



Hy-Tec Industries Pty Limited

ABN: 90 070 100 702

Response to Audit Recommendations

for the

Austen Quarry

Prepared in conjunction with:



R.W. CORKERY & CO. PTY. LIMITED

February 2018

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CONTENTS

	Page
1. INTRODUCTION.....	1
2. RESPONSE TO IDENTIFIED NON-COMPLIANCES	3
2.1 AREAS OF NON-COMPLIANCE.....	3
2.1.1 Issue N-01.....	3
2.1.2 Issue N-02.....	3
2.1.3 Issue N-03.....	4
2.1.4 Issue N-04.....	5
2.1.5 Issue N-05.....	5
2.1.6 Issue N-06.....	5
2.2 ADMINISTRATIVE NON-COMPLIANCE.....	6
2.2.1 Issue A-01.....	6
2.2.2 Issue A-02.....	7
2.2.3 Issue A-03.....	7
2.2.4 Issue A-04.....	8
2.2.5 Issue A-05.....	9
2.2.6 Issue A-06.....	9
2.2.7 Issue A-07.....	10
2.2.8 Issue A-08.....	10
2.2.9 Issue A-09.....	11
2.2.10 Issue A-10.....	11
2.2.11 Issue A-11.....	12
2.2.12 Issue A-12.....	12
2.2.13 Issue A-13.....	12
2.2.14 Issue A-14.....	13
2.2.15 Issue A-15.....	13
2.2.16 Issue A-16.....	14
2.2.17 Issue A-17.....	14
2.2.18 Issue A-18.....	14
2.2.19 Issue A-19.....	15
2.2.20 Issue A-20.....	15
3. SUMMARY AND CONCLUSION.....	17

ATTACHMENTS

Attachment A	Austen Quarry Site-Specific Training Package.....	21
Attachment B	AQ Heavy Rainfall Inspection Worksheet.....	29
Attachment C	AQ Weed Identification Manual	35
Attachment D	AQ Environmental Inspection Check List.....	41
Attachment E	AQ Mobile Plant and Equipment Access to Site Checklist.....	45
Attachment F	AQ Vegetation, Topsoil and Overburden Stripping Procedures	49
Attachment G	AQ Revegetation Monitoring Record	53
Attachment H	AQ Water Pumping Logbook	57



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1. INTRODUCTION

Hy-Tec Industries Pty Ltd (Hy-Tec) commissioned Australian Quality Assurance & Superintendence Pty Ltd (AQUAS) to undertake an Independent Environmental Audit of the management and operation of the Austen Quarry (the Quarry) in accordance with Condition 8 of Schedule 5 of Development Consent SSD 6084 (SSD 6084). AQUAS was endorsed by the Secretary of the Department of Planning and Environment (DPE) on 20 September 2017 to undertake the audit. The audit involved a review of all relevant documentation and a site inspection on 17 October 2017. The audit was the first at the Austen Quarry for operations under SSD 6084 and covers the period from commencement of the consent (15 September 2016) to the date of the audit (17 October 2017).

While the Audit Report focuses on the conditional requirements of SSD 6084 and Environment Protection Licence (EPL) 12323, AQUAS also reviewed the approved management plans for the Quarry, the conditions of water access licences and other relevant documents pertaining to the operation of the Quarry during the audit period. The 2017 audit identified the following non-compliances for the audit period.

- 6 non-compliances.
- 20 Administrative non-compliances.

There were no non-compliance issues identified for the conditions of EPL 12323.

A response on the identified non-compliances has been compiled by Hy-Tec in conjunction with R.W. Corkery & Co (RWC) and included in Section 2 of this response. Section 3 provides a brief summary of the management commitments made by Hy-Tec as a result of this audit and any relevant additional comments.

It is noted that the majority of the identified non-compliances referred to actions that have been occurring at the Quarry but did not have a formal process in place to document the procedures or confirm activities and inspections have occurred. Following the audit inspection, a range of induction and inspection documents have been updated or prepared to guide and document on-site activities. These documents have been included with this response and include the following.

- Attachment A – Austen Quarry Site-Specific Training Package Incorporating:
 - Attachment A1 - AQ Site-Specific Training Package Cover page (check sheet)
 - Attachment A2 - AQ Site-Specific Safety Induction
 - Attachment A3 - AQ Site-Specific Environmental Management Induction
- Attachment B – AQ Heavy Rainfall Inspection Worksheet
- Attachment C – AQ Weed Identification Manual
- Attachment D – AQ Environmental Inspection Check List
- Attachment E – AQ Mobile Plant and Equipment Access to Site Checklist
- Attachment F – AQ Vegetation, Topsoil and Overburden Stripping Procedures
- Attachment G – AQ Revegetation Monitoring Record
- Attachment H – AQ Water Pumping Logbook

It is noted that the Water Management Plan for the Quarry was approved on 16 October 2017. As such, many of the actions required under this plan were not audited during the audit inspection. Now that the Water Management Plan has been approved, all management activities including surface water and groundwater monitoring under this plan have been implemented.

The ongoing compliance of the Quarry and documentation of this compliance with its requirements and obligations described in SSD 6084, EL 12323 and approved management plans will be demonstrated through use of the Attachments supplied at the end of this response document. The documents shall be completed by Quarry Management (Quarry Manager or Supervisors) and or their delegates as appropriate and trained to do so.

2. RESPONSE TO IDENTIFIED NON-COMPLIANCES

2.1 AREAS OF NON-COMPLIANCE

2.1.1 Issue N-01

Condition	Requirement	Issue sighted
Environmental Management Strategy 3.3	A training package detailing the importance of observing all environmental safeguards and outlining the potential environmental impacts will be implemented for all personnel working on-site. This may be done at the following stages: At the commencement of employment as part of the employee's site induction and safety procedures briefing. At least every 24 months thereafter. At any stage, should there be a change in operational procedures	A definitive training package had not been prepared and implemented.

Hy-Tec Response

Hy-Tec requires all employees and contractors to undergo site-specific training and induction processes. However, to date these processes have focused on operational information. Drivers are required to review and sign a Driver Code of Conduct and are subject to the Hy-Tec Chain of Responsibility – Driver / Vehicle Checks standard. It is acknowledged that these processes have not included specific environmental management induction components to date.

Hy-Tec has updated the induction module for all personnel and contractors working on site to ensure ongoing compliance with this condition and for awareness of all safety and environmental items pertaining to the site. This module is provided as **Attachment A – Austen Quarry Site-Specific Training Package**, and includes the following documents:

- Attachment A1 – AQ Site Specific Training Package Cover page (check sheet)
- Attachment A2 – AQ Site Specific Safety Induction
- Attachment A3 – AQ Site Specific Environmental Management Induction

2.1.2 Issue N-02

Condition	Requirement	Issue sighted
Environmental Management Strategy 3.4	Visual inspections of stormwater, sediment and erosion control prior to, and following wet season and/or major rainfall events (>25mm in 24hours)	Records do not demonstrate inspections of sediment and erosion control had been conducted prior to high rainfall events.

Hy-Tec Response

Daily inspections and bi-monthly audits are undertaken at the Quarry that are designed for supervisors and managers to inspect the whole of site and to bring attention to items in need of

repair, such as the water management structures. However, aspects of these inspections relating to inspection prior to or following significant rainfall events have not been formally documented to demonstrate compliance with this requirement.

To bring heightened awareness and focus to the condition of these water management structures, Hy-Tec has implemented the *AQ Heavy Rainfall Inspection Worksheet* which is provided as **Attachment B**.

2.1.3 Issue N-03

Condition	Requirement	Issue sighted
Environmental Management Strategy 3.4	Prevent the spread of weeds through site by: Visual weed inspections of machinery entering site; and Quarterly weed inspections of the site.	Inspections required to be conducted for the management of weeds had not been completed. No records were available for inspection of machinery entering site. Quarterly weed inspections had not been conducted.

Hy-Tec Response

Weed management at the Quarry has been undertaken on an ad hoc basis in the past, generally in response to identified weed infestations and in conjunction with the land owner, who has significant holdings of pastoral land nearby. Weed management in the Biodiversity Offset Area has also not commenced as an agreement with the landowner regarding use of this land as an offset area is yet to be finalised (expected September 2018). Aerial spraying for serrated tussock occurred in November 2016 in conjunction with the land owner and had moderate success, with hand spraying for of Serrated Tussock, African Love Grass and Blackberry bush being undertaken during December 2017 in various accessible areas around the site. Further aerial spraying has been programmed for February 2018 for Serrated Tussock

Weed inspections are conducted annually by an experienced ecologist during ecological surveys of the Quarry. Visual inspections of the Quarry by Quarry Management have occurred but not on a formal basis and the process has not been documented to date. In addition, Quarry personnel and management are generally aware of local weeds that might be found in the area, and search for these whilst conducting regular site inspections.

It is acknowledged that a more regular and site-specific weed management program is needed to satisfy the conditions of consent and approved Landscape Management Plan. Hy-Tec has developed a *AQ Weed Identification Manual* (see **Attachment C**) intended to be used as an internal training tool and reference to assist with on-site identification of weeds. In addition, the *AQ Environmental Inspection Check List* includes quarterly formal weed inspections that will be undertaken by Quarry Management (see **Attachment D**).

Inspections of equipment entering and exiting site are conducted by Quarry personnel, however specific documented evidence of inspection for soil and weeds had not been included on the inspection sheet. The *AQ Mobile Plant and Equipment Access to Site Checklist* has been updated to include these as inspection items (**Attachment E**) and will be kept as documented evidence of this.

2.1.4 Issue N-04

Condition	Requirement	Issue sighted
Environmental Management Strategy 6.10.5	Employees should be able to recognise existing and potential weeds present on-site and within the surrounding area to ensure they are not inadvertently brought in via items contaminated by seed	No records to demonstrate that workers had been trained in the identification of weeds on site.

Hy-Tec Response

As described in the response to Issue N-03 in Section 2.1.3, weed identification is conducted annually during ecological surveys and Quarry personnel are generally aware of local weeds that might be found in the area. However, no documented evidence of official training in identification of these weeds had been developed. As such the *AQ Weed Identification Manual* (see **Attachment C**) has been developed and Quarry Management or their delegate shall be trained in this manual before performing quarterly inspections to ensure on-going compliance.

2.1.5 Issue N-05

Condition	Requirement	Issue sighted
Environmental Management Strategy 6.11.5	Have markers, fencing or flagging been provided around vegetation to be protected or areas undergoing rehabilitation?	Markers, fencing or flagging had not been provided around vegetation to be protected or areas undergoing rehabilitation.

Hy-Tec Response

Sensitive areas of vegetation and rehabilitation, along with approved access tracks and directive to stay on these tracks at all times unless in an emergency is enforced in the “*AQ Site Specific Environmental Management Induction*” (see **Attachment A3**). As the Biodiversity Offset Area is yet to be secured, there has not been a requirement to mark, fence or flag this area. However, once any rehabilitation area is established it shall be marked, fenced or flagged as practically applicable to ensure compliance with this item.

2.1.6 Issue N-06

Condition	Requirement	Issue sighted
Water Access Licence 25616 MW0017-00023	From 1 July 2011, water must not be taken from the Dharabuladh Management Zone of the Upper Nepean and Upstream Warragamba Water Source when flows are in the Very Low Flow Class, which means that the flow at Coxs River at the Island Hill gauge [No. 212045] is: A. equal to or less than 17 ML/day on a rising river, or B. equal to or less than 15 ML/day on a falling river. This restriction does not apply if water is to be taken from a runoff harvesting dam or an in-river dam pool.	Visual observation of water flow in the river was recorded at the commencement of pumping. The flow at the Island Hill gauge was not verified prior to pumping.

Hy-Tec Response

In the past, Quarry personnel have used visual observations to judge if flow levels within the Coxs River were suitable for water to be extracted. While it is acknowledged that this method does not provide an accurate estimate to water flow, the flow readings sourced from the Department of Industry – Water online services for the days on which water was extracted indicates that **water has not been extracted during low flow periods**. **Table 1** presents the dates on which water was extracted and the flow levels recorded for each of those days.

Table 1
Flow Levels at Coxs @ Island Hill (212045)

Date	Flow Level (ML)	Date	Flow Level (ML)
24/07/2017	48.0	12/09/2017	45.3
25/07/2017	48.9	13/09/2017	41.4
26/07/2017	49.1	14/9/2017	36.8
27/07/2017	49.6	15/9/2017	33.5
01/08/20107	54.4	19/9/2017	45.1
02/08/2017	56.7	21/09/2017	29.3
03/08/2017	59.8	16/10/2017	27.9
04/08/2017	62.9	17/10/2017	28.4

Source: Department of Industry – Water (Water Live – accessed 12 February 2018)

It is noted that the Department of Industry – Water provides flow data on its website and through the Water Live App. This information will be checked for all future pumping activity and the relevant data included in *Attachment H – AQ Water Pumping Log Book*.

2.2 ADMINISTRATIVE NON-COMPLIANCE

2.2.1 Issue A-01

Condition	Requirement	Issue sighted
Administrative Controls 18	By 30 September 2015, unless otherwise agreed with the Secretary, the Applicant shall: (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction within the development area; and (b) submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.	Survey not completed by 30 September 2015. This was raised as an administrative non-compliance by DPE in an audit in November 2015.

Hy-Tec Response

This issue has been addressed previously to the satisfaction of the Secretary of DPE.

2.2.2 Issue A-02

Condition	Requirement	Issue sighted
Administrative Controls 20	Within 6 months of the date of this consent, unless otherwise agreed by the Secretary, the Applicant shall enter into a planning agreement with the Council in accordance with division Division 6 of Part 4 of the EP&A Act; and the terms specified in Appendix 7.	While discussions on the VPA had commenced with Council on 7/08/15, the voluntary planning agreement had not been entered into with Council within 6 months of the date of the consent.

Hy-Tec Response

While it is acknowledged that this is not compliant with Condition 20 of Schedule 2 of SSD 6084, it is noted while there were delays in finalising the VPA agreement, the in principal agreement had been reached, however due to a range of factors including Council governance the formally signed document was not finalised in the timeframe. The VPA has since been finalised and implemented by both parties.

2.2.3 Issue A-03

Condition	Requirement	Issue sighted
Schedule 3 - Environmental Performance Conditions 4 Schedule 5- Environmental Management, Reporting and Auditing 10 Noise Management Plan 8.4.3	The Applicant shall: (a) implement best practice management to minimise the operational and road transportation noise of the development; (b) minimise the noise impacts of the development during meteorological conditions when the noise criteria in this consent do not apply (see Appendix 5); (c) carry out noise monitoring (at least every 6 months, unless otherwise approved by the Secretary) to determine whether the development is complying with the relevant conditions of this consent; and (d) regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent, to the satisfaction of the Secretary.	Noise monitoring had not been conducted on a six monthly basis. Noise monitoring conducted September 2016 and September 2017.

Hy-Tec Response

The second of the biannual compliance noise monitoring campaigns was overlooked for early 2017. Hy-Tec became aware of this omission during preparation of the 2017 Annual Review and notified the Department of Planning and Environment with the submission of the review. In order to ensure that this is not overlooked in the future, Hy-Tec now requests annual proposals from the relevant noise consultant that include monitoring in March/April and September/October each year. Hy-Tec acknowledges that it has not satisfied commitments to stakeholders with regards to demonstrating compliance with the approved noise limits in SSD 6084 during the 2016-2017 reporting period. In order to demonstrate compliance conclusively, three compliance noise monitoring campaigns have been commissioned over the next 12 months with an additional monitoring campaign scheduled for early December 2017.

It should be acknowledged that the monitoring in September 2016 and more recently in September / October 2017 continues to demonstrate that operational noise at the Quarry is rarely audible at the closest privately-owned residences.

2.2.4 Issue A-04

Condition	Requirement	Issue sighted
Schedule 5- Environmental Management, Reporting and Auditing 8	<p>Within a year of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:</p> <p>(a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;</p> <p>(b) include consultation with the relevant agencies;</p> <p>(c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL or necessary water licences for the development (including any assessment, strategy, plan or program required under these approvals);</p> <p>(d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and</p> <p>(e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, strategy, plan or program required under the abovementioned approvals.</p>	<p>The approval of the auditor, and hence commissioning of the Independent Environmental Audit had not been completed by 15/09/17.</p>

Hy-Tec Response

Hy-Tec notes that the text of Condition 8 of Schedule 5 of SSD 6084 refers to commissioning of the audit. Although it is acknowledged that the Department holds a different view, Hy-Tec had commissioned the auditor (Mr James Hart) by this date and considers that this satisfies the requirements of this condition.

2.2.5 Issue A-05

Condition	Requirement	Issue sighted
Landscape and Rehabilitation Management Plan 8.3.1.1	Signs will be placed on selected survey markers to highlight the ecological sensitivity of the BOA to contractors and staff.	Signs have not been installed at this stage. Noted that while a biodiversity offset area had been identified, the biodiversity offset strategy had not been finalised at the time of audit.

Hy-Tec Response

This requirement refers to management of the approved Biodiversity Offset Area. Hy-Tec is in the process of reviewing options available to the Company to satisfy the offsetting obligations resulting from the Austen Quarry Extension Project. The offsetting requirements are also the subject of a proposed modification to SSD 6084 that may result in the boundary of the approved Biodiversity Offset Area being modified. Until the offsetting mechanism is finalised and approved, signage and exclusion zones will not be established.

However, Hy-Tec has developed the *AQ Site-Specific Environmental Management Induction* (Attachment A3) process for personnel involved in disturbance activities that may have potential to impact conservation areas. This induction includes educating the relevant personnel and / or contractors of the conservation areas in the vicinity of the operational areas of the Quarry. An induction / training check list is provided as **Attachment A1**.

2.2.6 Issue A-06

Condition	Requirement	Issue sighted
Landscape and Rehabilitation Management Plan 8.3.2 Biodiversity Offset Management Plan 3.3	Monthly boundary inspections and any breaches rectified within 4 weeks.	Reported to have been completed however no records available.

Hy-Tec Response

Inspections of the Quarry boundary occur regularly during normal operational site inspections, however, this process has not previously been documented and therefore Hy-Tec was unable to demonstrate compliance in this regard during the audit inspection. Following the audit inspection, the *AQ Environmental Inspection Check List* was compiled for all activities requiring at least monthly inspection. This check list is provided as **Attachment D**. A monthly inspection of Quarry boundaries and internal fences will now be documented through this process.

2.2.7 Issue A-07

Condition	Requirement	Issue sighted
Landscape and Rehabilitation Management Plan 8.3.2	Implement an access track management strategy.	Development of the access track management strategy had not commenced at time of audit.

Hy-Tec Response

As described in the response to Issue N-05 in Section 2.1.5, sensitive areas of vegetation and rehabilitation, along with approved access tracks and directive to stay on these tracks at all times unless in an emergency is described in the “AQ Site Specific Environmental Management Induction” (see **Attachment A3**). While site personnel have generally been made aware of the approved access tracks and limitations with regards areas of access, this process has not been formalised in induction or training processes. The *AQ Site Specific Environmental Management Induction* has been developed to include reference to existing access tracks and advises personnel of restricted areas of the Quarry.

2.2.8 Issue A-08

Condition	Requirement	Issue sighted
Landscape and Rehabilitation Management Plan 8.4.1.4 8.4.1.5	Vegetation will be cleared in a way that maximises the opportunity for recycling Operators will be instructed to handle soil as little as possible.	No evidence of communication of requirements for vegetation clearing and soil stripping to operators

Hy-Tec Response

Operating procedures have been communicated to Quarry personnel in the past through site-specific training and induction processes. However, it is acknowledged that this process has not been formalised or documented to provide clear communication between Quarry Management and personnel involved in vegetation clearing and soil stripping activities.

The *AQ Vegetation, Topsoil and Overburden Stripping Procedures* check list has been prepared to address this issue and is provided as **Attachment F**. This document provides Quarry personnel with a step by step procedure and includes items to be considered in the process such as information on timing, fauna management and other procedures.

2.2.9 Issue A-09

Condition	Requirement	Issue sighted
Landscape and Rehabilitation Management Plan 8.4.1.5	To ensure the value of the soils to be disturbed is maximised, the following management measures will be implemented for topsoil stripping, stockpile management and soil respreading.	Evidence that the requirements for the management of disturbed soils had been communicated to workers involved in the activities was not available.

Hy-Tec Response

The value of topsoil in the ongoing revegetation activities is recognised, with topsoil generally stripped and placed directly in areas undergoing rehabilitation. However, as with the procedures for vegetation clearing (see Section 2.2.8) it is acknowledged that this process has not been formalised or documented to provide clear communication between Quarry Management and personnel involved in soil stripping and stockpiling activities.

The *AQ Vegetation, Topsoil and Overburden Stripping Procedures* check list has been prepared to address this issue and is provided as **Attachment F**. This document provides Quarry personnel with a step by step procedure and includes items to be considered in the process such as stripping depths, stockpiling height and management.

2.2.10 Issue A-10

Condition	Requirement	Issue sighted
Noise Management Plan 8.4.3	Attended noise monitoring will be undertaken using a hand-held noise meter. The maximum (L _{MAX}), and the energy equivalent (L _{Aeq}) intrusive noise level over a 15 minute measurement period will be recorded. If necessary, other descriptors such as LA10, LA50, LA90, LA99 and L _{Amin} could also be recorded. Wherever possible, the LA90 noise level (i.e. without contributions from Quarry activities) will be recorded to identify the prevailing a background noise level.	Attended monitoring conducted on an annual basis. Conducted September 2016 and September 2017. L _{Aeq} ,15min reported. L _{MAX} not reported in September 2016 Noise report.

Hy-Tec Response

The compliance noise monitoring report by Todoroski Air Sciences in October 2016 did include the L_{MAX} recorded during the attended noise monitoring periods, however did not explicitly state this as the L_{MAX}, but referred to dominant or significant noise sources recorded. Regardless, both the L_{MAX} and L₉₀ were recorded during the monitoring campaign and the compliance noise monitoring report has been updated to include this information. The updated report is available from the Hy-Tec website.

2.2.11 Issue A-11

Condition	Requirement	Issue sighted
Noise Management Plan 8.6	A noise monitoring report will be prepared by the person or company responsible for the monitoring within 7 days of each attended noise monitoring event.	Noise monitoring reports had not been provided within 7 days of each noise monitoring event.

Hy-Tec Response

It is acknowledged that this requirement was not satisfied for either of the compliance noise monitoring reports prepared for the Quarry under SSD 6084. It is also noted that this requirement is not within the conditions of consent for SSD 6084 or in the EPL 12323 but is included in the approved Noise Management Plan to ensure that reporting is finalised and presented on the Hy-Tec website in a timely manner. However, it is now recognised that 7 days is not a practical length of time to permit the noise consultant to complete their internal quality control reviews and for the report to proceed through the Hy-Tec internal review and quality control process before being approved for release on the Hy-Tec website. It is proposed that once this audit report and response have been approved by DPE, the Noise Management Plan would be updated to modify this requirement to a more reasonable time, such as one month.

2.2.12 Issue A-12

Condition	Requirement	Issue sighted
Biodiversity Offset Management Plan 3.3	Clearly delineated conservation exclusion zones within and around the existing Quarry and Stage 2 Extension will be implemented following approval of the BOMP to exclude movement of vehicles, plant and staff within rehabilitation areas and the BOA.	Markers, fencing or flagging had not been provided around vegetation to be protected or areas undergoing rehabilitation.

Hy-Tec Response

Please see response to Issue A-05 in Section 2.2.5.

2.2.13 Issue A-13

Condition	Requirement	Issue sighted
Silver Leaved Mountain Gum Management Plan 4.6	Are the requirements of Section 4.6 of the SLMGMP for the replanting of rehabilitation areas communicated to workers?	While Section 4.6 of the SLMGMP provides requirements for the replanting and rehabilitation of disturbed areas, a rehabilitation procedure for was not available, and evidence that the requirements of Section 4.6 had been communicated to workers involved in rehabilitation was not available.

Hy-Tec Response

Requirements for replanting and maintenance of planted areas within the Quarry are communicated verbally by Quarry Management to the relevant contractors and internally for visual inspection and maintenance of the replanted areas. It is acknowledged that this process

has not previously been documented and therefore it is not possible to demonstrate that this information is being made available to personnel and contractors. Contractors providing plants for the Austen Quarry will be provided with a copy of the Landscape Management Plan that includes specific requirements with regards to species selection and plant growth prior to planting. The *AQ Revegetation Monitoring Record* (included as **Attachment G**) has been prepared that will be completed for all replanted areas and covers monitoring at one month, three months, six months and 12 months' intervals. After this time replanted areas will be incorporated into the annual ecological surveys. The monitoring record includes review of plant condition, herbivory and notes for actions needed.

2.2.14 Issue A-14

Condition	Requirement	Issue sighted
Environmental Management Strategy 3.4	Update Material Safety Data Sheet Register – Event based or annually.	While a hazardous chemicals register including safety data sheets was available, some SDS provided were greater than 5 years old.

Hy-Tec Response

During the audit inspection it was noted that the hard copy files of the MSDSs stored at the site had not been updated recently. Quarry Management have access to the most recent MSDS via online database and therefore always have the most recent version available when/if needed and use this as required. As such the need for hard copy versions of the MSDSs is mostly redundant, it was acknowledged during the audit inspection that having two different sources available on site may be confusing, especially if one is no longer up to date.

Hy-Tec has reviewed the hard copy MSDS records held at the Quarry and updated these to include the most recent and relevant version of the relevant sheet.

2.2.15 Issue A-15

Condition	Requirement	Issue sighted
Environmental Management Strategy 3.4	Confirm sufficient spill response equipment is supplied and properly maintained - Quarterly or following use of a spill kit.	While Spill kits had been provided, no records of inspection of the spill kits available.

Hy-Tec Response

Quarry Management are notified after any use of a spill kit, and they are inspected and replenished directly after any use. However, this process has not previously been documented and therefore Hy-Tec was unable to demonstrate compliance in this regard during the audit inspection. Following the audit inspection, the *AQ Environmental Inspection Check List* was compiled for all activities requiring at least monthly inspection. This check list is provided as **Attachment D**. A quarterly inspection of all existing spill kits and availability of spill kits will now be documented through this process.

2.2.16 Issue A-16

Condition	Requirement	Issue sighted
Environmental Management Strategy 3.4	Stormwater captured within any bunding is to be removed as soon as practicable after a rain event and disposed of as contaminated water. Spills within bunded areas must be cleaned up as soon as practicable	Small volume of diesel in sump under diesel tank. Bunded area had not been maintained to ensure spills within the bund are quickly cleaned up and removed.

Hy-Tec Response

While it is noted that diesel was observed within the sump under the diesel tank during the audit inspection, this observation is considered to demonstrate the effective function of the sump and bunding. Minor spills of hydrocarbons are a common occurrence when refuelling large items of equipment such as that used at the Quarry. While all spills are cleaned up immediately, spills captured in purpose built sumps shall be cleaned out when practical or required.

The fuel and oil storage location on site is contained within a bunded and weather protected shed, stopping rain from having potential to spread spills or flood capture sumps.

2.2.17 Issue A-17

Condition	Requirement	Issue sighted
Environmental Management Strategy 6.9.6	Bi-annual weed inspection and herbicide treatment program shall be undertaken or as required.	While an annual inspect had been conducted by Onsite Environmental, weed inspections were not conducted on a bi-annual basis.

Hy-Tec Response

Please see response to Issue N-03 in Section 2.1.3.

2.2.18 Issue A-18

Condition	Requirement	Issue sighted
Environmental Management Strategy 6.12.6	The Quarry Manager to undertake a visual assessment annually to assess adequacy of the bushfire control measures implemented.	No records to show that a specific annual visual assessment has been conducted to assess the adequacy of bushfire control measures.

Hy-Tec Response

Visual inspections of the bush fire readiness of the Quarry are undertaken on an ad hoc basis and not formalised or documented and therefore Hy-Tec was unable to demonstrate compliance in this regard during the audit inspection. Particular focus is given to these inspections in the months prior to and during the ‘fire season’, which is recognised to be September/October to 31 March (start of is seasonally dependant) in the Hartley area. There have not been any bush fire incidents at the Quarry in the past, however the Quarry has provided assistance with bush fire fighting in the Blue Mountains, mostly through access to water resources.

Following the audit inspection, the *AQ Environmental Inspection Check List* was compiled for all activities requiring at least monthly inspection. This check list is provided as **Attachment D**. An inspection of fuel sources within fire breaks/buffer zones and water availability for fire-fighting purposes will now be documented through this process.

2.2.19 Issue A-19

Condition	Requirement	Issue sighted
Water Access Licence 25616 MW2337-00001	The following information must be recorded in the logbook for each period of time that water is taken: A. date, volume of water, start and end time when water was taken as well as the pump capacity per unit of time, and B. the access licence number under which the water is taken, and C. the approval number under which the water is taken, and D. the volume of water taken for domestic consumption and/or stock watering.	Water access licence was included in the logbook. While a logbook was maintained which included meter reading, river flow and time recorded at the commencement of pumping, the start and end time was not always recorded.

Hy-Tec Response

A log book record of water pumped from Coxs River under licence has been maintained at the Quarry, however it is acknowledged that not all details required by Water Access Licence 25616 were recorded in this process. It is noted that a photo of the meter was recorded for each pumping event and that critical information regarding the volume of water extracted was available for calculation of the annual water access volumes and these did not exceed the licenced volumes.

The water pumping log book has been updated to record all information required by Water Access Licence 25616. A page from the log book is included as *Attachment H – AQ Water Pumping Log Book*.

2.2.20 Issue A-20

Condition	Requirement	Issue sighted
Water Access Licence 37423 DS2431-00001	Within 6 months of granting this approval, a monitoring plan to measure the water table, groundwater and surface water quality must be submitted to, and approved by, the relevant licensor, Parramatta Office.	While a Water monitoring program has been developed and approved for the site, the Water Monitoring Plan had not been submitted to and approved by NOW within 6 months of granting of the licence.

Hy-Tec Response

It is noted that this requirement is a condition of Water Supply Works Approval 10WA119180 that was issued on 25 March 2015. The Stage 2 Extension Project was approved on 15 July 2015 and focus was placed on the Surface Water Audit and Water Management Improvement Program required under Condition 17, 18 and 19 of Schedule 2 of SSD 6084 and the Water Management Plan required under Condition 20 of Schedule 2 of SSD 6084. The requirements

of SSD 6084 were given priority by Hy-Tec. The Water Management Plan was approved on 16 October 2017 and includes a comprehensive monitoring plan for groundwater levels and for groundwater and surface water quality. The Water Management Plan was prepared in consultation with the Department of Industry – Water and comments received by the Department were addressed in the final version submitted to DPE. At no time was this monitoring plan mentioned during consultation with the Department of Industry – Water.

This requirement was overlooked due to a focus on addressing the requirements of SSD 6084 and reliance upon the comments provided by Department of Industry – Water during consultation and the not unreasonable expectation that all requirements would be noted by Department of Industry – Water in their feedback to Hy-Tec.

3. SUMMARY AND CONCLUSION

The audit report and accompanying checklist identifies that the operation and management of the Austen Quarry remains generally compliant with the conditional requirements of SSD 6084 and the approved management plans. Six non-compliances and 20 administrative non-compliances with the conditions of SSD 6084, the conditions of water access licences and the implementation of the approved management plans required under this consent were identified. There were no non-compliance issues regarding implementation of EPL 12323. It is noted that no non-compliance issues were identified that threatened material environmental harm. However, Hy-Tec acknowledges that further effort is required to ensure that the commitments to the stakeholders (Government agencies, local community, etc.) continue to be actioned, and will continue to follow up on any and all items as required to ensure compliance.

Many of the identified non-compliance issues related to activities that are being undertaken at the Quarry but not formally documented. This meant that Hy-Tec could not demonstrate compliance with these matters but also could not ensure that activities were being implemented on a consistent basis or in accordance with the frequency specified in the relevant conditions of consent. In addition, there were a series of non-compliance issues that are considered ‘technical non-compliances’ and are related to technical administrative matters that are outside of the control of Hy-Tec (generally relating to deadlines for actions).

The actions taken by Quarry management since the audit and in response to the audit findings are summarised as follows.

- Implementation of site-specific training and induction processes to ensure that Quarry personnel and relevant contractors are aware of their environmental management responsibilities.
- Implementation of a range of check lists and documents to guide inspections and monitoring at the Quarry and provide a record of activities.
- Commissioning of a noise consultant on an annual basis to undertake the necessary compliance noise monitoring reviews. Hy-Tec has commissioned an additional compliance noise monitoring campaign, so that three campaigns will occur during the reporting period for the Annual Review (1 July 2017 to 30 June 2018) to demonstrate compliance with the approved noise limits. After this time period ongoing monitoring campaigns will be reviewed with the Department to assess the ongoing monitoring requirements.
- Ensure that weed management and inspections for weeds and feral animals are undertaken in accordance with the approved Landscape Management Plan. Visual inspections will occur quarterly with weed management activities such as spraying and manual weed removal occurring twice each year.
- Hy-Tec will ensure that employees and contractors responsible for revegetation activities are aware of the requirements of the approved Landscape Management Plan and that the replanted areas are monitored with the results of monitoring recorded and remedial actions implemented.

In conclusion, the audit, conducted approximately 12 months since the commencement of operations started under SSD 6084, has identified a range of non-compliances, the majority of which relate to the management and documentation of environmental issues at the Quarry. Hy-Tec considers that with the implementation of the attached training/induction and management documents, the relevant conditions of SSD 6084, water licences and the approved management plans would now be satisfied. As noted in the response, Hy-Tec intends to review and where relevant update the approved management plans to align the approved actions with their practical implementation at the Quarry, given that Quarry management now has more than 12 months experience implementing these plans. All updated management plans will be submitted to DPE for review and approval prior to implementing them.

Attachments

(Total No. of pages including blank pages = 42)

- Attachment A Austen Quarry Site-Specific Training Package incorporating: (8 pages)
- Attachment A1 - AQ Site-Specific Training Package Cover Page (check sheet)
 - Attachment A2 - AQ Site-Specific Safety Induction
 - Attachment A3 - AQ Site-Specific Environmental Management Induction
- Attachment B AQ Heavy Rainfall Inspection Worksheet (6 pages)
- Attachment C AQ Weed Identification Manual (6 pages)
- Attachment D AQ Environmental Inspection Check List (4 pages)
- Attachment E AQ Mobile Plant and Equipment Access to Site Checklist (4 pages)
- Attachment F AQ Vegetation, Topsoil and Overburden Stripping Procedures (4 pages)
- Attachment G AQ Revegetation Monitoring Record (4 pages)
- Attachment H AQ Water Pumping Logbook (4 pages)

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Attachment A

Austen Quarry Site-Specific Training Package incorporating:

- AQ Site-Specific Training Package Cover Page (check sheet)
- AQ Site-Specific Safety Induction
- AQ Site-Specific Environmental Management Induction

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<p>AUSTEN QUARRY SITE SPECIFIC TRAINING PACKAGE COVERPAGE / CHECKLIST</p> <p>This training package cover-page is to be used as a site induction checklist and sign-off for all site employees and contractors working on site.</p> <p>This training package and cover-page is to be completed:</p> <ul style="list-style-type: none"> – Prior to the commencement of any engagement on site as an employee or contractor as part of the sites induction & safety procedures briefing. – At least every 24 months thereafter. – At any stage, should there be a change in operational procedures 	
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Trained in (must tick)	
	Site Specific Induction Safety Briefing
	Online Hy-Tec / ABL Induction
	Environmental Management Induction
<p>The Austen Quarry operates under conditions of development consent that are designed to reduce the potential for adverse impacts to the surrounding environment and to the amenity of our neighbours and the local community.</p> <p>The following management plans and procedures describe the control measures that are currently implemented for management of operations. If there are specific areas in which you need training, please discuss this with the Quarry Production Manager, Quarry Supervisor or person conducting this induction.</p>	
Made aware of (please tick)	Trained in
	Y / N
	Environmental Management Strategy and Plan
	Y / N
	Air Quality Management Plan
	Y / N
	Noise Management Plan
	Y / N
	Transport Management Plan
	Y / N
	Blast Management Plan
	Y / N
	Water Management Plan
	Y / N
	Landscape and Rehabilitation Management Plan
	Y / N
	Biodiversity Offset Management Plan
	Y / N
	Silver-leaved Mountain Gum Management Plan
<p>Other items to be trained in:</p>	
Made aware of (please tick)	Trained in
	Y / N
	Aboriginal Cultural Heritage Awareness Training
	Y / N
	Emergency Response Procedures
	Y / N
	Weed Identification Manual
	Y / N
	Vegetation Clearing and Topsoil Stripping Procedure
	Y / N
	Rehabilitation Monitoring Procedure
	Y / N
	Driver's Code of Conduct
Name of Inductee _____	Name of Inductor _____
Signature & Date _____ / /	Signature & Date _____ / /

Concrete & Aggregates

Adelaide Brighton

HTQY-A-CL-028

Austen Quarry

Safety Management System

"Uncontrolled Copy When Printed"

Appendix 14C

Approved: To be approved

Site Specific Induction

Review Date: 14/07/2018

Please print details CLEARLY – Inductee’s are not permitted into ABL C&A Quarries unless this form is correctly completed.

Inductee’s Name :		Site Pass Number:	
Inductee’s Contact Number :		Inductee’s Company :	
Emergency Contact Name :		C&A Representative	
Emergency Contact Number		Date:	

Note: This induction is to familiarise all persons with Health, Safety & Environment issues whilst attending this quarry. Persons required to conduct work on this site MUST complete an ABL C&A online HSE Induction program, if a person required to travelling around the quarry unsupervised they must complete a Traffic Management Procedure form.

	Safety requirements whilst visiting or working at this Quarry – as advised by ABL C&A representative	Tick Yes
1	Austen Quarry operating hours are: Monday – Thursday: SALES (5am – 9pm).....INDUCTIONS (9am – 4pm) Friday:.....SALES (5am – 8pm) Saturday:.....SALES (5am – 1:00pm) NOTE: Trucks must not arrive at gate or cross Glenroy Bridge before 4:30am, trucks found waiting at the front gate will be sent away. Visitors or contractors arriving outside of these times must notify the Quarry Manager prior to arrival.	
2	UHF Channel 26 is used from the quarry front gate to Weighbridge & Secondary plant; UHF Channel 27 is used for Quarry Pit access haul road.	
3	Anyone arriving at a Hy-Tec Site must sign in on arrival and sign out on departure at the site office. EMERGENCY EVACUATION POINT is located at the site employee & visitor carpark & Primary Plant crib room.	
4	Emergency Alarm is relayed via 2-way radio with the call Emergency, Emergency, Emergency . All Two Way Radio communications must cease until emergency situation is given. When Emergency situation is confirmed, all persons MUST follow instructions given and proceed to designated Evacuation Area.	
5	FIRST AID Kits are located in the Site Office, Workshop, Operation Rooms & Mobile Light Vehicles.	
6	Alcohol and Non Prescription Drugs are not permitted at this Quarry. Random drug and alcohol testing occurs on this site which you will be required to participate in if directed.	
7	No persons UNDER 16 Y.O.A. are allowed on Hy-Tec sites at any time.	
8	Toilets, Meal and washing facilities are located in the Office area & Primary Plant crib room.	
9	Smoking is prohibited within 4 metres of any doorway and Hy-Tec Mobile Plant.	
10	All flora and fauna MUST be protected and given due consideration.	
11	High visibility clothing, long trousers & long sleeve shirt, hard hat & safety footwear must be worn at all times on this quarry site. Hard hats and eye protection are not required when in office areas, vehicles or when operating mobile plant.	
12	Austen Quarry deposit has a high Silica content, whilst on site there is the potential to be exposed to Respirable Crystalline Silica (RCS) as well as other airborne contaminants which are hazardous to your health, if airborne dust is present report to site supervisor. P2 dust masks may be required to be worn in certain areas of the site or when instructed by the site supervisor.	
13	All vehicles MUST have windows up and air-conditioning on circulate whilst travelling around site.	
14	Mobile Vehicles have right of way over pedestrians at all times, pedestrians must use designated walkways and crossings at all times.	
15	Major Hazards: Heavy mobile vehicles, light vehicles, pedestrians, overhead power lines, deep water.	
16	Prior to starting any work on a Hy-Tec site the work must be authorised by a site Process Controller, with a completed ABL Clearance to Work permit.	
17	All substances brought onto the quarry site must be accompanied by a current SDS .	
18	All spillages of oils, fuels etc. Must be reported immediately to the quarry supervisor, it is the contractors responsibility and cost to clean up and dispose any spills.	
19	Report ALL Injuries, Incidents & Near misses immediately to Quarry Management.	


I, the Inductee, am aware of and agree to comply with the above mentioned statements and safety requirements.

Inductee Signature

C&A Rep. Signature

All inductees must complete this site specific induction if they have not attended this quarry within the previous 12 months.

Status: Approved	Owner: HSE Manager	Doc: HTQY-A-CL-028	Rev: 2	Issued: 07/02/2017	Page 1 of 1
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ENVIRONMENTAL MANAGEMENT INDUCTION	
The Austen Quarry is located in a rural area adjacent to the Coxs River and a short distance from the Blue Mountains. Operators and contractors need to be aware of general operational requirements to limit potential environmental impacts and activities that may be the cause of a complaint.	

Noise and Dust Management	
There are several activities that may result in unnecessary noise or cause significant dust emissions. Please be aware of these activities while operating.	Please Tick
Truck noise on roads	
Equipment noise – is the equipment more noisy than usual or requires maintenance.	
Impact noise from material being loaded to trucks.	
Weather conditions causing more than usual dust lift off from roads or stockpiles.	
Do any unsealed roads need watering to limit dust	
Be considerate of neighbours during early mornings and late evenings.	
If you have concerns about any of the above, raise them with the Quarry management (Quarry Manager or applicable supervisor).	

Hydrocarbon Management	
Hydrocarbons are stored and used at the Austen Quarry that may be a potential fire hazard or contamination risk. All hydrocarbons are stored in secured and bunded areas, however it is your responsibility to carefully manage use of these materials.	Please Tick
If working with hydrocarbons, ensure you are familiar with the contents of the spill kits and how these will be applied. The inducting supervisor will be responsible for taking you through this process.	
Ensure you are aware of the locations of spill kits and fire extinguishers in the area you are working.	
Handle all hydrocarbons with appropriate care when refuelling or in maintenance works.	
Clean up spills of diesel fuel or oils immediately using the spill kits provided.	
Smoking is only permitted in designated areas.	
If there is a risk of fire, contamination or the spill might enter a waterbody, report the incident to the Quarry management immediately.	

Waste Management	
Hy-Tec aims to recycle or reuse as much material as possible at the Austen Quarry.	Please Tick
Waste materials at the Austen Quarry should be separated into the following types.	
<ul style="list-style-type: none"> • General refuse • Recyclables – bottles, cardboard, paper • Scrap metals • Tyres • Batteries • Oily wastes • Concrete wastes 	
Ensure you are aware of storage areas for all separated wastes.	
Under no circumstances is waste material to be burnt or buried on site.	
If you are unsure what is required for any waste materials you encounter, please ask the Quarry management.	

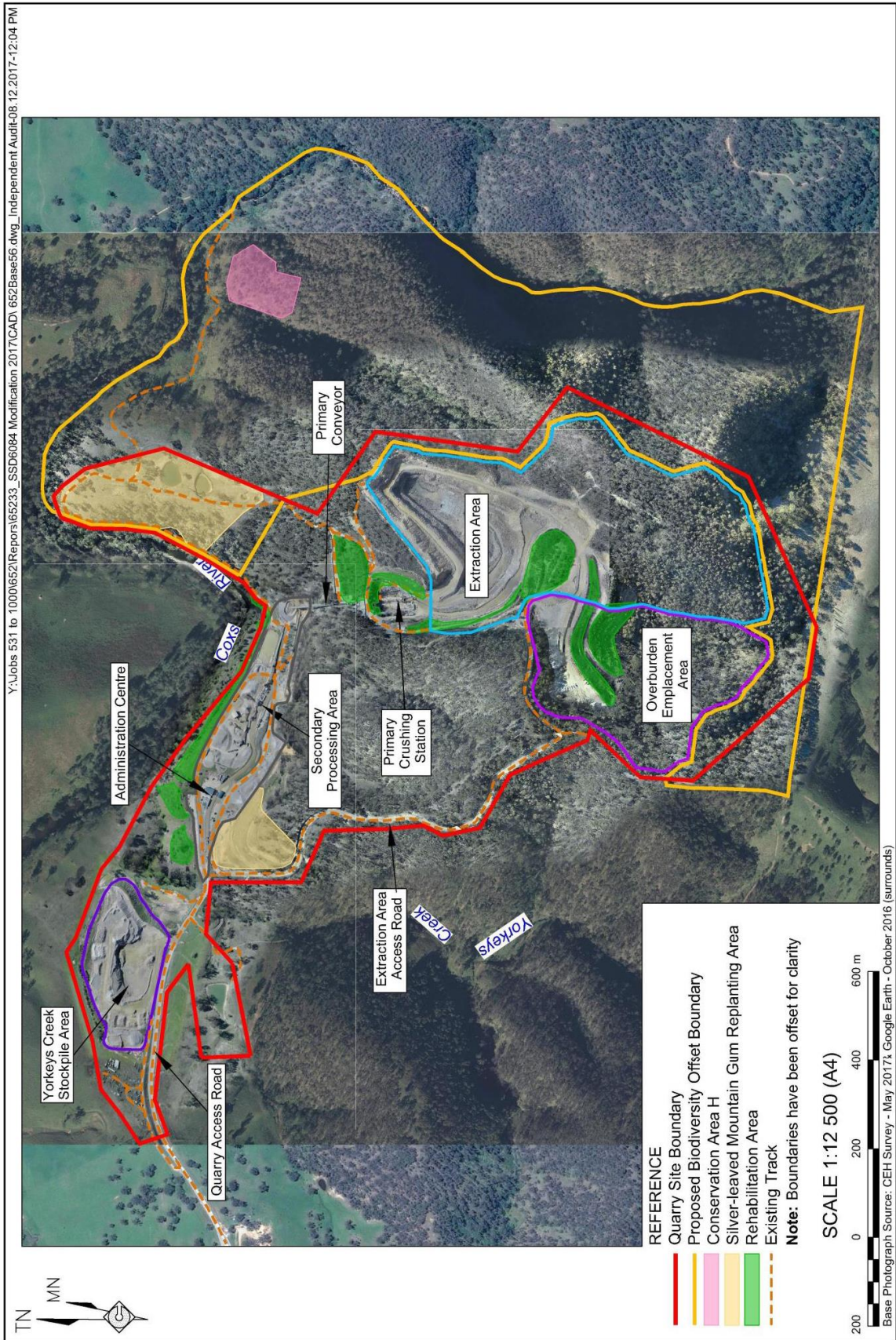
Blast Management	
Blasting activities occur no more than once per week at the Austen Quarry. Blasting is the responsibility of relevant contractors and Quarry management.	Please Tick
Blasting may produce fly rock and blast fumes in rare cases. Please be aware of exclusion/clearance zones on scheduled blasting days and times to ensure you are not at risk.	
Report any observations of blast fumes or fly rock to the Quarry Manager.	
Contractors responsible for blast design, blasting events and monitoring will need to ensure all activities occur in accordance with the approved Blast Management Plan.	

Water Management	
The Austen Quarry implements a water management system to separate clean and dirty water and to ensure that any water from within the site that enters the Coxs River does not damage the aquatic environment.	Please Tick
Report any failure or overflow of dams or other water management structures to the Quarry Supervisor	
Report any failure of pumps or pipelines to the Quarry Supervisor	
Report any unusual evidence of erosion to the Quarry Supervisor	
If you have any queries regarding water management at the site, please ask the Quarry management.	

Aboriginal Cultural Heritage Management	
Any disturbance of land risks disturbing unexpected items of Aboriginal cultural heritage significance.	Please Tick
Please be aware of the possibility of locating isolated artefacts such as arrow heads, flakes or other tools or weapons as well as traditional sites such bora rings or engravings on rock outcrops.	
If you identify any of the above, do not remove the item but immediately inform the Quarry management.	

Flora and Fauna Management	
Hy-Tec manages some areas within the Austen Quarry to conserve the existing native flora and fauna. It is the responsibility of all operators and contractors to limit impacts to native vegetation and animals and ensure that these areas of the site are not inadvertently damaged.	Please Tick
The Austen Quarry is home to a threatened species of plant called the Silver Leafed Mountain Gum (<i>Eucalyptus pulverulenta</i>). Unless the plant is in an area approved for extraction activities, this plant must be protected.	
The Austen Quarry contains several areas that are designated for vegetation and native fauna habitat conservation. These include the following. <ul style="list-style-type: none"> Proposed Biodiversity Offset Area Conservation Area H Rehabilitation Areas Silver Leafed Mountain Gum Replanting Area The attached figure shows the location of these areas. All native flora and fauna is to be protected in these areas.	
The attached figure displays the existing access roads within the Quarry. All operators and contractors must drive on these tracks unless there is an emergency.	
Please report all sightings of feral animals including cats, dogs, rabbits, rats, goats and foxes to the Quarry Supervisor.	
Please report significant weed infestations to the Quarry Supervisor.	
Please report any dead or dying vegetation to the Quarry Supervisor	
If you are unsure if you should be operating in an area, please check with the Quarry management.	

Name of Inductee _____	Name of Inductor _____
Signature & Date _____ / /	Signature & Date _____ / /



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Attachment B

AQ Heavy Rainfall Inspection Worksheet

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Standard Inspection Form

Quarry Water Management System Integrity Inspection

following events of high rainfall

Section 1: Inspection Details			
Following high intensity rainfall, full Quarry inspection for resulting damage.			
Site – Austen Quarry	Date of Inspection		
<p>Information; After heavy rain events a full site inspection is required of all dams, runoff areas, roads, and banks, anywhere that water erosion or retention wall weakening may have occurred. The primary objective is to ensure that dirty water from the Quarry is not entering the Coxs River, and to inspect any erosion which may have occurred during the heavy rainfall period.</p> <p>The inspection should involve all of the site, pipelines, roadways, and haul roads for erosion, licensed release points, contour runoff areas, dam inspections for bank stability and water capacity levels. Any significant weathering or damage should be noted and appropriate steps taken.</p>			
Dam Inspected	In good working condition	Needs Attention	Comments
Settlement Dam 1 –(EPL 1) -Surge Pile-			
Settlement Dam 2 –(EPL 8) -Bottom of Yorkies-			
Settlement Dam 3 –(EPL 9) -Bottom of Overburden-			
Settlement Dam 4 Upper –(EPL 10) -Back Settlement Dam Upper-			
Settlement Dam 4 Lower -Back Settlement Dam Lower-			
Settlement Dam 5 Lower –(EPL11) -Opposite Yorkies Lower-			
Settlement Dam 5 Upper -Opposite Yorkies Upper-			

Last Modified;	High Intensity Rainfall Inspection Checklist
Approved By;	Page 1

Sediment Basin Inspected	In good working condition	Needs Attention	Comments
Basin 1 (Silt Trap) -Main Haul Road			
Basin 2 (Silt Trap) -Main Haul Road			
Basin 3 (Silt Trap) -Main Haul Road			
Basin 4 (Silt Trap) -Main Haul Road			
Basin 5 (Silt Trap) - South Side of Quarry Driveway			
Basin 6 (Silt Trap) - South Side of Quarry Driveway			
Basin 7 (Silt Trap) - North Side of Quarry Driveway, above SB-2b			

Clean Water Storage Dam	In good working condition	Needs Attention	Comments
Dam 1 -Behind Stockpiles opposite office			
Dam 2 -Behind Scalps			

Bund Wall Integrity	In good working condition	Needs Attention	Comments
Overburden Pile			
Yorkies			
Pit Bund Walls			

Last Modified;	High Intensity Rainfall Inspection Checklist
Approved By;	Page 2

Unsealed Road Integrity	In good working condition	Needs Attention	Comments
Office Area, Including Upper Stockpiles			
Bottom Plant Access Ramps			
Bottom Plant			
Around Surge Pile			
Yorkies Access Roads			
Main Haul Road			
Overburden Access Roads			
Pit Access Roads			
Coxs River Access Road			

Additional Comments:

Last Modified;	High Intensity Rainfall Inspection Checklist
Approved By;	Page 3

Appendix A – Inspection Locations




Last Modified;	High Intensity Rainfall Inspection Checklist
Approved By;	Page 4



Attachment C



AQ Weed Identification Manual

(Total No. of pages including blank pages = 6)


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WEED IDENTIFICATION MANUAL	
<p>Ecological surveys of the Austen Quarry site have identified that the following weed species occur within the site. The following summary of weed species provides an overview of weed habitat, flowering periods and treatment.</p> <p>If weed infestations of any of these species are identified within the site please notify the Quarry Production Manager or Quarry Supervisor.</p>	


 	Name of Weed:	<i>Eragrostis curvula</i> (African lovegrass)
	Biosecurity Duty (Central Tablelands)	General - prevent, eliminate or minimise any biosecurity risk
	Habitat:	Along roads and in grazing areas in sandy soils or soils with low fertility. 30 cm to 120 cm tall
	Flowering period:	November to April. Can seed anytime during the year.
	Timing and Method for Management:	September to March. Herbicide spraying and sowing/managing pastures to outcompete the plant. Spraying alone may not be effective. Prevent spread (through vehicles or machinery). Regular monitoring for infestations.


 	Name of Weed:	<i>Rubus fruticosus</i> agg. Spp. (Blackberry)
	Biosecurity Duty (Central Tablelands)	Prohibition on Dealings: Must not be imported or sold (excluding some commercial varieties)
	Habitat:	Australia-wide weed infestations grow in most locations where there is sufficient rainfall.
	Flowering period:	White or pink flowers 2-3 cm in diameter appear from November to January.
	Timing for Management:	Prevention where possible, or spraying during flowering period. Requires ongoing and long-term management in form of: <ul style="list-style-type: none"> - Hand weeding and slashing - Spraying with herbicides - Grazing (goats are best) - Pasture management to out compete weeds.

	Name of Weed:	<i>Nassella trichotoma</i> (Serrated tussock)
	Biosecurity Duty (Central Tablelands)	Prohibition on Dealings: Must not be imported or sold. Recommended Measure: Limit risk of introduction and mitigate possible spread.
	Habitat:	Appears in grazing lands, grassy woodlands and forests
	Flowering period:	Anytime except June/July
	Timing for Management:	February to October Treatment of this weed may involve the following. <ul style="list-style-type: none"> - Chipping or grubbing out manually - Spraying with herbicides - Pasture management to out-compete weeds.

	Name of Weed:	<i>Conium maculatum</i> (Hemlock)
	Biosecurity Duty (Central Tablelands):	General - prevent, eliminate or minimise any biosecurity risk
	Habitat:	Appears in disturbed areas such as stockyards and along roadsides and riverbanks. Plant is highly toxic to humans and livestock
	Flowering period:	Spring
	Timing for Management:	All year in regular intervals. Use herbicides for management.

	Name of Weed:	<i>Onopordum spp.</i> (Scotch, Stemless, Illyrian and Taurian thistles)
	Biosecurity Duty (Central Tablelands)	General - prevent, eliminate or minimise any biosecurity risk
	Habitat:	Mainly pasture areas with moderate to high rainfall. Prefers soils that are well drained and of moderate to high fertility.
	Flowering period:	October to February
	Timing for Management:	September to December. Treatment of this weed may involve the following. <ul style="list-style-type: none"> - Chipping or grubbing out manually - Spraying with herbicides - Pasture management to out-compete weeds.

	Name of Weed:	<i>Hypericum perforatum</i> (St John's wort)
	Biosecurity Duty (Central Tablelands):	Recommended Measure: Limit risk of introduction and mitigate possible spread.
	Habitat:	It is found in pastures, water catchment reserves, forests and national parks. It is most suited to areas receiving more than 600 mm annual rainfall and above 500 m altitude.
	Flowering period:	October to April
	Timing for Management:	November to January. Treatment of this weed may involve the following. <ul style="list-style-type: none"> - Chipping or grubbing out manually - Spraying with herbicides - Burning - Pasture management to out-compete weeds.

	Name of Weed:	<i>Rosa rubiginosa</i> (Sweet briar)
	Biosecurity Duty (Central Tablelands):	General - prevent, eliminate or minimise any biosecurity risk
	Habitat:	Small 1.5m to 3m shrub common in cooler areas with high rainfall. Found in unimproved grasslands and disturbed bushland. It prefers well-drained areas of moderate fertility with little competition and light grazing. The weed can grow on most soil types.
	Flowering period:	October to December
	Timing for Management:	November to March (foliar spraying is most effective). Treatment of this weed may involve the following. <ul style="list-style-type: none"> - Slashing and deep ploughing or ripping in winter to bring the roots to the surface - Spraying with herbicides - Grazing with goats - Pasture management to out-compete weeds.

Name of Trainee _____	Name of Trainer _____
Signature & Date _____ / /	Signature & Date _____ / /

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Attachment D

AQ Environmental Inspection Check List

(Total No. of pages including blank pages = 4)

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HY-TEC Industries - Austen Quarry
Monthly Environmental Inspection Check List

By Whom: _____

Signature: _____

Category:	Checklist:	Timing:	Initial each item inspected, circle relevant month				Notes / Comments:	
			Monthly Feb. Mar. Aug. Sep. Nov. Dec	Quarterly April. October	Half Yearly July	Annually January		
Environmental Management Strategy	Perimeter and area check (markers, fencing, flagging etc.)	Monthly						
	Pit boundary inspection	Monthly						
	Quarry boundary inspection	Monthly					Any breaches to be rectified with 4 weeks if breach identified, date fixed: / /	
	Inspection of areas around refuelling locations and chemical stores	Monthly					Areas are clean and free of spills / waste	
	Spill kit inspections	Quarterly					Ensure all kits are available and in working condition	
	Safety Data Sheets (SDS) maintained for site	Biannual Check of Records					Are records accurate and up to date?	
	Lighting inspection	Monthly					General check of lighting - glow experienced by neighbours is minimised.	
	E Sampler check	Monthly					Functioning and data downloaded	
	Weather station check	Monthly					Functioning and data downloaded	
	Dust monitoring stations check	Monthly					Take sample for analysis	
	Rehabilitation areas inspection	Monthly					Condition of rehabilitation areas	
	Seed/grass propagation	Monthly					Condition of seed/grass	
	Tree/tube stock propagation	Monthly					Condition of saplings	
Environmental Safety	Topsoil stockpile inspection	Monthly					Topsoil stockpiles are not eroding and have stabilising groundcover	
	Revegetation Inspection	Periodically in first year (1/3/6/12 months) and then every two years					Inspection checklist to be completed.	
	Weed in spections	Quarterly visual inspection					Visual check for infestations.	
	Weed inspections	Commission Biannual Weed Treatment					Professional spraying	
	Visual Amenity - At external vantage point	Biannual photo record at Hassans Walls					Photos taken for annual reporting	
	Evacuation access roads	Quarterly					Access not limited / restricted	
	Quarry pit evacuation access	Monthly					Access not limited / restricted	
	EPL point signage	Monthly					Signage in good condition	
	Check fire breaks/buffer zones for fuel sources	Annually Prior to Fire Season						
	Check access to water sources for firefighting purposes	Annually Prior to Fire Season						
	Livestock / flora / fauna	Flora & fauna monitoring	Commission Consultant for Annual Monitoring					Commission ecologists for spring surveys
		Feral animal sightings/signs	Monthly					Report any sightings or evidence.
		Livestock sightings/signs	Monthly					Report any sightings or evidence.

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Attachment E

AQ Mobile Plant and Equipment Access to Site Checklist

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Concrete & Aggregates

HTA-S-SFT-050

Austen Quarry

Safety Management System

Appendix 12Q

“Uncontrolled Copy When Printed”

Mobile Plant and Equipment Access to Site Checklist

Plant Owner:												Date:			
Make:		Model:										Equipment ID (Rego/vin)			
Circle Applicable Item of Plant															
Mobile Screen	Front End Loader	Backhoe	Drill Rig	Air compressor, water trucks	Crane *note	Dozer / Tractor	Excavator/ Trencher	Forklift	Grader	Petro/diesel pump	Elevated Work Platform	Skid Steer loader	Dump Truck	Trailer	Other
✓ Appropriate Columns															
Compliant								Non Compliant		Not Applicable		Comments			
Current Registration / Conditional Registration Certificate															
Current Pressure Vessel Certificate															
Operating Manual and Logbook Supplied															
Statutory Inspections up to date (*note)															
Equipment is in fit state to work (No current defects identified in logbook)															
Fault reporting / rectification system used															
Daily safety inspection procedures / checklists supplied															
All braking systems (Retarder, Emergency and park) inspected/tested as per OEM															
Steering system (normal & emergency) inspected/tested as per OEM															
Lights working (warning, flashing, headlights, reversing, working)															
Reverse Siren fitted and working															
Fire Extinguisher supplied and in current test date															
Seat belt or personal restraining device fitted and working correctly.															
Air conditioning unit fitted and working correctly															
Tools, leads and safety switches inspected and electrical Test & Tag in date															
Hoses, fittings, cables, plugs, switches and controls inspected and in good condition															
Any visual leaks to hoses or fittings.															
Pins and bushes good condition, all safety clips/pins attached correctly.															

Concrete & Aggregates

HTA-S-SFT-050

Austen Quarry

Safety Management System

“Uncontrolled Copy When Printed”

✓ Appropriate Columns			
Compliant	Non Compliant	Not Applicable	Comments
			Operators trained and licenced
			Warning and instructions displayed
			Tyres / tracks serviceable, fitted correctly and in good condition
			SWL of lifting equipment displayed / Compliance plate fitted
			Manufacturers guarding fitted.
			Emergency stops / lanyards appropriately placed, clearly identified and working correctly
			LPG cylinders within ten year stamp and in good condition
			All work platforms have secure handrails and access ladders fitted and in good condition
			ROP's and FOP's fitted and in good condition
			Two way radio fitted or supplied
			Mobile plant and equipment is free of soil and vegetation.
			Mobile plant and equipment is free of soil and vegetation before exit from site.
			Other:

Equipment's Authorised Company Representative
 (Company name that owns the equipment) have completed the above checklist and certify ABL Concrete & Aggregates have been supplied with the necessary Operating Instructions to ensure the safe use of the above identified equipment, that the equipment is in a safe condition and is "fit for purpose" when used in accordance with the Operating Instructions supplied.

Name: (Please Print)	Signature:	Date:
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ABL C&A Authorised Representative
 I have inspected the above identified equipment and checked the necessary controls as set out in this checklist.

Name: (Please Print)	Signature:	Date:
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*Note: Certificate of yearly inspection is required and if older than 10 years, a 10 years major inspection certificate must also be provided.

Attachment F

AQ Vegetation, Topsoil and Overburden Stripping Procedures

(Total No. of pages including blank pages = 4)

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VEGETATION, TOPSPOIL AND OVERBURDEN STRIPPING PROCEDURES	
This form must be completed prior to stripping land of any vegetation, topsoil or overburden.	

Personnel Name and Date of Activities:				
Proposed work activities (circle one or more):	Vegetation:	Clearing	Topsoil:	Stripping and Placing
	Vegetation:	Moving / Placing	Overburden:	Management
Date	Action			Satisfied
Procedure A) - Vegetation Clearing				(Please Tick)
/ /	Vegetation clearing is to occur between April and September, where possible			
/ /	Ensure that a pre-clearance survey has been completed			
/ /	Relocate any identified native fauna as advised by a suitably trained person.			
/ /	Identify trees with hollows in the area to be cleared and nudge these trees with equipment first to give native fauna an opportunity to escape.			
Procedure B) – Vegetation Moving and Placing				
/ /	Transfer any tree crowns with seed to areas under rehabilitation to assist natural revegetation.			
/ /	Separate tree hollows and replace or rehang hollows in areas under rehabilitation			
/ /	Trunks and major limbs are to be retained for placement in areas under rehabilitation			
/ /	Offcuts and other remaining timber may be mulched, sold or split for firewood or fence posts.			
Procedure C) - Topsoil Stripping and Placing				
/ /	Topsoil stripping and placing will not occur during wet or extremely dry conditions.			
/ /	Strip topsoil to a depth of 300mm or to top of usable resource rock if less than 300mm (soil material below this level is considered overburden)			
/ /	Avoid the need to double handle topsoil material.			
/ /	If available, preferentially replace topsoil directly on rehabilitation areas.			
/ /	Place topsoil in stockpile areas and, if needed, spray with herbicide to limit weed infestation.			
/ /	Stockpiles will not exceed 2m in height			
/ /	Immediately seed the stockpile with a stabilising groundcover or herb/shrub layer.			
/ /	Locate topsoil stockpiles in areas away from mobile equipment to limit compaction of the material			
/ /	Mark topsoil stockpile locations on a map for future reference.			
Procedure D) – Overburden Management				
/ /	Avoid moving overburden during wet or extremely dry conditions.			
/ /	Overburden is to be stripped to the depth of the weathered bedrock			
/ /	Place overburden in the overburden emplacement area and, if needed, spray with herbicide to limit weed infestation.			
/ /	At the end of the stripping campaign, seed the stockpile with a stabilising groundcover or herb/shrub layer.			

Name of supervisor overseeing work			
Signature & Date		/	/


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Attachment G

AQ Revegetation Monitoring Record

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REVEGETATION MONITORING RECORD	
<p>Revegetation monitoring records and actions required for all areas subject to revegetation procedures.</p> <p>Quarry personnel are responsible for inspection of replanted areas at intervals of 3 months, 6 months and 12 months following planting. Monitoring after this time is to occur every 2 years in conjunction with annual ecological monitoring.</p>	

Contractor / Person Responsible for Planting				
Plants Used (attach list if needed)	Species	Area Planted	Date Planted	Number

1 Month Monitoring		
Person Conducting Monitoring		
Date		
Status	Comments	Completed (please tick)
Condition of plants	Good/Moderate/Poor Evidence of disease or dieback:	
Estimate number of dead or dying plants.	Percentage of total planted: (Survival rates below 85% will require remedial planting)	
Evidence of herbivores		
Photographic evidence taken		
Action needed		
Signature		Date

3 Month Monitoring		
Person Conducting Monitoring		
Date		
Status	Comments	Completed (please tick)
Condition of plants	Good/Moderate/Poor Evidence of disease or dieback:	
Estimate number of dead or dying plants.	Percentage of total planted: (Survival rates below 85% will require remedial planting)	
Evidence of herbivores		
Photographic evidence taken		
Action needed		
Signature		Date

6 Month Monitoring		
Person Conducting Monitoring		
Date		
Status	Comments	Completed (please tick)
Condition of plants	Good/Moderate/Poor Evidence of disease or dieback:	
Estimate number of dead or dying plants.	Percentage of total planted: (Survival rates below 85% will require remedial planting)	
Evidence of herbivores		
Photographic evidence taken		
Action needed		
Signature		Date

12 Month Monitoring		
Person Conducting Monitoring		
Date		
Status	Comments	Completed (please tick)
Condition of plants	Good/Moderate/Poor Evidence of disease or dieback:	
Estimate number of dead or dying plants.	Percentage of total planted: (Survival rates below 85% will require remedial planting)	
Evidence of herbivores		
Photographic evidence taken		
Action needed		
Signature		Date


Quarry Production Manager or Quarry Supervisor Sign-off on Final Monitoring		
Name:		
Vegetation surviving without Quarry personnel management.	Yes / No	Comment:
Records and photos of monitoring complete.	Yes / No	Comment:
Name		Date
Signature		

Attachment H

AQ Water Pumping Logbook

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WATER EXTRACTION LOG BOOK	
Water Access Licence 25616 requires that a log book be maintained to accurately record water pumped from the Coxs River. Water Access Licence 25616 permits extraction of 20ML (20 shares) over a 12-month period. Water levels in the Coxs River (Island Hill Gauge 212045) may be identified from the Department of Industry – Water website or from the Water Liver app.	

Date:		
Location / Destination:		
Flow Level at the Island Hill gauge (212045) (rising/falling)		
Meter reading at start:		
Meter reading at finish:		
Total water extracted:		
Water Extracted to date (July to June)		
Duration of pumping and pump capacity:		
Weather observations:		

Date:		
Location / Destination:		
Flow Level at the Island Hill gauge (212045) (rising/falling)		
Meter reading at start:		
Meter reading at finish:		
Total water extracted:		
Water Extracted to date (July to June)		
Duration of pumping and pump capacity:		
Weather observations:		

Date:		
Location / Destination:		
Flow Level at the Island Hill gauge (212045) (rising/falling)		
Meter reading at start:		
Meter reading at finish:		
Total water extracted:		
Water Extracted to date (July to June)		
Duration of pumping and pump capacity:		
Weather observations:		

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