



ENVIRONMENTAL COMPLIANCE AUDIT 2011 - 2014

MAROOKA SAND QUARRY

Prepared for:

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13-021**

By:

**Newport Technical Services Pty Ltd
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DEFINITIONS

Compliance	<p>The intent and explicit requirements of the condition / commitment have been met. This includes meeting all requirements with respect to consultation (agency or otherwise), timing of actions or activities, the preparation of management plans or other specific requirements of the condition.</p> <p>The failure to meet any or all of the specific requirements of the condition would result in a non-compliance.</p>
Not Applicable	<p>A condition or requirement is not relevant to the operations.</p>
Non-Compliance	<p>A non-compliance occurs when any of the specific requirements of the condition / commitment have not been met (i.e. if any sub-component of a requirement is not met (such as timing or consultation), the entire requirement is considered to be non-compliant).</p>
Note	<p>Compliance could not be determined as a preceding condition of consent has not been addressed which is linked to this condition of consent.</p>
Not Triggered	<p>A condition or requirement has an activation or timing requirement which had not been triggered or completed at the time of the audit and therefore a determination of compliance could not be made. It is recommended that future audits assess compliance of any conditions or requirements that were found to have not been triggered during this audit.</p>
Verification	<p>The inability to provide formal written verification (letter, fax, email, meeting minutes, etc.) that a requirement has been met does not necessarily result in a non-compliance. If the auditor is able to verify by other demonstrable means (visual inspection, personal communication, etc.) that a condition has been met then, in most cases, the operation should be considered to be in compliance for that condition.</p>

Note: For consistency, the same definitions and report format have been adopted as the previous two environmental compliance audits (Umwelt 2008 and 2011).

1. INTRODUCTION

1.1 General

Hodgson Quarry Products Pty Ltd (Hodgson) commissioned Newport Technical Services Pty Ltd (Newport) to undertake an independent environmental compliance audit of Maroota Sand Quarry (the quarry). The audit was conducted to assess the compliance of the quarry's operations for the period 16 March 2011 to 15 March 2014.

Newport was provided with a number of environmental compliance and DA documents by Hodgson for review prior to and following, the site-based component of the audit. In accordance with a letter from NSW Department of Planning and Infrastructure (DP&I) dated 5th October 2011 which states an independent audit is to be undertaken by 15 March 2014, site visits were undertaken on 11th and 12th March 2014.

This report outlines the independent environmental audit methodology, results and recommended actions for ensuring the quarry is fully compliant with its current environmental approvals and associated conditions.

The audit team was comprised of Andrew Hills, Senior Environmental Engineer and John Ballantyne, Environmental Engineer.

1.2 Audit Scope of Work

As required, the independent environmental compliance audit was conducted in accordance with the requirements of Development Consent DA 267-11-99. In accordance with Condition 25 of DA 267-11-99, the audit was conducted pursuant to the current edition of the following guidelines:

- ISO 14010 *Guidelines and General Principles for Environmental Auditing*;
- ISO 14011 *Procedures for Environmental Auditing*;
- ISO 19011 *Guidelines for Quality and or Environmental Management Systems Auditing*.

With regard to Condition 25, the audit is required to:

- Assess compliance with the requirements of the consent, licences and approvals; and
- Review the effectiveness of the environmental management of the development, including any mitigation works.

1.3 Document Audit

In order to meet the requirements outlined above, the following documents were audited to assess the quarry's compliance:

- Maroota Quarry Development Consent, DA 267-11-99, issued by the Minister for Urban Affairs and Planning, 31st May 2000;
- Section 96(2) Modification (File No. S00/00772), granted by the Minister for Planning, 29th November 2000;
- Environmental management commitments made by the proponent (Hodgson) in the Environmental Impact Statement (EIS) (Nexus, 1999) and Statement of Environmental Effects (SEE) prepared to support the Section 96(2) Application (Nexus, 2000);
- Environmental management commitments made by Hodgson in the Operational Environmental Management Plan prepared by VGT (VGT November 2011).
- Environment Protection Licence (EPL) 6535; and
- Water Licences.

2. AUDIT METHODOLOGY

2.1 General

Newport conducted a Phase 1 environmental audit which involved reviews of available documents, site inspections, and interviews with key personnel. No sampling, monitoring or laboratory analysis was undertaken as part of the audit.

2.2 Preliminary Document Review

Prior to undertaking site inspections and interviews at the quarry, the following documents were reviewed:

- Development Consent Condition and Section 96(2) Modification;
- EPL;
- EIS, Volumes 1-3 (Nexus, 1999);
- Section 96(2) Application for Modification of Consent (Nexus, 2000);
- Operational Environmental Management Plan (VGT, 2011);
- Air Quality Impact Assessment (Holmes, 1999);
- Addendum to Noise Assessment Report (Dick Benbow and Associates, 2000);
- Noise Impact Assessment Report (Dick Benbow and Associates, 1999);
- Report on Traffic and Transportation Requirements (Nexus, 1999);
- Maroota Development Application Conceptual Mine Plan (Woodward-Clyde, 1999);
- Maroota Development Application process Water Dam Design (Woodward-Clyde, 1999);
- 2003-2006 Maroota Compliance Audit (Umwelt, 2008);
- 2006-2011 Maroota Compliance Audit (Umwelt, 2011);
- 2012 Conditions Compliance Report (VGT, 2012); and
- 2012-2013 Conditions Compliance Report (VGT, 2013).

Hodgson also provided additional documentation and monitoring results which were requested by Newport for the period 2011 to 2014.

2.3 Site Visit

2.3.1 General

Site visits were conducted on 11th and 12th March 2014 as outlined in the sections below. Prior to the site visit a compliance checklist was prepared. The checklist was used to record information against each condition during the site component of the audit.

2.3.2 Opening Meeting and Preliminary Site Inspection

An opening meeting was held with Hodgson Director Martin Hodgson (Director) and Hodgson Environmental Consultant Greg Thomson of VGT (Environmental Consultant). The opening discussion involved how the proposed audit process would be conducted and the audit schedule.

At the completion of the meeting, a preliminary site inspection was undertaken to familiarise the audit team with the site and current operations. The preliminary site inspection included the active extraction cells, sediment and process water dams, water storage dams, processing plant,

workshop, site entry and weighbridge, dust monitoring locations, meteorological monitoring site, slurry drying areas, perimeter bunds and an overview of the site to assess general environmental management practices

2.3.3 Interviews with Key Personnel

For the purposes of the audit, interviews were conducted with the Director and Environmental Consultant. The interviews were undertaken so that the compliance checklist could be completed, to confirm or otherwise information obtained from the document review and gather data required for the audit. The interviews also clarified any changes which had occurred on the site since the last audit (from a compliance viewpoint).

2.3.4 Data Collection and Verification

A large number of documents and data were reviewed onsite in the presence of the Director and the Environmental Consultant. However, there were also several documents which were retained by Newport for offsite review and reporting. In addition, a number of documents that were unavailable at the time of the site visit were subsequently requested and provided at a later date.

Information and data collected during the audit were verified by the audit team at the time of the site visit wherever possible. This was in the form of documentation and/or site inspections as required. The audit results have identified where suitable verification could not be provided (either during, or subsequent to, the site visit).

2.3.5 Site Inspection

Upon completion of the onsite document review and audit interviews, another targeted site inspection was undertaken. This purpose of the inspection was to verify items identified during the interview which required onsite inspection and/or clarification by the audit team. The audit team were accompanied by the Director and Environmental Consultant during this site inspection which included dust monitoring locations, meteorological monitoring sites, perimeter bunding and rehabilitated areas.

2.3.6 Closing Meeting

A final closing meeting was held with the Director and Environmental Consultant Prior to leaving the site. Any outstanding matters were discussed, such as required documents, as well as a process and schedule for completion of the audit report. The audit team were then escorted from the site by the Environmental Consultant.

2.4 Reporting

The compliance checklist was finalised following the completion of the site component of the audit and after receipt of any outstanding documents which had been requested. The checklist, notes and photographs taken by the audit team were used to prepare a draft report.

The report presents an overview of the status of compliance of the quarry against its current development consent conditions at the time of the audit. The report also provides recommendations with regard to improving environmental management at the quarry (on an exception basis). The full compliance checklist is presented in Appendix A.

3. RESULTS AND DISCUSSION

3.1 General

This section outlines the results of the audit on an exception basis. The full compliance checklist table is presented in Appendix A. The checklist table lists each Development Consent condition number, the current compliance status as assessed by the audit process, evidence that has been provided and/or sighted and recommendations. The results of the audit are based upon site observations, interviews with key personnel and available documentation held by Hodgson and VGT.

The audit findings presented in this report are based upon the condition of the site (from a compliance viewpoint) at the time of the audit process and information provided to Newport from Hodgson and VGT. Changes at the quarry which affect compliance which Newport have not been made aware of are beyond the scope of work of this audit.

In general, the site appeared to be well maintained from an environmental management point of view. Observations and interviews indicated that the Director, site personnel and the Environmental Consultant had a good working knowledge of their compliance obligations.

It was noted during the previous audit that a lack of response from DP&I in regard to Hodgson seeking clarification and/or attempts to demonstrate that a non-compliance has since been addressed, has created confusion for Hodgson as to what their current compliance status may be and also created technical non-compliances. As this has been an ongoing issue for Hodgson, conditions previously identified as being non-compliant on the basis of no response having been received following the issuance of correspondence requesting consultation, approval or satisfaction have been assessed as verifications rather than non-compliances by the current audit. It was clear that the ongoing issue associated with the lack of correspondence from government agencies is a source of frustration for Hodgson.

Hodgson demonstrated an overall improvement in environmental performance since the previous audit. However, there were also a number of non-compliances which were identified in the previous two audits which have not been addressed; these are outlined in Section 3.3.5.

As noted during the previous audit, quarrying operations are not being undertaken on a staged cell by cell approach as detailed in the Environmental Impact Statement (EIS). However, as evidenced by various reports which were provided during the site visit, environmental monitoring results (air quality, noise, water etc.) indicated that the site's environmental performance has been good with no exceedances of the adopted criteria being identified.

It was noted during the previous audit that Hodgson had entered into an agreement with the Department of Planning (DoP) now known as the Department of Planning and Infrastructure (DP&I) to construct the central pit within a five year timeframe subject to a number of practical provisions such as extensions for prolonged wet weather, availability of water, market demand, production estimates and the available clay volume etc. (Hodgson Resources letter dated 11 July 2005).

At time of the previous audit, the five year plan had since expired with the rehabilitation works having not been undertaken, Hodgson advised that this was due to wet weather and market down turn. The most recent revision of the OEMP (28 November 2011) indicates that rehabilitation works should have been completed within twelve months if "suitable weather" conditions prevailed during this time. The Director advised the audit team that whilst the water level had been lowered, rehabilitation works in accordance with the timing specified in the OEMP had again not taken place due to wet weather.

As the twelve months time frame has lapsed and the works have not been completed, Hodgson should provide an updated status report to DP&I on this issue and agree with DP&I on a revised plan to achieve the intended outcomes of the original five year plan. The new plan should consider current and future operations to ensure the new time frame is achievable.

The Operational Environmental Management Plan (OEMP) has been updated since the previous audit and as was recommended, has been consolidated into one single document. Parts of the OEMP require further revision (Soil and Water Management Plan, Operation and Noise Management Plan, Flora and Fauna Management Plan and Flora and Fauna Management Plan) to reflect current operations, adhere to agreed time frames and achieve compliance with consent conditions. The current revision of the OEMP also requires approval from DP&I. Although a written request was made by the Environmental Consultant on behalf of Hodgson regarding this matter, no response from DP&I was received.

Issues previously identified with water licensing (number, status and use) have been clarified and presented in a report by URS dated 16 July 2013.

Site observations and subsequent discussions with the Director confirmed that water is no longer being transferred off site to a dam on a neighbouring property.

In summary, the audit identified a number of non-compliances with the conditions of Development Consent. It was apparent however, that there had been an overall improvement in environmental performance since the previous audit. The appointment and subsequent approval of the designated Environmental Officer is likely to have contributed to this.

As previously stated, instances where Hodgson have been required to consult with, gain approval from or notify government agencies in order to achieve compliance with a condition have been assessed as verifications rather than non-compliances during the current audit due the ongoing nature of this issue.

There are a number of ongoing non-compliances which were identified during the previous two audits which have not been addressed; these are outlined in Section 3.3.5

3.2 Compliance Issues

3.2.1 General

The following sections present an assessment of compliance, or otherwise, with the relevant statutory requirements. Recommendations are shown in italics.

3.2.2 Development Consent

Based on the findings of the audit, the Maroota Quarry is operating generally in a manner that is consistent with the requirements of Development Consent (DA267-11-99) and subsequent modification granted in November 2000. However, a number of non-compliances were identified during the audit process where improvements are required to ensure compliance with the conditions of consent. The full compliance checklist which was completed in order to assess compliance against each requirement of the Development Consent is included in Appendix 1. A summary of the non-compliances and recommended improvements or mitigation measure are outlined below:

Condition 2(b) – Non-compliance

Condition 2(b): Development shall be carried out in accordance with the Environmental Impact Statement prepared by Nexus Environmental Planning Pty Ltd., dated November 1999, including the landscaping plan attached to the EIS:...

A number of compliance issues were identified during the audit which have been outlined above in Section in 3.1.

Condition 2(c) – Non-compliance

Condition 2(c): Development shall be carried out in accordance with all additional information supplied to the Department in relation to the development including:

- a) **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;**
- b) **the letter from Dick Benbow and Associates Pty Ltd dated 27 January 2000;**
- c) **the letter from Dick Benbow and Associates Pty Ltd dated 5 January 2000 and attachments;**
- d) **the fax from Holmes Air Sciences dated 21 December 1999;**
- e) **the letter from Nexus Environmental Planning Pty Ltd dated 21 December 1999 and attachments;**
- f) **the letter from Woodward-Clyde dated 21 December 1999; and**
- g) **the letter from Woodward-Clyde dated 16 December 1999.**

The fax from Dick Benbow and Associates dated 17 February 2000 requires the construction of an acoustic barrier around the northern and western sides of the processing plant.

An acoustic barrier has been constructed around the north eastern corner, southern and western sides of the processing plant. Tree screening vegetation has been planted along the southern and western perimeter bund recently (February 2014) and was not yet established at the time of the audit. It is expected that this tree screen will also provide some noise mitigation once established.

It was noted during the site inspection that due to the layout of the processing plant and surrounding quarry landform acoustic barriers could not be constructed on the northern sides of the processing plant without either a major reconfiguration of the plant or substantial earthworks.

Noise from the project was monitored by Global Acoustic on 5 September 2011 and 3 December 2013. Noise levels recorded on these occasions were compliant at all three locations. On this basis, the acoustic barriers on the northern side of the processing plant were deemed to be unnecessary by Hodgson during the audit period.

It is recommended that noise monitoring be undertaken on an annual basis, or when a new cell is commenced, to ensure that compliance is maintained for the LA1 and LA10 noise emission criterion.

The report prepared by Dick Benbow and Associates (report No. 10065 Issue 1) dated 26 June 2000 requires excavators to be fitted with acoustic mufflers to achieve a noise level of approximately 76dB(A) when measured at 7 metres. Noise monitoring of the Hitachi Zaxis 330 and

Hitachi Zaxis 240 excavators (which had not been fitted with an acoustic muffler) on 3 December 2013 demonstrated compliance when measured at 7 metres. Noise emissions of 68dB(A) and 74dB(A) were recorded respectively. These results are presented in two separate letter-reports prepared by Global Acoustics dated 27 March 2014 and 27 May 2014 which were available for review during the audit.

The letter from Holmes Air Sciences dated 21 December 1999, outlined that vegetation plantings around the site boundary described in the EIS would provide a dust sheltering effect. The Director advised that plantings as outlined in the EIS had previously been undertaken; however they had been grazed by livestock belonging to the land owner. Since the previous audit, fencing has been erected to keep livestock away from sensitive areas including the conservation area, bund walls and the recently planted tree screen vegetation. During the site inspection, it was noted that the bund walls had a good coverage of grass and that some natural regeneration had occurred. Generally, the site appeared to be reasonably well vegetated and is expected to improve as the trees planted along the southern and western perimeter bund become more established over time.

Recommendation

Undertake a noise assessment on annual basis or when a new cell is commenced to determine if acoustic barriers are still required around the northern and western sides of the processing plant to minimise noise impacts.

Alternatively, seek approval from DP&I to implement noise mitigation measures other than acoustic barriers which can demonstrably achieve the same noise levels.

Seek modification or removal of Condition 2(c).a) based on noise monitoring results which demonstrate excavators do not require acoustic mufflers to comply with the specified noise level when measured at 7 metres and operating under load.

In addition to the recently planted tree screening described above, undertake replacement planting around the site boundary to fill remaining gaps in the tree screen and ensure compliance with what has been specified in the EIS.

Condition 6 – Verification

Condition 6: The Applicant will submit a Conditions Compliance Report to the Director-General 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 Director-General.

Based on the current quarry operations, it is not practical to assess compliance prior to undertaking extraction. Assessment is currently reported in an annual compliance report which is prepared by VGT, however this does not technically comply with the wording of the condition. A conditions compliance report was submitted to DP&I for the period February 2012 to March 2013, however no response from DP&I was received.

Recommendation:

Seek approval from DP&I to include assessment of compliance for all extraction cells on an annual basis regardless of whether extraction has commenced or is yet to commence. This will ensure reporting requirements are undertaken in accordance with the Development Consent.

Condition 6(g) - Verification

Condition 6(g) environmental targets and strategies for stages of the development yet to be completed.

Based on the current quarry operations, it is not practical to assess compliance against environmental targets and strategies for future cell extraction areas. Assessment is currently reported in an annual compliance report which is prepared by VGT, however this does not technically comply with the wording of the condition. A conditions compliance report was submitted to DP&I for the period February 2012 to March 2013, however no response from DP&I was received.

Recommendation:

Seek approval from DP&I to include assessment of compliance for all extraction cells on an annual basis regardless of whether extraction has commenced or is yet to commence. This will ensure reporting requirements are undertaken in accordance with the Development Consent.

Condition 8(b) – Verification

Condition 8(b): No extraction shall commence in areas that are not currently subject to extraction, until the Applicant has:

(b) submitted the Conditions Compliance report required under Condition 6.

Based on the current quarry operations, it is not practical to assess compliance against environmental targets and strategies for future cell extraction areas. Assessment is currently reported in annual compliance report which is prepared by VGT, however this does not technically comply with the wording of the condition. A conditions compliance report was submitted to DP&I for the period February 2012 to March 2013, however no response from DP&I was received. '

Recommendation:

Seek approval from DP&I to include assessment of compliance for all extraction cells on an annual basis regardless of whether extraction has commenced or is yet to commence. This will ensure reporting requirements are undertaken in accordance with the Development Consent.

Condition 19 – Verification

Condition 19: The Applicant shall prepare an OEMP in consultation with the relevant authorities and to the satisfaction of the Director-General.

The OEMP has been updated since the previous audit and as was recommended, has been incorporated into one all-encompassing document. However, there is no evidence confirming that it has been updated in consultation with the relevant authorities (Council, Office of Environment and Heritage (OEH) and the New South Wales Office of Water (NOW)). A number of letters were provided which requested input from relevant authorities regarding the separate management plans which form the appendices of the OEMP; however, it appears as though no response was received for any of these requests. Further to this, the updated OEMP was submitted to DP&I for approval on 29 November 2011, however no response was received.

As noted during the previous audit; technically the quarry should be audited against the previous revision of the OEMP. However, the previous OEMP was reviewed as part of the 2011 audit and amendments have been made to the OEMP to address recommendations made by the 2011 audit. In addition, the previous revision would not be representative of quarry activities during the current

audit period. On this basis, the updated version of the OEMP has been reviewed as part of this audit.

Recommendation

Seek approval for the current revision of the OEMP from the DP&I Director-General.

Condition 22 – Verification

Condition 22: The Applicant shall, in consultation with the Director-General, the EPA and the DLWC, update the OEMP....

The OEMP has been updated and various requests for consultation with government agencies have been made but no responses have been forthcoming.

Recommendation

Seek approval for the current revision of the OEMP from the DP&I Director-General.

Condition 28 – Non-compliance

The Applicant shall take all practical steps to manage the development so that the ambient air quality goals for total suspended particles (TSP) of 90ug/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.

Hodgson outlined the dust controls currently used onsite which included a water cart (sighted during the site inspection) to minimise dust emissions and access to polymers which can be used for more extreme dust emission events should they occur.

It was noted during the site inspection that more than three hectares of the site was exposed and currently active. This represents an elevated dust risk and is non-compliant with Development Consent Condition 29(c) which requires that no more than three hectares of the site is exposed and active at any one time. However, the Director demonstrated a good understanding of weather conditions from a dust emissions viewpoint and dust appeared to be generally well controlled by the water cart during the site inspection.

Depositional dust monitoring is undertaken at the site. It was noted during the previous compliance audit that the monitoring was not being undertaken with the relevant standards. Hodgson has since rectified this. The monitoring locations have been moved to ensure a 120° degree clear sky angle and samples are now being collected and analysed each month with results being presented in the annual conditions compliance report (Section 5.1.2).

The 2012-2013 conditions compliance report states that a Pollution Reduction Program (PRP) issued by the Department of Environment and Climate Change (DECC) on 10 March 2008 required PM₁₀ to be monitored for 3 months at the Maroota Public School. The results of the monitoring were below criteria specified by the EPA (42.5ug/m³), as such the PRP was removed.

Subsequent PM₁₀ monitoring was undertaken between October 2011 and January 2013, the results of which are also presented in Section 5.2.1 of the 2012-2013 conditions compliance report. The results showed that at no time did the PM₁₀ dust levels exceed the National Environmental

Protection Measure (NEPM) Air PM10 maximum of 50ug/m³. The maximum result recorded was 43ug/m³.

Ongoing monitoring is a requirement of the consent.

Recommendation

Conduct another period of TSP/PM10 monitoring to demonstrate ongoing compliance with consent dust criteria. (It is noted that it is standard practice to use a conversion factor to determine TSP concentrations from PM10 monitoring results).

Liase with OEH and DP&I with regard to the requirement for ongoing monitoring based on the results from the above.

Methods to minimise the area of the site exposed at any one time should be investigated and implemented where practicable.

Condition 29(a) – Verification

Condition 29(a): The Applicant shall prepare and implement 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 (PM10 and PM2.5) and specify appropriate monitoring intervals and locations.**

An Air Quality Management Plan is included in the updated OEMP. A site inspection confirmed that the plan is being adhered to. However, it was noted during the audit that the static air quality monitoring sites have been moved since the previous audit. These were moved to ensure that the monitoring sites were compliant with the relevant Australian Standard (3580.10. 01). Whilst the new monitoring locations are shown on an updated figure (Figure 12) contained in the OEMP, the updated air quality monitoring locations have not been approved by OEH. Correspondence was sent to OEH in a letter dated 28th July 2011 advising that the position of sites had moved. However, no response from OEH was received.

Recommendation

Seek approval for the updated static air quality monitoring sites as shown from the OEH

Condition 29(c) – Non-compliance

- (b) 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...**

During the site inspection the audit team were advised by the Director that more than 3 hectares of the site were currently active in terms of extraction and processing. It was also noted during the document review that Section 4.4 of the February 2012 and March 2013 annual compliance reports states that "Site works involve the extraction of sand, clay and gravel material from approximately 29.5 hectares of the site to an average depth of 20-25 metres, depending on the underlying groundwater level".

Recommendation

Investigate methods to reduce the area of the site which is exposed and implement where practicable.

Alternatively, following investigation seek modification or removal of Condition 29(c) due to the 3 hectare restriction being impractical from an operations viewpoint.

Condition 29(d) – Non-compliance

Condition 29(d): Provide details of actions to ameliorate impacts if they exceed the relevant criteria.

Section 12 (Emergency Response) of the Air Quality Management Plan outlines the procedures to be undertaken when dust emissions become unacceptable. However, Section 9 (Summary of Progress) of the Air Quality Management Plan indicates that “a flashing light or similar notification will be installed on the weather station to show when wind speeds are above 10 metres/second”. It was noted during the site inspection that this has not been undertaken.

Recommendation

Create an alarm or notification on the weather station display when wind speeds exceed 10 metres/second.

Condition 32 – Non-compliance

Condition 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 previously installed and operated at the site for watering stockpiles and general use in the production area. However, this has been removed since the previous audit. Hodgson advised that the sprinkler system was removed as a water cart is used as the primary means of watering stockpiles, bare areas and haul roads as required and that stockpiled material generally contains a high moisture content. Whilst it was demonstrated during the site inspection that dust emissions are managed effectively using the water cart and the Air Quality Management plan contains an “Emergency Response” section (Section 12) with respect to air quality exceeding relevant criteria, the removal of the sprinkler system renders the operation as being non-compliant with Condition 32.

Recommendation

Re-install, operate and maintain a sprinkler system in addition to using a water cart for dust suppression to ensure compliance.

Alternatively, seek modification or removal of, Condition 32 from DP&I based on both the static air quality monitoring and High Volume Air Sampling (HVAS) results having not recorded any exceedances of relevant criteria during the past two annual compliance reporting periods (February 2012 and March 2013).

Condition 36(a) – Verification

Condition 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.***

It was noted during the audit that the static air quality monitoring sites have been moved since the previous audit. These were moved to ensure that the monitoring sites were compliant with the relevant Australian Standard (3580.10. 01). Whilst the new monitoring locations are shown on an updated figure (Figure 12) contained in the OEMP, the updated air quality monitoring locations have not been approved by OEH. Correspondence was sent to OEH in a letter dated 28th July 2011 advising that the position of sites had moved. However, no response from OEH was received.

Recommendation

Seek approval for the updated static air quality monitoring sites as shown from the OEH

Condition 36(b) – Note

Condition 36(b): Operation of dust deposition gauges and monitoring must be carried out in accordance with:

- (b) **AS 2724.3...**

Total Suspended Particulate (TSP) monitoring has not been undertaken. PM10 monitoring was undertaken during the audit period with no exceedances of the NEPM PM10 criteria (50ug/m³). The Environment Protection Licence does not specify an air quality concentration limit for TSP or PM10 particulates. However, the development consent specifies a concentration limit for TSP.

Recommendation

TSP monitoring should be undertaken during the next audit period as the consent specifies a TSP concentration limit (90ug/m³ – annual average) and not PM10.

Condition 37 – Verification

Condition 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.

The meteorological station is installed and operational. The Director advised that the station's data is downloaded by an external consultant (Onsite Environmental Management), however, the site Environmental Consultant (VGT) may be performing this task in the future in conjunction with other environmental monitoring currently being undertaken. Downloaded data is presented in the 2013 Conditions Compliance Report.

It was reported during the previous audit that there was no evidence of the station's location having been determined in consultation with OEH. The Director and Environmental Consultant advised that a letter had been sent to OEH regarding the station's location, however, no response was received.

Recommendation

Seek approval for the current location of the meteorological station from the EPA.

Condition 38 – Non-compliance

Condition 38: The Applicant shall prepare and implement a Soil and Water Management Plan as part of the EMP. The plan shall be updated on an annual basis, to the satisfaction of DLWC and in consultation with DLWC...

The Soil and Water Management Plan is presented as Appendix F in the updated OEMP. However, the plan has not been updated on an annual basis as specified by the condition.

Recommendation

Update Soil and Water Management Plan annually in consultation and to the satisfaction of NOW. If the plan does not require updating NOW must be notified.

Alternatively, seek modification or removal of, Condition 38 from DP&I so that the Soil and Water Management Plan is updated at the same time as the OEMP (the Soil and Water Management Plan is an appendix of the OEMP). Condition 22 states that the OEMP is to be updated "from time to time". The Soil and Water Management plan could be included under the broader OEMP update as required by Condition 22.

Condition 38(f) – Non-compliance

Condition 38(f): The Soil and Water Management Plan shall contain, but not be limited to:

(f) description of monitoring methodologies and standards that will be adhered to;

Section 11 of the Soil and Water Management Plan (contained in the updated OEMP) outlines monitoring and testing procedures for surface and groundwater. However, Section 11 should be expanded to include information on standards, sampling and QA/QC procedures and calibration of equipment. The Environmental Consultant's sampling procedure was sighted; however, this information is not included in the Soil and Water Management Plan.

Recommendation

Update Section 11 of the Soil and Water Management Plan to include information on standards, sampling and calibration procedures.

Condition 39 – Verification

Condition 39: Groundwater monitoring shall be undertaken on a regularly scheduled basis to provide data suitable for the determination of the wet weather high groundwater level, to the satisfaction of the DLWC. A network of monitoring bores shall be installed at appropriate locations across the site to accommodate these objectives.

Section 10 of the Soil and Water Management Plan outlines the groundwater monitoring regime that is currently undertaken and presents supporting information for the determination of the wet weather high groundwater level. A letter was sent to NOW on 16 November 2011 seeking satisfaction of the determined wet weather high groundwater level (180m AHD) based on the information contained in the Soil and Water Management Plan described above, however no response was received.

A groundwater report prepared by URS was viewed during the site audit. The report contained a large data set. It was noted from the report and during discussions with the Director and Environmental Consultant that the groundwater bore locations have changed since the previous audit. Bore PT84MW4 was relocated and its identification number changed to PT84MW5. The Form A bore application form indicating this change was sighted during the audit, a copy of which is kept onsite. The Environmental Consultant advised that this change will also be reported in the next conditions compliance report (2014) and that Soil and Water Management Plan will also be updated when the OEMP is next updated.

Recommendation

Seek confirmation from NOW that it approves of the current groundwater monitoring program and agrees with the nominated wet weather high groundwater level.

Ensure that Section 3.3 of the 2014 conditions compliance report includes the change of location and bore number (i.e. PT84MW5 is now PT84MW4).

Condition 46(c) – Non-compliance

Condition 46(c): The Applicant shall prepare and implement a Noise Management Plan as part of the EMP.

The Noise Management Plan shall:

- (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...**

Section 9 (Monitoring) of the Noise Management Plan only addresses the monitoring interval associated with this condition.

Recommendation:

Update the Noise Management Plan to address all remaining requirements of the condition.

Ensure methodologies as specified by the Noise Management Plan are adhered to (i.e. conduct noise monitoring on an annual basis).

Condition 47(a) – Non-compliance

Condition 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.

Noise monitoring of the Hitachi Zaxis 330 and Hitachi Zaxis 240 excavators (which had not been fitted with an acoustic muffler) on 3 December 2013 demonstrated compliance when measured at 7 metres. Noise emissions of 68db(A) and 74db(A) were recorded respectively. These results are presented in two separate letter-reports prepared by Global Acoustics dated 27 March 2014 and 26 May 2014 which were available for review during the audit.

Recommendation:

Seek modification or removal of Condition 47(a) based on noise monitoring results which demonstrate excavators do not require acoustic mufflers to comply with the specified noise level when measured at 7 metres and operating under load.

Condition 47(c) – Non-compliance

Condition 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 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 Director-General within 14 days of the completion of the investigations.

The two Global Acoustics letter-reports dated 24 March 2014 and 27 May 2014 demonstrate compliance of the excavators that are used onsite (Hitachi Zaxis 330 and Hitachi Zaxis 240 excavators). However, the letter-reports have not been submitted to the Director-General for approval in accordance with the condition.

Recommendation:

Submit reports demonstrating compliance to the Director-General for approval in accordance with the condition.

Condition 52(a) – Verification

Condition 52(a): The Applicant shall conserve the six *Acacia bynoeana* plants in the following manner:

- (a) a conservation area is to be established, containing the six plants and incorporating a 30 metre buffer.**

The presence of the six *A. bynoeana* plants has not been confirmed since the initial identification despite Hodgson having engaged ecologists to conduct surveys on 4 separate occasions (2002, 2005 and twice in 2011) with no evidence of their presence being found on each occasion. One

final survey was recommended during the previous audit to confirm the presence / absence of the six *A. bynoeana* plants. Hodgson has complied with this recommendation and no plants were identified. The findings of the most recent survey conducted in 2011 are presented in Appendix 1 of the Flora and Fauna Management Plan. The findings are outlined in a letter prepared by Onsite Environmental Management (Onsite) dated 4 November 2011 which was available for review during the audit. Onsite concluded that no *A. bynoeana* plants are present within Hodgson's quarry premises.

Based on the number of surveys conducted by qualified independent ecologists, it is reasonable to assume that the plants are either no longer present, or were incorrectly identified during the initial survey.

The lack of fencing around the conservation area which was identified during the previous audit has also been rectified. An electric fence has been erected which prevents livestock from entering the conservation area.

The ongoing requirement to comply with this condition is a clear source of frustration for Hodgson due to the number of surveys over an eleven year period which have yet to identify an *A. bynoeana* plant.

Recommendation:

Seek agreement from DP&I that this issue has been satisfactorily addressed and no further action is required.

Condition 52(b) – Verification

Condition 52(b): The Applicant shall conserve the six *Acacia bynoeana* plants in the following manner:

(b) the boundary of the conservation area shall be surveyed and marked by a suitable qualified surveyor, with the assistance of a botanist / ecologist.

The lack of fencing around the conservation area which was identified during the previous audit has been rectified. An electric fence has been erected which prevents livestock from entering the conservation area. However, since the presence of the six *A. bynoeana* has not been confirmed, the boundary of the conservation area has not been surveyed or marked by a suitably qualified surveyor with the assistance of a botanist / ecologist.

Recommendation:

Seek agreement from DP&I that this issue has been satisfactorily addressed and no further action is required.

Condition 52(c) – Verification / Compliance

Condition 52(c): The Applicant shall conserve the six *Acacia bynoeana* plants in the following manner:

(c) the surveyed boundary shall be fenced to prevent vehicles entering the site.

An electric fence has been erected which prevents livestock from entering the conservation area. However, since the presence of the six *A. bynoeana* has not been confirmed, the boundary of the conservation area has not been surveyed or marked by a suitably qualified surveyor with the assistance of a botanist / ecologist.

Recommendation:

Seek agreement from DP&I that this issue has been satisfactorily addressed and no further action is required.

Condition 52(d) – Verification

Condition 52(d): The Applicant shall conserve the six *Acacia bynoeana* plants in the following manner:

(d) no clearing, construction or extraction shall occur within 30 metres of an plant identified in the EIS until steps (a) to (c) have occurred.

The *A. bynoeana* plants cannot be located. As such, the steps outlined in 52 (a) to 52 (c) above have not been completed.

Based on the number of surveys conducted by qualified independent ecologists, it is reasonable to assume that the plants are either no longer present, or were incorrectly identified during the initial survey.

Recommendation:

Seek agreement from DP&I that this issue has been satisfactorily addressed and no further action is required.

Condition 55 – Verification

Condition 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...

The previous compliance audit identified that no evidence of consultation with National Parks and Wildlife Service or Council could be provided.

In order to comply with the condition, Hodgson sent a letter dated 28 July 2011 to OEH (National Parks and Wildlife Service) and Council requesting comment on the original Flora and Fauna Management Plan and any requirements for a future updated plan. However, no response was received.

Recommendation

Seek confirmation from OEH (National Parks and Wildlife Service) and Council that it approves of the current Flora and Fauna Management Plan and that any requirements for future updates to the plan are provided.

Condition 58(a) – Non-compliance

Condition 58(a): The Applicant shall prepare a Plan for the staged rehabilitation of the site as part of the EMP. The Rehabilitation Plan Shall:

- (a) outline procedures for the implementation of rehabilitation measures within an acceptable timeframe.**

Procedures have been outlined in Section 7.2, 7.2, 7.3 and 7.4 of the Rehabilitation Plan (Appendix J of the OEMP).

Section 7.4 (Dam Works and Extraction) states that the rehabilitation of the dam will be conducted in a staged process to allow for a continuous supply of water to the sand plant and that it was anticipated that with suitable weather this would be complete within 12 months. It is noted that the most recent update of the OEMP was 28 November 2011 meaning that the dam should have been constructed by 28 November 2012 (if “suitable weather” conditions had prevailed during this time).

It was noted during the site inspection that the dam was still in operation and being used to supply water to the sand plant. The Director advised the audit team that whilst the water level had been lowered, the dam had not been constructed in accordance with the timing specified in the Plan due to wet weather.

Recommendation

Update the Rehabilitation Plan in accordance with the proposed timing for the rehabilitation of the dam. The revised plan should consider current and future operations to ensure the new time frame is achievable.

Condition 58(e) – Verification

Condition 58(e): The Applicant shall prepare a Plan for the staged rehabilitation of the site as part of the EMP. The Rehabilitation Plan Shall:

- (e) provide evidence of consultation with Council in the design of the final landform for the site.**

In order to comply with the condition, Hodgson sent a letter dated 24 October 2011 to Council requesting review and comment on the original Rehabilitation Plan contained in the EIS and the current Rehabilitation Plan. However, no response was received.

Recommendation

Seek confirmation from Council that it approves of the original Rehabilitation Plan contained in the EIS and the current Rehabilitation Plan.

3.3 Environmental Performance

3.3.1 EPL Annual Return

Condition R1.1 of the H.B. Resources EPL requires that an Annual Return is completed and supplied to the EPA comprising:

- a Statement of Compliance; and
- a Monitoring and Complaints Summary.

Annual Returns were submitted on 27 April 2012 and 20 April 2013 for the 2011/2012 and 2012/2013 reporting periods.

Annual returns were submitted on time and no non-compliances were identified.

3.3.2 Site Inspection

Site inspections were conducted on 11th and 12th March 2014 and included the active extraction cells, sediment and process water dams, water storage dams, processing plant, workshop, site entry, signage and weighbridge, dust monitoring locations, meteorological monitoring site, groundwater bores, slurry drying areas, perimeter bunds, conservation area and a general overview of the site to assess general environmental and property management practices.

At the time of the inspection, the site was found as being generally operated and maintained with effective environmental management controls in place. Hodgson personnel and the Environmental Consultant have a good understanding of key environmental compliance criteria. In addition, relevant documentation was generally available onsite. Areas of the quarry that were being developed, were also being managed generally in accordance with the relevant environmental management criteria.

Hodgson advised that it has not been possible to undertake rehabilitation works during the current audit period (with the exception of tree screen planting on the southern and western perimeter bund walls) primarily due to wet weather conditions. Although, the central dam water level has been lowered with a view to rehabilitating the area, suitable weather has not allowed for this to occur.

Key observations made during the site inspection are outlined below:

- Existing environmental management measures described by Hodgson and the Environmental Consultant during the audit interviews were verified during the inspection and document review;
- The active extraction area appeared to be greater than three hectares;
- Extraction was not being undertaken in accordance with staging outlined in EIS;
- Rehabilitation of the central dam was not being undertaken in accordance with staged approach as outlined in the Rehabilitation Plan;
- Dust monitoring gauges appeared to be compliant with the relevant Australian Standards as a clear sky angle of 120° was evident;
- The Director and Environmental Consultant possess a strong understanding of the operational impacts of the quarry and applicable control measures;

- Relevant environmental compliance and management documentation was generally readily available onsite;
- The onsite generator had been decommissioned and replaced with a direct power supply;
- Materials, equipment, storage and workshop areas were observed to be tidy and well managed during the site inspection;
- Hydrocarbons were generally stored in bunds onsite inside a number of shipping containers and in the workshop;
- Hydrocarbon spill kits were located onsite inside a number of shipping containers and in the workshop;
- The diesel pump was located in a bunded area, however it was unknown how contaminated water contained in the bund is disposed of.
- Perimeter bunds generally had good grass coverage and tree screen planting had recently been undertaken on the southern and western perimeter bunds;
- The conservation area was comprised of well established natural vegetation;
- Electric fences have been erected to protect the tree screen vegetation, perimeter bunds and the conservation area from grazing by goats and cattle.

3.3.3 Environmental Monitoring

A number of recommendations relating to site environmental monitoring were made in Section 3.1. It is recommended that the current environmental monitoring program is reviewed during the next revision of the OEMP. Consultation with a number of relevant government agencies is required and although attempts at liaising with these agencies have clearly been demonstrated during the audit, it is recommended that they continue to be pursued by Hodgson for comment. Feedback from relevant government agencies will assist with the development of future environmental monitoring programs and ensure that monitoring undertaken by Hodgson leads to full compliance with consent conditions.

3.3.4 Environmental Management

The findings of the audit indicate that the Environmental Consultant (VGT) is effectively managing the routine monitoring and annual reporting requirements associated with the EPL. A site specific "Environmental Officer" from VGT is responsible for ensuring that the relevant monitoring and compliance reporting is undertaken. The Environmental Officer is listed in compliance documents as a contact for the quarry with regard to environmental management at the site.

On the basis of the arrangement with the Environmental Consultant, the Director is well informed as to the status of all monitoring requirements and is informed of any issues that may arise from the results of such monitoring. This has allowed quarrying operations and the site's environmental management obligations to be coordinated in an effective manner.

A number of examples demonstrated improvement since the previous compliance audit. With the relocation of dust monitoring sites, the required 120° clear sky angle has been achieved. Issues previously associated with groundwater monitoring bore licensing have been resolved. Since 2011, water is no longer being transferred off site to a dam on a neighbouring property

The document review showed that the most recent revision of the OEMP has addressed a number

of non-compliances identified during the previous audit. However, it is noted that additional amendments, as well as approval from DP&I of the revised document, are still required in order to achieve full compliance. Non-compliances are outlined in Section 3.2.2 and in the compliance checklist presented in Appendix A.

3.3.5 Outstanding Issues from 2006 and 2011 Audits

The following lists the ongoing non-compliance issues and condition numbers associated with the recommendations made in the 2006 and 2011 Audits. New recommendations regarding these issues have been incorporated in the previous sections of the report.

Agency Liaison

- Condition 6 and Condition 8(b) - Submitting Condition Compliance Report prior to commencing extraction in a new cell (2012 and 2013 compliance reports submitted).
- Condition 22 – Update the OEMP in consultation with the Director-General, NOW, DP&I and OEH. The OEMP has been updated since the previous 2011 audit but approval of the revision has not been received from DP&I, NOW or OEH.

Environmental Monitoring

- Condition 28 – TSP/PM10 monitoring has not been undertaken continuously. Methods to reduce the area of the site which is exposed should be investigated and implemented where practicable.
- Condition 47(a) and 47(c) – Undertake noise monitoring of all excavators used onsite when operating under load. Fit acoustic mufflers on excavators that exceed noise emissions of 76dB(A) when measured at a distance of 7 metres. Undertake noise compliance monitoring following installation of acoustic mufflers and submit report to the Director-General for approval.

Management Plans / Licences

- Condition 38 and 38(f) – Update Soil and Water Management Plan and OEMP to include sampling procedures.
- Condition 46(c) – Update Noise Management Plan to address all requirements of this condition.
- Condition 58(a) – Complete works in the central dam (Area 1) in accordance with the timeframe specified in the Rehabilitation Plan contained in the OEMP (Appendix J). Alternatively, update the Rehabilitation Plan to reflect a realistic timeframe for the rehabilitation works and submit to DP&I for approval.

APPENDIX A – COMPLIANCE CHECKLIST

Section 1			
Condition	Compliance	Details	Recommendations
General			
Obligation to Prevent and Minimise Harm to the Environment			
1	Compliant	During site inspections, environmental practices sighted were generally considered appropriate and minimising harm to the environment. No major environmental incidents were identified during the audit.	
Adherence to Terms of DA and EIS			
2a.	Non-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 comments on specific conditions).	
2b.	Non-Compliant	A number of compliance issues were identified during the audit which have been outlined in section 3.1 of the report.	
2c.	Non-Compliant	2 faxes from Dick Benbow (17/2/2000). Requires the construction of an acoustic barrier around the northern and western sides of the processing plant. An acoustic barrier has been constructed around the north eastern corner, southern and western sides of the processing plant. Noise Report by Global Acoustics (27/3/14) for monitoring carried out 3/12/13 demonstrated compliance with the project specific noise criteria.	Undertake a noise assessment on annual basis or when a new cell is commenced to determine if acoustic barriers are required. Alternatively, seek approval from DP&I to implement noise mitigation measures other than acoustic barriers which can demonstrably achieve the same noise levels.
		Report Dick Benbow (26/6/2000), Excavators have not been fitted with acoustic mufflers, however Noise measurements taken by Global Acoustics on the 3 December 2013 demonstrated that a Hitachi Zaxis 330 excavator and a Hitachi Zaxis 240 excavator, operating at the Hodgson Quarry, had sound pressure levels of 68dB(A) and 74dB(A) respectively when measured at 7 metres.	Seek modification or removal of condition 2(c).a) based on noise compliance monitoring which demonstrates acoustic mufflers are not required to comply with the specified noise level when measured at 7 metres and operating under load.
		letter Dick Benbow (27/1/2000), The Noise Management Plan contains procedures for informing residents of operations to be carried out in close proximity.	
		letter Dick Benbow (5/1/2000), requires the operator to 1. use the best available technology economically achievable has been recommended; 2. the investigation of further noise controls as part of noise compliance investigations and the site ongoing environmental management plan; 4. notify truck drivers to minimise noise emissions and adhere to quarry speed limits – sighted signage and induction documentation; 5. If during the noise compliance study, excessive impact noise is detected, or if any complaints from residents are lodged in regards to sleep disturbance immediate action shall be taken - no excessive impact detected, no noise complaints received, procedures exist for immediate response to noise complaints in the OEMP appendix G section 11.	During annual noise compliance investigations, further applicable reasonable and feasible noise controls measures should be investigated.
		Fax Holmes Air Sciences (21/12/1999), states a sheltering effect would be achieved if trees are planted around the site boundary, as suggested in the EIS. Screen planting has been completed along the southern and western perimeter bunds.	Undertake replacement planting around the site boundary to fill remaining gaps in the tree screen and ensure compliance with what has been specified in the EIS.
Compliance			
3	Compliant	No requirements have been issued by the Director-General since the previous audit.	
4	Compliant	Site induction covers environmental issues. Identify which appendix in OEMP.	
		Section 5.2 of the OEMP details training requirements for staff, contractors and subcontractors.	
		Onsite signage sighted. See previous notes.	
5	Compliant	No construction of buildings was undertaken during the audit period.	
The Conditions Compliance Report includes:			
6	Verification	Compliance reports have been prepared for 2012 and the period February 2012 to March 2013. However a Conditions Compliance Report was not submitted prior to the commencement of extraction in new areas prior to the compliance report submitted in 2012.	See condition 6g.
6a.	Compliant	A compliance report has been prepared for 2012 and the period February 2012 to March 2013 and is proposed to be completed annually. Section 2 Conditions Compliance Report (2013), Table 1 Compliance Issues and Appendix I provides a review of the performance of the project against the conditions of Consent and statutory approvals. .	
6b.	Compliant	Reviewed most current compliance report. No directions have been issued by DP&I.	
6c.	Compliant	Reviewed current compliance report prepared by VGT.	
6d.	Compliant	No variations have been obtained since the previous.	
6e.	Compliant	No complaints during audit period	
6f.	Compliant	Some tree planting taken place in February 2014 on the South eastern perimeter bund. Details of these plantings are to be presented in the next compliance report. Site operations haven't changed since last audit. No rehabilitation has been undertaken as there are only very limited areas where this could be completed.	

6g.	Verification	Not practical to be undertaken on a cell by cell basis, assessment is currently conducted annually in the compliance report. However, this does not comply with the condition.	Seek approval from DP&I to include assessment of compliance for all extraction cells on an annual basis regardless of whether extraction has commenced or is yet to commence.
7	Compliant	No requirements have been received from the Director- General.	
Commencement and Duration			
8a.	Compliant	Bund wall in place	
8b.	Verification	Conditions Compliance Report not submitted prior to extraction. Not practical to be undertaken on a cell by cell basis so this is being conducted annually in the compliance report. However, this does not comply with the condition.	Seek approval from DP&I to include assessment of compliance for all extraction cells on an annual basis regardless of whether extract has commenced or is yet to commence.
8c.	Compliant	Water Licence issue raised in 2011 audit resolved, 4 bores all licenced and kept on site. EPL and Development Consent valid	
9	Compliant	Extraction is still within the 15 year period from the date if consent.	
Complaints Procedures			
Prior to commencement of construction, the Applicant will:			
10a.	Compliant	The telephone number is displayed on sign at front gate and in white pages.	
10b.	Compliant	The postal address is displayed on sign at front gate.	
11	Compliant	Complaints log book is located on site, no complaints were received in the audit period.	
12a.	Compliant	no complaints were received in the audit period.	
12b.	Compliant	no complaints were received in the audit period.	
13	Compliant	no complaints were received in the audit period.	
14a.	Compliant	no complaints were received in the audit period.	
14b.	Compliant	no complaints were received in the audit period.	
Dispute Resolution			
15	Compliant	Not triggered during audit period.	
Section 2			
Question	Response	Details	
Hours of Operation			
16	Compliant	Martin Hodgson (Director) verbally confirmed hours of operation.	
Depth of Extraction			
17	Compliant	An Extraction plan could not be located in the EIS making compliance with this condition difficult to Audit. A wet weather level has been developed (see condition 39). Regular spot checks are undertaken by Martin Hodgson as required and surveys of the operations extent and depth are conducted by a registered surveyor.	
Environmental Management Plan			
18	Compliant	Construction Environmental Management Plan has been developed. 2006 and 2011 compliance audits noted compliance with this condition. There has been no construction during the audit period and no ongoing requirements during the audit period.	
19	Verification	The OEMP has been updated (dated November 2011), as suggested in the 2011 compliance audit, the OEMP is now one all encompassing document. The updated EMP has been submitted to the Director-General however no response was received.	Seek approval for the current version of the OEMP from the DP&I Director-General
The Environmental Management Plan includes:			
20a.	Compliant	Compliant although no response from department.	
20b.	Compliant	As above	
20c.	Compliant	As above	
20d.	Compliant	As above	
20e.	Compliant	As above	
20f.	Compliant	As above	
20g.	Compliant	As above	
21	Compliant	Compliant although no response from departments/agencies.	
22	Verification	Regularly updated, last updated November 2011, and has been consolidated into a single document but unable to gain approval of revision from DPI.	Seek approval for the current version of the OEMP from the DP&I Director-General
Environmental Management Representative			
23	Compliant	Lisa Thompson has been approved by the Director General as Environmental Officer (Howard Reed 5/10/11).	
23a.	Compliant	Same as above	
23b.	Compliant	Same as above	
24	Compliant	VGT - EMP update. Global Acoustics - Noise Monitoring.	
24a.	Compliant	Environmental consultant VGT was responsible for the update of the OEMP and associated Environmental Management Plans during the audit period.	
24b.	Compliant	Consultants are engaged when required to provide advice on matters specified in the Conditions of Consent - VGT were engaged to update the OEMP in response to the 2009 - 2011 independent Environmental Audit	

24c.	Compliant	Environmental inductions and training program is included in the OEMP updated by VGT (see section 5.2 and appendix O)	
24d.	Compliant	No critical construction or operation activities defined in the EMPs, however VGT visit the site at monthly intervals and are available if required.	
Independent Environmental Audit			
25	Compliant	ERM Undertook an independent audit in 2003. Umwelt undertook audits for the following periods 2003 - 2006, 2006 -2011. This Audit is for the period 2011- 2014 (March). The next Audit period will be 2014 - 2017.	
25a.	Compliant	2011 audit assessed compliance with the requirements of the Consent Conditions, Licence and approvals.	
25b.	Compliant	2011 audit reviewed the effectiveness of the environmental management of the development.	
25c.	Compliant	2011 audit was conducted at the Applicant's expense	
26d.	Compliant	2011 audit was conducted by a duly qualified independent person or team (Umwelt) approved by the Director-General.	
26	Compliant	Letter from department (Howard Reed) 5/11/11. The applicant is reminded of the requirement to submit an updated OEMP for the Director Generals approval (Updated OEMP was sent to the Director-General 28/11/11). No comments were received from government agencies. This audit is being conducted for the specified period (March 2011 - March 2014).	
Section 3			
Question	Response	Details	
Waste			
27	Compliant	No waste from quarrying. All other waste disposed of by contractors.	
Air Quality			
Air Quality Criteria			
28	Non-Compliant	Water cart onsite and in use. Hose down of driveways viewed during audit. DDG gauges previously noted as not being in accordance with relevant standards have been moved to allow 120° clear sky angle. More than 3 hectares of site are currently exposed and active posing an increased dusk risk (condition 29 c).	Investigate methods to reduce the area of site exposed and implement where practicable. Conduct another period of TSP/PM10 monitoring to demonstrate ongoing compliance with dust criteria. Liaise with OEH and DP&I with regard to the requirement for ongoing monitoring.
Air Quality Management			
Air Quality Management Plan developed that:			
29	Compliant	Air Quality Management Plan sighted in Appendix E OEMP.	
29a.	Verification	Locations have been moved but no response received by OEH. Sighted static hivol results, compliant, very low. No exceedances over a long period.	Seek approval from the OEH for the updated static air quality monitoring sites.
29b.	Compliant	Monitoring Plan located in Section 10 of Air Quality Management Plan (Appendix E OEMP) outlines methodologies to be used including the installation of a weather station which was completed during the audit period.	Recommend investigation into methods to reduce the area of site exposed and implement where practicable.
29c.	Non-Compliant	Section 4.3 2013 Compliance report. More than 3 hectares of site exposed and active	Investigate methods to reduce the area of the site which is exposed and implement where practicable. Alternatively, following investigation seek modification or removal of condition 29(c) due to the 3 hectare restriction being impractical from an operations viewpoint.
29d.	Non-Compliant	Section 9 and Section 12 of plan. Section 10 of the plan states an alarm will be installed on the weather station to indicate when wind speeds exceed 10 m/s, this alarm has not been installed.	Recommend installing alarm on weather station to indicate when wind speeds exceed 10 m/s.
29e.	Compliant	Details provided in Section 12 (E.12 OEMP).	
30	Compliant	Site inspection confirmed implementation of dust controls outlined in OEMP, however more than 3 hectares of site is exposed and active, and the weather station is not alarmed.	
31	Compliant	Section E.12 OEMP "Emergency Response" states "work to cease when the operation is resulting in visible dust blowing across public roads or lands not owned by Dr L.S.Martin.	
32	Non-Compliant	Sprinkler system previously in place has been removed. Changed operation so that stockpiles do not sit for long. Water cart 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. E.8.2 OEMP, vehicle speed limit restricted on site to 20km/hr	
34	Compliant	Viewed signage and witnessed trucks leaving with tarps on.	
Air Quality Monitoring			
35	Compliant	Noted as compliant in 2003 audit, No new construction during audit period.	
Operation of dust monitoring gauges and monitoring carried out in accordance with			
36a.	Verification	DDG gauges previously noted as not being in accordance with relevant standards have been moved to allow 120° clear sky angle.	Seek approval from the OEH for the updated static air quality monitoring sites.
36b.	Note	TSP monitoring has not been undertaken during the audit period.	TSP monitoring should be undertaken during the next audit period.

36c.	Compliant	PM10 monitoring has been completed, results are presented in Section 5.1.3 of the 2013 Conditions Compliance Report. OESM conducted the HVAS (PM10) sampling. VGT has provided an email from OESM confirming the report states compliance with AS 3580.9.6, report has been sighted.	
37	Verification	Data downloaded by Onsite Environmental. VGT to download in future. Had some issues but working at the moment. Prefer to download monthly. Out of service recently for about 6 weeks. Data presented in compliance report. Hasn't been calibrated recently but possibly not required. Sighted weather station as being operational.	Seek approval for the current location of the meteorological station from the EPA.
Section 4			
Question	Response	Details	
Water Quality			
Soil and Water Management Plan			
Soil and Water Management Plan prepared and implemented and updated annually. It shall include:			
38	Non-Compliant	The Soil and Water Management Plan has been updated in the OEMP (dated 28/11/2011), but has not been updated on an annual basis required by the condition, a letter has been sent to NOW however no response has been received.	Update the Soil and Water Management Plan Annually and seek approval from NOW. Alternatively, seek modification or removal of Condition 38 from DP&I so that SWMP is updated at the same time as OEMP.
38a.	Compliant	Appendix F Section 9&10 in EMP contains procedures for managing the impacts on the quality and quantity of surface and ground water.	
38b.	Compliant	Appendix F Section 7 in EMP contains the details of measures to minimise soil erosion and discharge of sediment.	
38c.	Compliant	The OEMP outlines mitigation and management measures which are designed to minimise impacts including impacts on the Hawkesbury River. No discharge during audit period. Site can't overflow to creek. Previous controlled discharge to neighbour and creek noted during previous audit however, discontinued since 2011.	
38d.	Compliant	The OEMP contains a strategy for decommissioning water management structures. 1a Tailings pond currently being decommissioned. Water is being diverted to 1c tailings pond so that 1a can be decommissioned.	
38e.	Compliant	Section 8 of the Plan outlines the potential sources of water pollution and a detailed description of management systems to minimise emissions.	
38f.	Non-Compliant	Section 11 specifies testing regime. Needs expansion on standards, sampling and calibration. The VGT sampling procedure was viewed, however, this information should be included in the soil and water management plan.	Update Section 11 of the SWMP to include standards, sampling and calibration procedures.
38g.	Compliant	Figure 2 shows all monitoring locations.	
38h.	Compliant	Section 11 of the plan contains a detailed description of the monitoring cycle and the duration of each monitoring cycle. Viewed 2013 URS Groundwater Management Plan. Complying with SWMP.	
38i.	Compliant	Specified in Section 8 and Section 15 of SWMP contain details of actions to ameliorate impacts if they exceed relevant criteria.	
38j.	Compliant	No exceedances during the audit period.	
38k.	Compliant	Section 15 of SWMP specifies emergency contingency plans in the event groundwater is encountered during excavation.	
Water Monitoring			
39	Verification	URS Groundwater Report 2013 viewed. Large gw data set. Bore locations have changed. Need confirmation of wet weather groundwater level to the satisfaction of NOW. Outlined in Section 10 of SWMP and letter to NOW from VGT dated 16 November 2011 but no response from NOW provided.	Seek confirmation from NOW that it approves of the current groundwater monitoring program and agrees with the nominated wet weather high groundwater level. Ensure Section 3.3 of 2014 condition compliance report includes the change of location and bore number.
Groundwater Management			
40	Compliant	No instances of groundwater being encountered during audit period.	
41	Compliant	No imported fill used during audit period.	
Licensable Groundwater Works			
42	Compliant	Groundwater licences to be updated since MW4 moved and became MW5. Form A sighted and a copy kept onsite.	VGT report changes in next annual compliance report. OEMP also to be updated during next revision.
Surface Water Management			
43	Compliant	No longer discharging to neighbour or creek. No other discharges identified. All dirty water retained onsite.	
44	Compliant	Drainage map sighted and identified during site inspection. All storm water directed to central dam with exception of localised catchments (minor)	
Dam Licensing			
45	Compliant	No new water storage dams constructed during audit period.	1c tailing dam constructed February 2014.
Section 5			
Question	Response	Details	
Noise			

A noise management plan has been prepared. It shall:			
46	Compliant	Noise Management Plan contained in Appendix G of the OEMP.	
46a.	Compliant	Section 5 of the plan identifies existing and potential noise sources and their relative contribution to noise impacts.	
46b.	Compliant	Section 2 specifies appropriate intervals for noise monitoring.	
46c.	Non-Compliant	Section 9 of the plan details the monitoring intervals, however does not outline weather conditions, seasonal variations, selected locations or the means for determining the noise levels emitted by the development.	Update Noise Management Plan to address all requirements of this condition. Ensure methodologies as specified by the NMP are adhered to.
46d.	Compliant	No noise complaints received during audit period. Sign at entrance sighted and truck drivers advised of responsibilities whilst onsite during induction. Noise mitigation outlined in section 11 of NMP. Temporary noise barriers (bunds) are now permanent.	
46e.	Compliant	Sighted in NMP - Section 11 provides details of noise amelioration measures	
46f.	Compliant	Sighted in NMP - Section 11 details contingency measures to be implemented should complaints be received. No complaints received during audit period; not required in compliance report	
46g.	Compliant	Section 7 contains procedure for notifying adjoining residents of works.	
46h.	Compliant	Section 7 mentions the use of temporary bunds in consultation with property owners. Bund constructed in the north east boundary.	
Operational Noise Limits			
47	Compliant	2013 report from Global Acoustics states "MQ complied with the project specific criteria at all the monitoring locations during December 2013 survey."	
47a.	Non-Compliant	Excavators have not been fitted with acoustic mufflers, however Noise measurements taken by Global Acoustics on the 3 December 2013 demonstrated that a Hitachi Zaxis 330 excavator and a Hitachi Zaxis 240 excavator, operating at the Hodgson Quarry, had sound pressure levels of 68dB(A) and 74dB(A) respectively when measured at 7 metres.	Seek modification or removal of Condition 47(a) based on noise monitoring results which demonstrates acoustic mufflers are not required to comply with the specified noise level when measured at 7 metres when operating under load.
47b.	Compliant	The on-site generator is no longer in use.	
47c.	Non-Compliant	Excavators have not been fitted with acoustic mufflers, however a noise compliance investigation has been completed on an Hitachi Zaxis 330 and an Hitachi Zaxis 240 excavator by Global Acoustics but not yet been submitted to the Director-General.	Submit noise reports demonstrating compliance with the noise level limits stated in conditions 47(a) and 47(b) to the Director-General for approval.
Traffic and Transport			
Road Noise Management Plan			
48	Compliant	Noise monitoring was completed by Global Acoustics and a report presented (dated December 2013). The report does not report against the parameters listed in condition 48, however the levels recorded do satisfy the noise limits of condition 48.	
49	Compliant	Road Noise Management Plan sighted in EMP - Appendix G	
Truck Movements			
50	Compliant	Average laden truck movements per day is 25, max 38 during audit period. Truck data was provided by HB	
Section 94A Contributions			
51	Compliant	Records to be provided by HB. Council have requested a site visit to inspect records without any problems.	
51a.	Compliant	Records Sighted	
51b.	Compliant	Records Sighted	
51c.	Compliant	Records Sighted	
51d.	Compliant	Council have requested a site visit to inspect records without any problems.	
51e.	Note	N/A Condition on Council	
Flora and Fauna			
52a.	Verification	The presence of the six Acacia bynoeana plants has not been confirmed despite several ecological surveys. The area previously identified as containing six Acacia bynoeana plants has been fenced however exact location of Acacia bynoeana plants can not be identified and as such a 30 metre buffer can not be confirmed.	Seek agreement from DP&I that this issue has been satisfactorily addressed and no further action is required.
52b.	Verification	The area previously identified as containing six Acacia bynoeana plants has been fenced however exact location of Acacia bynoeana plants can not be identified and as such a 30 metre buffer can not be confirmed.	Seek agreement from DP&I that this issue has been satisfactorily addressed and no further action is required.
52c.	Verification	The area is fenced, however the boundary of the conservation area has not been identified.	Seek agreement from DP&I that this issue has been satisfactorily addressed and no further action is required.
52d.	Verification	The exact location of the plants can not be identified and as such conditions 52a - c have not been completed.	Seek agreement from DP&I that this issue has been satisfactorily addressed and no further action is required.
53	Compliant	Old aerial photos show no clearing has been undertaken. Fenced off with electric fence, however access to the area is required in event of an emergency.	
54	Compliant	Minor addition to bund wall since previous audit. No vegetation disturbed in that area.	
Flora and Fauna Management Plan			
Flora and Fauna Management Plan prepared as part of the EMP that includes:			

55	Verification	FFMP sighted, appendix H of OEMP. A letter has been sent to National Parks and Wildlife Services and Council (28/7/11) however a reply was not received.	Seek confirmation from OEH (National Parks and Wildlife Service) and Council that it approves of the current FFMP and that any requirement for future updates to the plan are provided.
55a.	Compliant	Sighted in appendix H of OEMP, Section 5 of FFMP.	
55b.	Compliant	Section 7.3 of FFMP contains provisions for the use of cleared trees (branches and logs) to be spread within rehabilitation areas.	
55c.	Compliant	Section 6, 7.2 and 7.3 contain procedures for management and maintenance of vegetation. Cover letter accompanied by letter from Onsite Environmental Management sent to OEH on 17/11/11 regarding acacias not being present onsite (point 3 of 55c).	
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 of FFMP contains a monitoring program of rehabilitated areas. Little revegetation to date. Tree screening planted in South Eastern corner of the site in February 2014. Inspections by ecologist have been occurring however no report was available.	Qualified ecologist to assess revegetation area within 12 months
56	Compliant	Weed spraying ongoing. Revegetated area with tree screening in South Eastern corner, planted in February 2014. Approx. 1500 plantings. List of native species planted provided. Maintenance to take place in this area. Evidence of fence repair and maintenance (electric fences).	
Heritage			
57	Compliant	Section 11 of FFMP Contains procedures should any archaeological material be discovered. No heritage sites or archaeological material have been located during audit period	
Rehabilitation Plan			
58	Compliant	Rehabilitation Plan (RP) sighted in Appendix J of EMP.	
58a.	Non-Compliant	Section 7.1, 7.2, 7.3 and 7.4 of RP outline procedures for the implementation of rehabilitation measures. However it is stated in section 7.4 of the RP (last updated 28/11/11) that area 1 works will be completed, given suitable weather, within 12 months. As of March 2014 these works have not yet been completed.	Update the Rehabilitation Plan in accordance with the proposed timing for the rehabilitation of the dam.
58b.	Compliant	Section 7.2 of RP documents the source of material for rehabilitation.	
58c.	Compliant	Section 6 of RP documents the preferred final landform.	
58d.	Compliant	Section 6 provides details of bund walls in final landform.	
58e.	Verification	Letter sent to Council 24/11/11 however no response received.	Seek confirmation from Council that it approves of the original Rehabilitation Plan contained in the EIS and the current Rehabilitation Plan.