



Karuah East Quarry

Response to Audit Recommendations



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ARA	Appropriate Regulatory Authority
the auditor	Approved audit team
BMP	Blast Management Plan
BOAMP	Biodiversity Offset Area Management Plan
the Department	Department of Planning, Industry and Environment
EMS	Environmental Management Strategy
EPA	NSW Environmental Protection Authority
EPL	Environmental Protection Licence 20611
IEA	Independent Environmental Audit
KEQPL	Karuah East Quarry Proprietary Limited
LRMP	Landscape & Rehabilitation Management Plan
NMP	Noise Management Plan
PIRMP	Pollution Incident Response Management Plan
Project Approval	Project Approval 09_0175
RAR	Response to Audit Recommendations
TJ	Tetralthea juncea
TJTMP	Tetralthea juncea Translocation Management Plan

1 INTRODUCTION

Hansen Bailey were engaged by KEQPL to undertake an (IEA) for *Project Approval 09_0175* in line with *Schedule 5 condition 9*. The auditor attended site on 27 August 2020 to commence the audit. This document contains a response from KEQPL to the audit findings, outlining actions and the timing of such actions that are to be taken in response to each non-compliance. As well as addressing any recommendations and opportunities for improvement identified by the auditor.

2 NON-COMPLIANCES

Each of the non-compliances identified by the auditor during the IEA are detailed in **Table 1**.

Table 1 KEQ project non-compliances, as detailed in the Karuah East Quarry Independent Environmental Audit Report (Hansen Bailey, 2020)

Ref	Non-Compliance
PA 09_0175 (as modified)	
Schedule 2, Condition 2(a)	Non-compliances against the conditions of PA 09_0175 were identified as discussed below.
Schedule 2, Condition 8	Evidence was not available at the time of audit to confirm that construction and occupation certificates were obtained for infrastructure constructed during the audit period.
Schedule 2, Condition 11	(a) Records of one-off contribution to Council for Headquarters Building were not available at the time of audit. (b) Records of annual contributions to Council for road maintenance in the 2019/20 Financial Year were not available at the time of audit.
Schedule 2, Condition 14	(a) Evidence of reporting for the 2017/18 period was not available at the time of audit. However, it is noted that this data was reported in the audit period Annual Reviews and the Regulator did not raise any issues in relation to this requirement.
Schedule 3, Condition 3	Noise levels exceeded the noise criteria on three occasions during the period: - 14/02/18 at Loc G: an estimated quarry noise level of 43 LAeq,15min exceeded the 38 LAeq,15min criterion; - 17/05/18 at Loc G: an estimated quarry noise level of 46 LAeq,15min exceeded the 38 LAeq,15min criterion; and - 14/08/18 at Loc G: an estimated quarry noise level of 47 LAeq,15min exceeded the 38 LAeq,15min criterion.
	Noise consultants' reports appended to the Annual Reviews include noise measurements at the quarry weighbridge representing receptors A and B only for the period September 2018 to June 2020, however not for other noise surveys during the audit period.
Schedule 3, Condition 6	(c) Site operations did not comply with the noise criterion at Location G in February, May and August 2018 and site operations were stopped at the end of August 2018 to address noise issues. Since that time, there is no evidence of regular assessment, however quarterly monitoring has not identified the need to modify or stop operations to ensure compliance with noise criteria.
Schedule 3, Condition 7	There is no evidence that reported exceedances of the noise criteria in Q1 to Q3 2018 triggered an evaluation of the noise management system or any changes to noise management measures.
Schedule 3, Condition 11	Evidence that written agreements with landholders within 500 m of project blasting was not available at the time of audit.
Schedule 3, Condition 16	In June and December of 2017, HVAS monitor filters were not changed at the correct time leading to an overrun of the sample. Filters were changed as soon as errors were identified.
Schedule 3, Condition 19	Uncontrolled and controlled discharges from sediment dams in exceedance of discharge limits occurred during the audit period in 2017, 2018 and 2019.
Schedule 3, Condition 21	The surface water monitoring does not include a program for the monitoring of stream ecosystem health.

Ref	Non-Compliance
	<p>A non-compliance with the WMP was recorded in 2017 due to frequency of groundwater level monitoring (as reported in Section 7.4.2 of the 2017 Annual Review). Quarterly monitoring commenced in accordance with the required frequency in October 2017; prior to this date monitoring had been undertaken on a six-monthly basis.</p> <p>Section 7.4.2 of the 2017 Annual Review notes that an Official Caution was received from the (then) DPE on 16/10/17 regarding this non-compliance.</p>
Schedule 3, Condition 23	<p>(a) Production records are reported in the audit period Annual Reviews, however the transportation of product from site per calendar month and the number of laden truck movements is not reported.</p> <p>(b) Viewed KEQ website on 17/8/20 and quarterly truck movement records were not available.</p>
Schedule 3, Condition 27	<p>(e) Tetratheca Juncea Management Plan (TJMP) Table 8 indicates this condition is addressed within Section 8, however the section does not contain any performance criteria. The previous IEA indicated administrative non-compliance due to the absence of performance criteria. The previous audit recommended an update to the plan, however no updates appear to have been made.</p> <p>(f) No comments on general plant health, individual identification, photo point monitoring are included in the TJMP monitoring reports.</p>
Schedule 3, Condition 28	<p>The Biodiversity Offset Strategy Finalisation letter (as referenced in Section 2.2 and Appendix 2 in the BOAMP) and evidence of consultation with OEH (now BCD) and Council was not available for review at the time of audit.</p>
Schedule 3, Condition 29	<p>Arrangements for the Biodiversity Offset Strategy long-term securities were not agreed and approved by DPIE within 12 months of the strategy being finalised.</p>
Schedule 3, Condition 32	<p>The revisions detailed in Table 2 of the Landscape and Rehabilitation Management Plan (LRMP) do not describe updating the measures to implemented over the three year period. The condition requires update every three years following initial preparation of the plan, in this case being November 2018.</p>
	<p>Chapters 6-9 of the LRMP detail management measures, however the plan does not specify which activities will occur over the next three years of the plan.</p>

Ref	Non-Compliance
	<p>Records were not available at the time of audit to confirm that the following measures for the LRMP were implemented during the audit period:</p> <ul style="list-style-type: none"> - Induction process for biodiversity impacts; - Evidence of submission of Vegetation Clearing Completion Reports to OEH; - Reporting of designs and completion for fauna habitat crossings; - Evidence of seed collection; - Evidence of weed and pest management; and - Evidence of temporary rehabilitation management.
Schedule 3, Condition 35	No evidence was available at the time of audit to confirm that the Conservation and Rehabilitation Bond was reviewed within three months of the previous IEA.
Schedule 4, Condition 1	<p>(a) Correspondence was not provided to affected landholders regarding exceedances of Project Approval impact criteria during the audit period.</p> <p>(b) "Mine Dust and You" fact sheets were not provided to landholders where exceedances of air quality criteria were identified during the audit period.</p>
Schedule 5, Condition 2	Evidence was not available at the time of audit to confirm that reports were provided to DPIE which reviewed control measures and remedial actions required following identified exceedances.
Schedule 5, Condition 5	(a – d) No evidence was available at the time of audit to confirm that KEQ had reviewed strategies, plans and programs required under the approval following audit period Annual Reviews, incidents, audit reports and modifications.
Schedule 5, Condition 7	Evidence was not available at the time of audit to confirm that KEQ had notified DPIE and other relevant regulatory agencies of all environmental incidents.
Schedule 5, Condition 7A	Evidence was not available at the time of audit to confirm that KEQ had notified DPIE and other relevant regulatory agencies of all environmental non-compliances that occurred during the audit period (see Schedule 3, Conditions 3, 4, 6, 7, 19, 21 above).
Schedule 5, Condition 11	The response to the previous IEA recommendations was not available on the KEQ website at the time of audit.
PA 09_0175 (as modified) SOCs	
SoC 3.1, 3.3	Evidence was not available to confirm that topsoil was stripped to the recommended depths under this SoC.
SoC 3.3 (Dams)	Exceedances of water discharge criteria under PA 09_0175 and EPL 20611 were recorded during the audit period.

Ref	Non-Compliance
	Uncontrolled discharge events from site occurred during the audit period from Dams 1 – 3.
SoC 3.3. (SW Mgt System)	See EPL 20611 conditions L2.1, L2.2. Evidence was not available to confirm that all exceedances were reported to EPA within the required timeframes.
SoC 4.1 (Vegetation Clearing Management)	Chain wire exclusion fencing was seen to be in place along the southern boundary and sections of the site adjacent to quarry haulage and infrastructure areas, however it does not encompass the entire quarry footprint.
SoC 4.1 (Fauna Management)	Section 6.3.6 of the LRMP includes a requirement to provide Vegetation Clearing Reports to OEHL. Evidence of submission of reports to OEHL for all progressive clearing events during the audit period was not available at the time of audit.
SoC 5	Alternative noise mitigation controls to the barrier identified under this SoC were installed for the stockpile and stacker locations during the audit period, in consultation with EPA.
SoC 11.1	Records were not available to confirm topsoil stripped during the audit period was in optimum condition for stripping.
SoC 11.2	A copy of the KEQ rehabilitation bond was not available for review at the time of audit.
EPL 20611	
Condition L1.1	Some discharges during the audit period exceeded the concentration limits prescribed by Condition L2.4, thereby contravening Section 120 of the POEO Act (see Condition L2.1 below).
Condition L2.1, L2.2	<p>Uncontrolled and controlled discharges from sediment dams in exceedance of EPL discharge limits occurred during the audit period in 2017, 2018 and 2019.</p> <p>KEQ self-reported the June 2019 discharge exceedances to EPA on 26/06/19 and EPA provided an associated 'Show Cause Notice' on 27/06/19. KEQ provided a response to the Show Cause/notice on 02/08/19. EPA issued a Penalty Infringement Notice for the 24 June 2019 discharge and Formal Warning regarding the other discharge events of 24 - 27 June 2019 via letter dated 15/08/19.</p>
Condition L4.1	Quarry noise levels exceeded the noise criteria on three occasions during the audit period.
	Monthly monitoring reports and the Annual Reviews do not report quarry noise levels at the weighbridge and calculated levels at receptors A and B for any quarters.
Condition O7.1	Acoustic bunding for site infrastructure identified in the EA (ADW Johnson, 2013) was not constructed prior to the commencement of quarrying operations. See Schedule 3, Condition 7 of PA 09_0175.

Ref	Non-Compliance
Condition M8.1	(b) Noise monitoring results are reported for Residences F and G, however not for the other residences. Consultant reports for the period September 2018 to May 2019 included a noise monitoring location representative of these receptors, however that time period did not include quarry operation.
R2	Evidence was not available at the time of audit to confirm that incidents which occurred during the audit period were reported to EPA as required under this condition.
R4.3	<p>The noise consultants reports and KEQ monthly monitoring reports include assessment of compliance with the noise limits, however they do not include:</p> <ul style="list-style-type: none"> (a) description of the plant in operation and activities during each noise monitoring assessment; and (c) an outline of any management actions taken to address any exceedances."

3 AUDITOR RECOMMENDATIONS

KEQPL have reviewed the IEA report prepared by the auditor and provided a response to the recommendations. **Table 2** details KEQPL's responses to the audit findings, including the actions and the timing of such actions that are to be taken in response to each recommendation.

Table 2 KEQ project recommendations, as detailed in the Karuah East Quarry Independent Environmental Audit Report (Hansen Bailey, 2020)

Ref	Recommendation Description	KEQPL Response/Actions	KEQPL Action Timeframe
PA 09_0175 (as modified)			
Schedule 2, Condition 8	It is recommended that KEQPL confirms that construction and occupation certificates for site infrastructure are in place.	KEQPL have engaged BCA Certifiers Australia Pty Ltd to undertake an assessment of structures at Karuah East Quarry and associated design documents, with the ultimate goal to have all relevant structures certified.	31/01/2021
Schedule 2, Condition 11	It is recommended that KEQPL confirms that the developer contributions to Council required during the audit period have been made.	KEQPL are investigating payments made to MidCoast Council to ensure that all required developer contribution payments have been made. If payments have not been made, KEQPL will consult with Council to establish a payment plan.	31/01/2020
Schedule 3, Condition 3	<p>Pending any further directions from EPA and/or DPIE, it is recommended that noise consultant's monitoring reports are updated to include the following additional details:</p> <ol style="list-style-type: none"> 1. Instrument details and a copy of current instrument calibration certificates as required by relevant Australian Standards. 2. Measurement results for a location representative of Residences A to E and calculated quarry noise levels to these residences, including calculation details and justification of the calculation method. 3. Detailed assessment and reporting of modifying factors as required by relevant policies and conditions, at least including tonal and low frequency characteristics. 4. Traffic noise measurements at the potentially most affected receptors as required by Schedule 3, Condition 4. 	KEQPL have been working in consultation with the Department and EPA towards a modification of the Project Approval. Draft conditions were issued 13/10/20. Upon approval of this acoustic modification, KEQPL will seek a variation of the EPL to ensure that commitments between the two documents (Project Approval and EPL) are aligned. At this stage, KEPLQ will additionally review and where necessary revise the NMP. This will include measures for noise monitoring reports to includes details recommended by the auditor.	30/04/2021
Schedule 3, Condition 4	It is recommended that unattended monitoring charts are included in the monthly monitoring reports as required by Section 8.4 of the NMP, or revise the NMP to not require these charts.	As discussed above, following approval of the acoustic medication, KEQPL will review the NMP and revise where necessary to reflect changes in the Consent conditions and EPL (post variation).	30/04/2021

Ref	Recommendation Description	KEQPL Response/Actions	KEQPL Action Timeframe
Schedule 3, Condition 6	Consider carrying out a review of noise monitoring results upon receipt of each noise compliance report, to reduce response time in the event of non-compliance with criteria or other noise issues.	<p>KEQPL are committed to operating in a compliant manner. When specialist/technical reports are prepared, they are reviewed as soon as practical then lodged with the ARA.</p> <p>KEQPL will take this recommendation into consideration in the process of reviewing management plans and associated procedures.</p>	N/A
Schedule 3, Condition 7	It is recommended that the Noise Management Plan is revised to reflect the noise mitigation measures that were adopted by KEQ following completion of the Thearle Acoustics review that are in addition to or change the noise management commitments in the KEQ EA.	As discussed above, following approval of the acoustic medication, KEQPL will review the NMP and revise where necessary to reflect changes in the Consent conditions and EPL (post variation).	30/04/2021
Schedule 3, Condition 11	It is recommended that KEQ consult with relevant private landholders and seek to enter into written agreements to allow blasting within 500 m of their land.	<p>KEQPL have operated in accordance with the approved Blast Management Plan (2015) which identifies that there are no residents/receivers within 500 metres from the potentially nearest blasting areas. Refer to <i>Section 3.4 – Sensitive Receivers</i> of the <i>Karuah East Quarry Blast Management Plan</i> for further details.</p> <p>KEQPL have never received a community complaint regarding blasting undertaken at the Quarry.</p> <p>KEQPL will consult with the Department to determine if any action is required.</p>	31/01/2021
Schedule 3, Condition 21	It is recommended that written confirmation of approval is sought from DPIE during the next update of the WMP.	KEQPL agree with this recommendation and will consult with the Department during the next review of the WMP.	30/04/2021

Ref	Recommendation Description	KEQPL Response/Actions	KEQPL Action Timeframe
	It is recommended that KEQ implement a program to monitor the health of local watercourses under the Water Management Plan.	<p>KEQPL will consult with the Department during the next review of the WMP and BOAMP to determine whether additional monitoring is required to monitor the health of local watercourses.</p> <p>However, let it be noted that local watercourses are monitored and reported on in the annual Biodiversity Offset Area Monitoring Report; this is in line with the approved BOAMP.</p>	30/04/2021
Schedule 3, Condition 23, Schedule 5, Condition 11	It is recommended that the information required under this condition is regularly reviewed and published on the KEQ website on a quarterly basis.	KEQPL agree with this recommendation. Future environmental monitoring reports will include information on the factors identified in mentioned conditions.	31/01/2021
Schedule 3, Condition 27	Cumberland Ecology recommends that the TJTMP be updated to include performance criteria to measure the effectiveness of the program.	The TJTMP ceases after 2020. KEQPL will take this into consideration when reviewing the TJTMP.	30/04/2021
	Cumberland Ecology recommends that 2020 monitoring include all required monitoring methods, and if undertaken outside of October 2020 an explanation of the change in survey date.	<p>Firebird ecoSultants Pty Ltd were engaged to conduct the TJ monitoring for 2020, however; after attending site and undertaking an inspection, the monitoring was postponed due to a lack of flowering.</p> <p>Monitoring of the TJ has typically been done during it's flowering period, which varies dependant on climatic conditions.</p> <p>The auditor's recommendation will be taken into consideration when a review of the TJTMP is undertaken.</p>	30/04/2021

Ref	Recommendation Description	KEQPL Response/Actions	KEQPL Action Timeframe
Schedule 3, Condition 30	It is recommended that KEQ seek written confirmation from DPIE of an extension to the timeframe required to continue consultation and implement long-term security for the project Biodiversity Offset Strategy.	Officers of the Biodiversity Conservation Trust are attending site in November to assess the Biodiversity Area and consult on the progress of the Biodiversity Offset Strategy. KEQPL will consult with the Department and seek extension to the timeframe required if required.	31/01/2021
Schedule 3, Condition 32	Cumberland Ecology recommends that the LRMP be updated to include a three year management schedule for the period November 2018 – November 2021.	KEQPL agree with the recommendation made by the auditor and will conduct a revision of the LRMP in the near future. The revisions describe here will be made.	30/04/2021
	It is recommended that KEQ record and report all information required under implementation the LRMP.	During the revision of the LRMP, KEQPL will ensure all procedures to record and report are examined and responsible employees are made aware of their obligations.	30/04/2021
Schedule 3, Condition 33	Cumberland Ecology recommends that the BOAMP be updated to include a three year management schedule for the period November 2018 – November 2021.	KEQPL agree with this recommendation by the auditor. KEQPL have already engaged Kleinfelder to revise the BOAMP to reflect changes to the Project Approval. While this revision is taking place, KEQPL will request Kleinfelder to make these recommended changes.	30/04/2021
Schedule 3, Condition 37	It is recommended that KEQ consult with DPIE over the progressive rehabilitation strategy for the visually prominent ridgeline identified in this condition and update the Landscape and Rehabilitation Management Plan, if required.	During the process outline above, KEQPL will consult with the Department over the progressive rehabilitation strategy of the ridgeline. This visual factor has been considered by KEQPL and it believed that as rehabilitation of the neighbouring quarry (Karuah Hard Rock Quarry) is established and finalised over the next few years, this visual impact will be mitigated.	30/04/2021

Ref	Recommendation Description	KEQPL Response/Actions	KEQPL Action Timeframe
Schedule 4, Condition 1	It is recommended that KEQ update their notification procedures to ensure the relevant landholders are notified as soon as possible after receipt of monitoring results confirming that an exceedance has occurred.	KEQPL are committed to operating in a compliant manner and maintaining positive relations with community. Over recent years, this positive relationship can be demonstrated by the lack of complaints received from community and positive feedback received at Community Consultation Committee meetings. KEQPL will review and where necessary revise the notification procedures followed when notifying landholders of pollution incidents.	30/04/2021
Schedule 5, Condition 1	It is recommended that KEQ undertake a review of the approved EMS to ensure that the document remains consistent with environmental monitoring requirements and approved site management plans. Consultation with DPIE should be undertaken if major updates to the 2015 version of the EMS are required.	KEQPL will undertake a review of the EMS and revise if deemed necessary at the conclusion of this IEA.	31/01/2021
Schedule 5, Condition 2	It is recommended that KEQ update their communications and incident response procedures to ensure that any future exceedances of the Project Approval criteria and any implementation management controls / remediation measures are reported to DPIE at the earliest opportunity once they are identified.	KEQPL re in the process of reviewing and where necessary revising the PIRMP. During this process KEQPL will review all communication and notification procedures for reporting of pollution exceedances to ARAs.	30/04/2021
Schedule 5, Condition 5	It is recommended that KEQ document any reviews undertaken as required under this condition.	KEQPL agree with this recommendation. A controlled templates will be prepared for use when reviewing documents (such as procedures or management plans).	30/04/2021
Schedule 5, Condition 10	It is recommended that the KEQ response this IEA and implementation of actions are summarised in the next KEQ Annual Review.	KEQPL agrees with this recommendation and will ensure that the KEQPL RAR and status of actions is reported in the next Annual Review.	31/03/2021 (due date of next Annual Review)

Ref	Recommendation Description	KEQPL Response/Actions	KEQPL Action Timeframe
PA 09_0175 (as modified) SOCs			
SoC 3.1	It is recommended that topsoil stripping depths and associated stockpile locations are recorded during future clearing works to assist with site rehabilitation.	KEQPL agree with this recommendation. During revision of the LRMP, this recommendation will be taken into consideration and if necessary, a procedure will be prepared to ensure future stripping works record critical information (such as stripping depths and stockpile locations).	30/04/2021
	It is also recommended that KEQ develop an internal topsoil stripping and stockpiling procedure to ensure that the information under this SoC is retained on site to assist in site rehabilitation.	KEQPL agree with this recommendation. During revision of the LRMP, this recommendation will be taken into consideration and if necessary, a procedure will be prepared to ensure future stripping works record critical information (such as stripping depths and stockpile locations).	30/04/2021
SoC 4.1	Recommend that KEQ review the process for salvage of large logs during clearing and whether any further emplacement of additional material would be beneficial in Lots 12 and 13.	KEQPL currently use fallen trees to create natural wooden bunding around the boundary of the disturbance area. Additionally, KEQPL have had approximately 300 nest boxes installed through the Biodiversity Offset area. These nest boxes are monitored and maintained yearly by trained ecologists. Albeit, KEPLQ will take this recommendation into consideration when revising the LRMP.	30/04/2021
EPL 20611			
Condition A1.2	It is recommended that KEQPL consult with EPA over the approved use of soil and overburden material from KEQ to assist with the final rehabilitation of the adjacent Karuah Quarry site and confirm whether an associated variation to EPL 20611 is required.	KEPL agree with this recommendation and will consult with the EPA regarding this matter as soon as practical to ensure there are no compliance issues as a result of this process.	31/01/2021
Condition L4.5	Bridges Acoustics recommendation: Require consultants to specifically report assessment methods and results for tonal and low frequency modifying factors, as required by this condition, for all attended noise compliance surveys.	KEQPL will take this recommendation into consideration when undertaking revision of the NMP.	30/04/2021

Ref	Recommendation Description	KEQPL Response/Actions	KEQPL Action Timeframe
Condition L5.7	It is recommended that future Annual Reviews provide comment regarding the management of blast fume.	KEQPL agree with this recommendation. During review of the BMP, revision will be made to blast monitoring to direct blast technicians to report on blast fumes in the Post Blast Report. This detail will also be reported on in the Annual Review.	30/04/2021
Condition M5.1	It is recommended that the Complaints Register available on the KEQ website is updated on a quarterly basis.	KEQPL agree with this recommendation. Fortunately, KEQPL have not received any complaints in recent times, however; understand the importance to keep the register up-to-date and published. Future environmental monitoring reports will include quarterly updates on the Complaints Register.	31/01/2021

4 CONCLUSION

KEQPL are committed to operating in compliance with the approval documents and relevant Acts, as well as strive towards maintaining positive relationships with community. Following the completion of the IEA, KEQPL will begin implementing actions to ensure that non-compliances and areas for improved environmental performance identified in the auditor's recommendations are attended to as soon as practically possible.

KEQPL thanks Hansen Bailey for their work conducting the IEA and look forward to working in consultation with the Department to ensure beneficial environmental and community outcomes.