please check them for viruses and defects.

The sender does not accept liability for any viruses, errors or omissions in the contents of this message or attachment, which arise as a result of email transmission.

FW: Maroota Sand Quarry - Audit consultation

Marnie Stewart [Marnie.Stewart@environment.nsw.gov.au] sent:Friday, 30 June 2017 3:25 PM To: Leanne Cross Cc: Sarah Burke [Sarah.Burke@environment.nsw.gov.au]; Richard Bonner [Richard.Bonner@environment.nsw.gov.au]

Dear Leanne

Thank you for the opportunity to comment.

Please be advised that OEH will not be providing any comments on this matter.

Kind regards,

Marnie Stewart Senior Project Officer – Planning, Greater Sydney Branch Regional Operations Division Office of Environment and Heritage T: 02 9995 6868 W: www.environment.nsw.gov.au Please note my work days are Tues- Fri

Save paper, save the planet! think before you print.

From: Leanne Cross [mailto:leanne@newcastleport.com.au] Sent: Thursday, 29 June 2017 2:12 PM To: Sarah Burke <<u>Sarah.Burke@environment.nsw.gov.au</u>> Subject: Maroota Sand Quarry - Audit consultation

Hi Sarah,

I have been given your name from Lisa Thomson of VGT on behalf of Maroota Sands Quarry, Roberts Road, Maroota.

Newport are in the process of undertaking an independent audit of the premises in accordance with condition 70 of development application 267-11-99. It is a requirements of the audit that consultation with relevant government agencies is undertaken.

Can you please advise if you have any comments or advice in relation to the site to assist with the audit or of you feel there are particular issues the audit team should investigate.

Can you please provide your response by 5th July. If I do not hear from you, I will assume the Department had not comments to make.

I can be contacted by return email or 0477 056 801.

Regards

Leanne Cross BSc

Lead Environmental Scientist

NEWPORT TECHNICAL SERVICES

21 Church Street (PO Box 163), Wickham NSW 2293 Phone/Fax: 02 4961 3390 | Mobile: 0477 056 801 Email: <u>leanne@newcastleport.com.au</u>

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. Any views expressed in this email are those of the individual sender except where the sender expressly and with authority states them to be the views of the NSW Office of Environment and Heritage.

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

RE: Maroota Sand Quarry - audit consultation - EPL 6535

Alexander Bowlay [Alexander.Bowlay@epa.nsw.gov.au] Sent:Thursday, 29 June 2017 4:41 PM To: Leanne Cross

Thanks Leanne,

I will check some files but yes I believe that at this stage the EPA has no comments regarding the pending audit. Thank you for the contact.

Regards,

Alex Bowlay

Operations Officer – Sydney Industry Section

Metropolitan Branch, NSW Environment Protection Authority

(02) 9995 5257

alex.bowlay@epa.nsw.gov.au www.epa.nsw.gov.au

Report pollution and environmental incidents 131 555 (NSW only) or (02) 9995 5555



From: Leanne Cross [mailto:leanne@newcastleport.com.au] Sent: Thursday, 29 June 2017 2:20 PM To: Alexander Spaller <<u>Alexander.Spaller@epa.nsw.gov.au</u>> Subject: Maroota Sand Quarry - audit consultation

Hi Alex,

Thank you for your phone call earlier today.

As you are aware Newport are in the process of undertaking an independent audit of Maroota Sands Quarry, Roberts Road, Maroota in accordance with condition 70 of development application 267-11-99. It is a requirements of the audit that consultation with relevant government agencies is undertaken.

In relation to the audit, I understand that the Department has no comments to make.

Again, thank you for your response.

Regards

Leanne Cross BSc Lead Environmental Scientist

NEWPORT TECHNICAL SERVICES

21 Church Street (PO Box 163), Wickham NSW 2293 Phone/Fax: 02 4961 3390 | Mobile: 0477 056 801 Email: leanne@newcastleport.com.au

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. Any views expressed in this email are those of the individual sender except where the sender expressly and with authority states them to be the views of the Environment Protection Authority. PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

RE: Maroota Quarry - Independent Audit

Gen Seed [genevieve.seed@planning.nsw.gov.au] sent:Wednesday, 21 June 2017 1:28 PM To: Leanne Cross Cc: Chase Dingle [Chase.Dingle@planning.nsw.gov.au]; Stewart Mclachlan [stewart.mclachlan@planning.nsw.gov.au]

Hi Leanne

I have spoken to Stewart Mclachlan the site's compliance officer and he has requested that the audit pay attention to groundwater and extraction depth. In particular the eastern area adjacent to the sand washing plant.

Should you wish to discuss the matter please call Chase Dingle on 9274 6403. Chase is the team leader of Compliance for the metro region.

Thanks

Gen

Genevieve Seed Senior Planning Officer Resource Assessments Level 22, 320 Pitt Street | GPO Box 39 | Sydney NSW 2001 T 02 9274 6489



f in Subscribe to our <u>newsletter</u>

We've You can find us at our new office moved Level 22, 320 Pitt St, Sydney, 2000

From: Leanne Cross [mailto:leanne@newcastleport.com.au] Sent: Wednesday, 21 June 2017 1:10 PM To: Gen Seed <genevieve.seed@planning.nsw.gov.au> Subject: Maroota Quarry - Independent Audit

Hi Genevieve,

As discussed with you on the phone today, Newport have been engaged to undertaken the independent audit of Maroota Quarry (DA267-11-99).

In relation to Condition 70 (b), does the Department have any comments to offer or particular areas of concern that the audit should focus on.

If you could please advise by the 28th June it would be greatly appreciated.

Thank you.

Regards

Leanne Cross BSc Lead Environmental Scientist

NEWPORT TECHNICAL SERVICES

21 Church Street (PO Box 163), Wickham NSW 2293 Phone/Fax: 02 4961 3390 | Mobile: 0477 056 801 Email: <u>leanne@newcastleport.com.au</u>



APPENDIX B – COMPLIANCE CHECKLIST

Section 1	1					
Condition	Compliance	Details	Recommendations / Comments			
General	Compliance	Details	Recommendations / Comments			
	eeneral Deligation to Prevent and Minimise Harm to the Environment					
1		During site inspections, environmental practices sighted were generally				
	Compliant	considered appropriate and minimising harm to the environment. No major				
A .II	to Torres of DA	environmental incidents were identified during the audit.				
Adherence 2a.	to Terms of DA					
2a.	New Compliant	The Development is generally being carried out in accordance with DA No 267-11-99, however a number of non-compliances were identified (see				
	Non-Compliant	comments on specific conditions).				
2b.		A number of compliance issues were identified during the audit which have				
	Non-Compliant	been outlined in section 3.1 of the report.				
Complianc	e					
3	Compliant	No requirements have been issued by the Secretary since the previous audit.				
4						
		Site induction doesn't cover site environmental management requirements.	Observation: Expand site induction document be expanded to include more			
	Administrative		detail regarding site environmental management requirements.			
	non-compliance	Section 5.2 of the OEMP details training requirements for staff, contractors				
		and subcontractors.				
		Onsite signage sighted.				
5	Compliant	No new construction has been undertaken during the audit period.				
The Condi	tions Compliance	Report includes:				
0		Compliance report has been prepared for 2016. Submitted 31/03/16. DPI				
	Compliant	has acknowledged receipt of the most recent report but has not provided a	Observation: Seek response from DPI to most recent compliance report			
		response at the time of the audit. Reviewed report February 2013 to December 2015.	and action items as required.			
6a.	Compliant	Contained in report in Section 4, 5 & 6.				
6b.	Compliant	Contained in report in Section 7.				
6c.	Compliant	Contained in report in Section 7.				
6d.	Compliant	Revision table presented on Page 3. Report incorporates additional				
	Compliant	information required by DPI as requested 21/03/17.				
6e.	Compliant	No complaints during audit period.				
6f.	Compliant	Contained in report in Section 9.				
6g.	Compliant	Contained in report in Section 6.2				
7	-	-				
,	Compliant	Comments by the Secretary have been received 21/03/16. Subsequently				
	Compilant	report was updated on 18/04/16 to incorporate requested changes.				
Commence	ement and Durati	on				
8a.	Compliant	Bund wall in place				
8b.		Compliance report has been prepared for 2016. Submitted 31/03/16. DPI				
	Compliant	has acknowledged receipt of the most recent report but has not provided a	Observation: Seek response from DPI to most recent compliance report			
	Comphant	response at the time of the audit. Reviewed report February 2013 to December 2015.	and action items as required.			
8c.		Water bores all licenced and kept on site. EPL and Development Consent				
o c .	Compliant	valid				
9	Compliant	Extraction is still within the 15 year period from the date if consent.				
Complaint	s Procedures					
	Prior to commencement of construction, the Applicant will:					
10a.	Compliant	The telephone number is displayed on sign at front gate and in white				
10b.	Compliant	pages. The postal address is displayed on sign at front gate.				
11		Complaints log book is located on site, no complaints were received in				
	Compliant	the audit period.				
12a.	Not Triggered	no complaints were received in the audit period.				
12b.	Not Triggered	no complaints were received in the audit period.				
13	Not Triggered	no complaints were received in the audit period.				
14a.	Not Triggered	no complaints were received in the audit period.				
14b.	Not Triggered	no complaints were received in the audit period.				
Dispute Re		N				
15	Not Triggered	Not triggered during audit period.				

Section 2						
	Response	Details				
Hours of O		Details				
16	-	Stuart Reed (Operations Manager) verbally confirmed hours of				
10	Compliant	operation.				
Depth of E	xtraction					
17	Not Verified	The wet weather high groundwater level of the regional aquifer is yet to be determined. An ongoing groundwater study is in progress to determine the level. Working with DPI-Water to reach an agreed level. As an interim measure, the quarry is working to previous level. Regular spot checks are undertaken as required and surveys of the operations extent and depth are conducted by a registered surveyor. Viewed the existing mark being used onsite. No historical evidence of groundwater inflow into operating extraction areas. No evidence of inflows whilst onsite also.	Identify the wet weather high groundwater level of the regional aquifer and seek agreement and approval from DPI. Continue spot checks and regular surveying to ensure compliance with the level.			
	ental Managemen	t Plan				
18	Compliant	Construction Environmental Management Plan has been developed and sighted. Approved by DPI 09/12/16.				
19	Compliant	The OEMP is one all encompassing document. The updated EMP has been submitted and approved by the Secretary; acceptance letter viewed during audit.	Note: letter from DoPE on 9/12/16 states that OEMP is not yet approved based on water management plan and rehab plan. Not approved by the secretary at time of the audit.			
-	tional Environme	ental Management Plan includes:				
20a.	Compliant	Contained in overal OEMP document.				
20b.	Compliant	As above				
20c.	Administrative non-compliance	Water Management Plan in draft with ongoing negotiation/discussion with DPI. Comments received from DPI in April 2017.	Finalise Water Management Plan and submit to DPI for approval.			
20d.	Compliant	Contained in overal OEMP document.				
20e.	Compliant	As above				
20f.	Compliant	As above				
20g.	Not Triggered	Rehabilitation plan not due at time of audit. Draft plan has been developed.	Note: Submit Rehabilitation Plan to DPI for approval by 30 June 2017.			
21	Compliant	Copies of EMP's available onsite, on VGT's website and also sen to DPI- Water, EPA & Council.				
22	Compliant	The OEMP is current and has been approved by the Secretary; accpetance letter viewed.				
23	Deleted					
24	Deleted					
25	Deleted					
26	Deleted					
Section 3						
Question	Response	Details				
Waste						
27	Compliant	No waste from quarrying. All other waste disposed of by contractors on a montly basis and additionally as required.				
	Air Quality					
Air Quality	y Criteria					
28	Compliant	No exceedances of specified air quality goals within audit period (and historically). Air quality results presented in Conditions Compliance Reports and also on VGT's website.				
Air Quality	y Management		······			
Air Quality	y Management Pl	an developed that:				
29	Compliant	Air Quality Management Plan (AQMP) sighted in Appendix A OEMP.				
29a.	Compliant	Monitoring locations have been approved since previous audit. No exceedances recorded over a long period. Section 2 of AQMP.				
29Ь.	Compliant	Monitoring Plan located in Section 3 of AQMP (Appendix A OEMP) outlines methodologies to be used including the installation of a weather station which was completed during the audit period.				

20			
29c.	Compliant	The AQMP addresses the requirements of this condition. Section 4 and 5.	
29d.	Compliant	Section 5 of AQMP (Trigger Action Response Plan).	
29e.	Compliant	Details provided in Section 4.1 and Section 5 of the AQMP.	
30	Compliant	Site inspection confirmed implementation of dust controlsas outlined in OEMP including onsite weather station, weather foreast observations, water cart and manual hose down.	
31	Not Triggered	No dust events requiring the Trigger Action Response Plan during the audit period.	
32	Non-Compliant	Sprinkler system previously in place has been removed. Changed operation so that stockpiles do not sit for long. Water cart and hose down used as required to manage dust.	Re-install sprinkler system. Alternatively, seek modification or removal of condition.
33	Compliant	Viewed trucks and vehicle movements, restricted and driving in appropriate manner. Section 4.3 of Air Quality Management Plan, vehicle speed limit restricted on site to 30km/hr. Onsite speed limit noted in site induction as being 20km/hr. Viewed photograph of 20km/hr speed sign installed at site entrance.	
34	Compliant	Viewed signage and witnessed trucks leaving with tarps on.	
Air Quality	y Monitoring		
35	Compliant	Noted as compliant in 2003 audit. Viewed monitoring equipment onsite during audit. No new construction during audit period.	
Operation	of dust monitorin	g gauges and monitoring carried out in accordance with	
36a.	Compliant	DDG gauges and monitoring equipment for deposited matter compliant with AS3580.1 (1991). Viewed equipment in operation onsite during audit. Results presented in Section 5 of Conditions Compliance Reports.	Observation: Dust monitoring is being undertaken in accordance with most current versions of AS's, however conditions still specify old versions. Seek change to consent conditions to show most recent versions of AS's with regard to dust monitoring to avoid any confusion.
36b.	Compliant	DDG gauges and monitoring equipment for TSP compliant with AS2724.3 (1984). TSP monitor installed in August 2016. Viewed equipment in operation onsite during audit. Results presented in Section 5 of Conditions Compliance Report.	As above
36c.	Compliant	DDG gauges and monitoring equipment for PM10 compliant with AS2724.3 (1984). Viewed equipment in operation onsite during audit. Results presented in Section 5 of Conditions Compliance Report.	As above
37	Compliant	Viewed weather station and digital panel onsite. Weather station data presented on VGT's website. Viewd DPI approval letter with respect to weather station location.	
Section 4			
Question 4	Response	Details	
Soil and W		Details	
Limits on I			
38a.	Compliant	No extraction beyond 182m AHD in Process Water Dam. There has been no extraction in this area since 2006.	
38b.	Compliant	No extraction occurring in all other areas beyond 186.1m AHD. Viewed exsting site mark used as an extraction guide. Survey completed on a 12 montly basis (or as required) with intention to increase survey frequency.	Observation: Recommend that surveying of extraction levels are marks guide marks be increased to 6 monthly basis or as required.
	ter Study and Re	mediation Works	
39a.	Compliant	Groundwater Study has beeen prepared by a qualified and experienced person endorsed by DPI. Prepared by Peter Dundon of Dundon Consulting Pty Ltd.	
39b.	Compliant	Consultation undertaken with DPI-Water. Viewed minutes of meeting conducted onsite on 24/10/16. Also viewed letter from Irene Zinger of DPI dated 31/03/17.	

20						
39c.	Compliant	Study has included all existing records of g/w levels. Extensive g/w information available and provided. Section 3.4 of Groundwater Study.				
39d.	Compliant	An interim groundwater contour map has been developed as part of the g/w study,				
39e.						
	Compliant	included in reoprt				
40	Non-Complaint	Groundwater study progress report submitted 31/10/16 to DPI and DPE (and resubmitted 17/11/16). Letter from DPI 31/3/17 refers to submission of GW study submission on the 24 Feb 2017. Groundwater Management Improvement Program (GMIP) not submitted by 6 month target due to ongoing ambiguity with regard to wet weather high groundwater level of the regional aquifer. Submitted October 2016. Correspondence with DPI- Water ongoing. Progress against the GMIP not reported in 2016 annual review. Intention to include in 2017 annual review report due 31 March 2018. Considered during independent audit; actions and recommendations contained herein.	Determine wet weather high groundwater level of the regional aquifer. Consult with DPI-Water seeking approval for proposed level based on findings of the g/w study. Include progress against GMIP in 2017 annual review report due 31 March 2018.			
41	Not Triggered	Groundwater Study submitted on 24/02/17, therefore condition doesn't come into effect until August 2017 (i.e 6 months from submission date). No instances of groundwater being encountered during audit period. No evidence of g/w inflows in extrcation areas during nsite audit inspections conducted following a period of wet weather.	Following determination and approval of the wet weather high g/w level, ensure that any areas of the site identified as being below this level are immediately infilled (after 24 August 2017).			
Water Ma	nagement Plan					
The water	management plan	n must include:	r			
42	Compliant	Water Management Plan (WMP) prepared by VGT as being suitably qualified and experienced. Viewed approval letter from DPI-Water 24/04/16. WMP submitted to DPI-Water on 31/01/17 under an approved extension of submission time by DPI-Water.				
42a.	Compliant	Site Water Balance contained in Section of the Surface Water Management Plan (SWMP).				
42b.	Non-Compliant	SWMP submitted to DPI 31/01/17. Comments received from DPI 04/04/17 outlining required actions. Surface water level and quality in Process Water Dam not included as it is not currently being measured. Intention to install level sensor to record this data. Plan to ensure tailgate drainage does not discharge offsite not in place. Intention to appoint an engineer to inspect tailings dam to essure construction has been in accordance with best practice, embankments are currently structurally sound and prepare a plan to ensure structural integrity is maintained.	Update SWMP plan in accordance with comments/actions outlined in DPI letter 04/04/17. Note: There is no effluent irrigation system onsite. No discharge points onsite. Install level sensor in Process Water Dam as proposed. Modify SWMP as required following installation; include recorded data as specified by Condition 42(b) in future annual review reports. Appoint an engineer to inspect tailings dam and consult with NSW Dams Safety Committee and prepare a plan in accordance with the requirements of Condition 42(b).			
42c.	Administrative non-compliance	Groundwater Management Plan (GMP) not currently in place as a final document. Currently in draft format with ongoing consultation with DPI-Water.	Determine wet weather high groundwater level of the regional aquifer. Consult with DPI-Water seeking approval for proposed level based on findings of the g/w study. Finalise GMP and submit to DPI-Water for approval. Following approval, include GMP in OEMP and implement contents.			
Groundwa	Groundwater Monitoring					
_	dwater monitorin	g program must:				
43a.	Administrative non-compliance	Draft Groundwater Monitoring Program submitted outside of four months of the date of approval of Modification 2. Target submission date July 2016, submitted 23/08/16. Draft program approved by DPI-Warer 28/11/16. Ongoing consultation with DPI-Water since draft plan submitted.	Update and finalise monitoring program in accordance with requirements outlined in draft approval letter from DPI-Water dated 28/11/16.Submit to DPI-Water for approval. Following approval, implement monitoring program contents.			
43b.	Administrative non-compliance	Ten monitoring bores are active (currently two with data loggers installed) with monitoring being undertaken manually on a monthly basis. Viewed site g/w monitoring bore location plans. Requirement to have five bores active with collection of continuous groundwater level monitoring data of the regional aquifer. HQP proposed to install data loggers for continuous monitoring.	Install data loggers and commence continuous monitoring in at least five monitoring bores around the south-easterm, southern, western and north-western boundaries of the extraction area as specified by Condition 43(c). Update Table 7 of draft monitoring program so that monitoring bores match up with Figure 1 and 2.			

43c.	Compliant	Monitoring bore PT84MW1 replaced by MW7 installed in December 2016 and active. Addressed in Section 4.2 and Table 7.	
43d.	Compliant	Monitoring bore MW9 installed in December 2016 and active. Addressed in Attachment A.	
44	Not Triggered	Draft Groundwater Monitoring Program still in draft format. Reporting of Groundwater Monitoring Program results not required at the time of the audit. Due to be reported June 2017.	
Process W	ater Dam Design	and Construction	
45	Non-Compliant	Assessment of process water dam has not been undertaken.	Engage a suitably qualified engineer to assess the process water dam has been designed and constructed properly. Consult with Dam Safety Committee to ensure dam construction compliance. Expand Section 8 of Surface Water Management Plan including advice and recommendations from Engineer's report (if any).
Section 5			
Question	Response	Details	
Noise	Response	Details	
	nagamant plan h	as been prepared. It shall:	
46	anagement plan n		
	Compliant	Noise Management Plan (NMP) sighted in Sub-Plan C of OEMP.	
46a.	Compliant	Addressed in Section 3.3 and Table 1 of NMP.	
46b.	Compliant	Addressed in Section 4.2.1. of NMP.	Observation: Expand Section 4.2.1 to include construction noise and evalutation and assessment methodology of noise levels.
46c.	Compliant	Addressed in Section 4.2.1. of NMP.	Observation: Update NMP to address all requirements of this condition. Ensure methodologies as specified by the NMP are adhered to.
46d.	Compliant	Addressed in Section 4.2.1. of NMP.	Observation: Include measures as specified in condition in Section 4.3 and Appendix B of NMP.
46e.	Compliant	Sighted in NMP - Table B1 provides details of noise amelioration measures.	Observation: Expand Table B1 to address intermittent, tonal and low frequency noise.
46f.	Compliant	No complaints received during audit period; not required in compliance report. Addressed in Section 4.3 of NMP.	
46g.	Compliant	Addressed in Section 4.3.1 of NMP.	
46h.	Compliant		Observation: Conduct an assessment of the effectiveness of the bund wall and include in compliance report. Update NMP to inclue assessment methodology.
46i	Compliant	Section 3 of NMP includes a Noise Reduction Strategy.	
Operation	al Noise Limits		
47	Compliant	Noise limits specified in Section 2 of the NMP. No exceedances of noise criterion. Results presented in Conditions Compliance Report, Annual Review and available on VGT's website. Last round of monitoring conducted on 27/4/17. Most recent report dated 15/5/17.	
47a.	Compliant	Excavators have been fitted with acoustic mufflers; inspected Hitachi Zaxis 330 and Hitachi Zaxis 220 onsite during audit. Noise within target level of 76dB(A).	
47b.	Compliant	Onsite generator is fitted with an acoustic enclosures; inspected onsite during audit.	
47c.	Administrative non-compliance	Excavators and onsite generator have been fitted with acoustic mufflers, however a noise compliance investigation has not been undertaken within one month of the installation of the equipment. Boundary noise monitoring conducted only.	Submit noise reports demonstrating compliance with the noise level limits stated in conditions 47(a) and 47(b) to DPI for approval.
47d(a)	Not Triggered	No works undertaken that would be considered as "atypical".	
47d(b)	Not Triggered	As above	
47d(c)	Not Triggered	As above	
Traffic and	d Transport		
Road Nois	e Management Pl	an	

48	Compliant	No exceedances of road noise criterion during audit period. No complaints with regard to noise received.
49	Compliant	Road Noise Management Plan sighted in OEMP - Sub-Plan C. Addressed in Section 3.2, 4.2.2 and Appendix B. Approved by DoPE 9/12/16.
Truck Mo	vements	
50	Compliant	Truck data was provided by HQP and reviewed.
	A Contributions	Thek data was provided by her and leviewed.
51	Compliant	Developited
51a.	-	Records sighted.
	Compliant	Records sighted.
51b.	Compliant	Records sighted.
51c.	Compliant	Records sighted.
51d.	Not Triggered	Council have previosuly requested a site visit to inspect records without any problems. Ok with HQ to conduct future inspections as required.
51e.	Not Triggered	N/A Condition on Council
Flora and	Fauna	
52	Deleted	
53	Compliant	Viewed fencing onsite.
54	Compliant	No additions to bund wall since previous audit. Vegetation established in that area: no disturbance.
Flore and	Fauna Managemo	
	5	
Flora and	Fauna Manageme	ent Plan prepared as part of the EMP that includes: FFMP sighted, Sub-Plan D of OEMP. Prepared in consultation with
55a.	Compliant	NPWS & Council. Section 6 of FFMP.
55b.	Compliant	Section 6.1 of FFMP.
55c.	Compliant	Section 3, Figure F1, Section 7 of FFMP.
551	compium	
55d.	Compliant	Section 11 of FFMP contains emergency response procedures to be implemented should operations compromise the significant flora and fauna communities identified in the EIS.
55e.	Compliant	Section 9 and Table 3 of FFMP contains a monitoring program of rehabilitated areas.
55f	Compliant	Table 2, Section 8 of FFMP.
56	Compliant	Weed sprayingand hand weeding ongoing. Revegetated area with tree screening in South Eastern corner, planted in February 2014 approx. 1500 plantings, now established. Fenced intact and maintained.
Heritage		
57	Not Triggered	No heritage sites or archaeological material have been located during audit period
Landscape	and Rehabilitati	on
	tion Objectives	
58	Compliant	Rehabilitation Plan (RP) sighted in Appendix J of EMP.
	e Rehabilitation	
59	Compliant	Rehabilitation Plan (RP) sighted in Appendix J of EMP.
	-	on Management Plan
		ation management plan must include:
60	Not Triggered	Submission and approval of the landscape and rehabilitation management plan was not required at the time of the audit. Due to be submitted for approval by 30 June 2017.
60a	Not Triggered	As above
60b	Not Triggered	As above
60c	Not Triggered	As above
60d	Not Triggered	As above
60e	Not Triggered	As above
600 60f		As above
	Not Triggered	
60g	Not Triggered	As above

(0)	a second a s				
60h	Not Triggered	As above			
60i	Not Triggered	As above			
	onservation and Rehabilitation Bond				
61	Not Triggered	Lodgement of a conservation and rehabilitation bond was not required at the time of the audit. Due to be lodged by 31 December 2017.			
61a	Not Triggered	As above			
61b	Not Triggered	As above			
62	Not Triggered	As above			
62a	Not Triggered	As above			
62b	Not Triggered	As above			
62c	Not Triggered	As above			
Environ	mental Managemer	nt			
	mental Managemer				
	5	ment strategy must include:			
63a	Compliant	Viewed approved document. Submitted on 30/06/16 for approval. Subsquent consultation with DPI 05/07/16. Document approved 25/11/16.			
63b	Compliant	Reviewed document during audit addressed in Section 1; approved by DPI on 25/11/16.			
63c	Compliant	Addressed in Section 2			
63d	Compliant	Addressed in Section 3			
63e	Compliant	Addressed in Section 4			
63f	Compliant	Addressed in Appendix D			
Adaptiv	e Management				
64	Not Triggered	No exceedances of criteria and/or performance measures requiring assessment and management during audit period.			
64a	Not Triggered	As above			
64b	Not Triggered	As above			
64c	Not Triggered	No directions received by the Secretary during the audit period.			
Manage	ment Plan Require	ments			
65	Compliant	Review of overarching OEMP containing risk specific management plans as sub-plans. Plans have been prepared in accordance with the relevant guidelines and criteria specified by the consent conditions. Letter from DoPE received stating that plans are approved and compliant.			
65a	Compliant	As above			
65c	Compliant	As above			
65d	Compliant	As above			
65e	Compliant	As above			
65f	Compliant	As above			
65g	Compliant	As above			
65h	Compliant	As above			
Annual l	Review				
66	Compliant	Annual review report sighted, dated 31/03/16.			
66a	Compliant	Addressed in Section 2 and Section 4 of annual review.			
66b	Compliant	Addressed in Section 5 of annual review.			
66c	Compliant	Addressed in Section 7 of annual review.			
66d	Compliant	Addressed in Section 5 of annual review.			
66e	Compliant	Addressed in Section 5 and Section 6 of annual review.			
66f	Compliant	Addressed in Section 6 of annual review.			
Revision	of Strategies, Plan	s and Programs			
67a	Compliant	Annual review submitted, response from DPI not received at the time of the audit.			
67b	Not Triggered	No incidents during audit period.			
67c	Compliant	Audit conducted; audit contained herein, prepared by NTS.			
67d	Compliant	Modification to the conditions of consent received on 18/03/17, review conducted and response submitted 15/07/17.			
Reportir	ıg				
Incident Reporting					
68	Not Triggered	No incidents during audit period.			

Regular Reporting					
69	Compliant	Regular environmental reporting published on VGT's website.			
Independent Environmental Audit					
70	Compliant	Previous audit completed in 2014. Conducted by NTS (Ref: 13-021, Rev 2 dated 18/06/14). Audit team endorsed by DPI.			
70a	Compliant	Current audit team endorsed by DPI prior to commencement of audit.			
70b	Compliant	Consultation undertaken as required.			
70c	Compliant	Completed during and by the audit process. Audit findings presented herein.			
70d	Compliant	As above			
70e	Compliant	As above			
71	Not Triggered	HQP required to submit report contained herein within six weeks of the audit completion. HQP intend to do comply with condition.			
Access to Information					
72a	Compliant	Required documents are pubicly available on VGT's website.			
72b	Compliant	Information kept up to date; managed by Lisa Thompson (HQP Environmental Manager).			



APPENDIX C – AUDITOR CERTIFICATION

Appendix A Independent Audit Certification Form

Independent Audit Certificat	ion Form				
Development Name	Maroota Sand Quarry				
Development Consent No.	267 1199				
Description of Development	Sand quarry	а,			
Development Address					
Operator		7			
Operator Address					
Independent Audit					
Title of Audit		111-1-7			
Title of Audit Environmental Compliance Audit 2014 - 17 I certify that I have undertaken the independent audit and prepared the contents of the attached independent audit report and to the best of my knowledge:					
 addit report and to the best of my knowledge: The audit has been undertaken in accordance with relevant approval condition(s) and in accordance with the auditing standard AS/NZS ISO 19011:2014 and Post Approval Guidelines – Independent Audits The findings of the audit are reported truthfully, accurately and completely; I have exercised due diligence and professional judgement in conducting the audit; I have acted professionally, in an unbiased manner and did not allow undue influence to limit or over-ride objectivity in conducting the audit; I am not related to any owner or operator of the development as an employer, business partner, employee, sharing a common employer, having a contractual arrangement outside the audit, spouse, partner, sibling, parent, or child; I do not have any pecuniary interest in the audited development, including where there is a reasonable likelihood or expectation of financial gain or loss to me or to a person to whom I am closely related (i.e. immediate family); Neither I nor my employer have provided consultancy services for the audited development that were subject to this audit except as otherwise declared to the lead regulator prior to the audit; and I have not accept any intend to accept any inducement, commission, gift or any other benefit (apart from fair payment) from any owner or operator of the development, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so. Note. a) The Independent Audit is an 'environmental audit' for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading information (oplane) and in the person k					
b) The Chines Act 1900 contains other offences relating to faise and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).					
Signature	Mposs .				
Name of Lead / Principal Auditor	LEANNE CROSS				
Address	Church street Wickham				
Email Address	Leanne @newcastleport. Com. au	2			
Auditor Certification (if relevant)					
Date:	31/7/2017	5			
	13				