



Independent Environmental Audit 2020

Cleary Bros (Bombo) Pty Ltd, Albion Park Quarry

9 December 2020

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Independent Environmental Audit 2020

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EXECUTIVE SUMMARY

Environmental Resources Management Australia Pty Ltd (ERM) was commissioned to perform an Independent Environmental Audit (IEA) of the Albion Park Quarry on behalf of Cleary Bros (Bombo) Pty Ltd ('Cleary Bros'). The quarry is located in an industrial area of the Shellharbour Local Government Area, in Albion Park, New South Wales (NSW). The primary purpose of the audit was to satisfy the Department of Planning, Industry and Environment (DPIE) Ministers' Conditions of Consent (COC) Development Consent number DC 10639, which requires completion of an independent audit every three years from the date of the approval. The audit period assessed in this IEA is 9 November 2017 through 5 November 2020.

The audit included a review of:

- DPIE, Ministers Conditions of Consent DC 10639 of 2005 (Modification 3, June 2017);
- Environment Protection Licence (EPL) 299; and
- Implementation of Management Plans developed as part of the Ministers' Conditions of Consent.

Cleary Bros has established the control systems generally required for the stage of development (operational). All staff interviewed demonstrated a high level of understanding of requirements and a commitment to the application of the requisite management systems and plans.

A qualitative risk assessment was also completed on the findings, consistent with AS/NZS 4360:2004 Risk management and HB 436:2004 Risk Management Guidelines Companion to AS/NZS 4360:2004 and as described in the Department of Planning & Environment publication "Post Approval Requirements – Independent Audit" issued May 2020. The number of non-conformances with the statutory conditions and implementation of the management plans is summarised in *Table E.1* below.

Review	Non-compliances (NC)	Administrative Non-compliances (ANC)	Observations (Obs NC)	Observations (Obs C)
Statutory Instruments	2	-	-	4
Implementation of Plans	-	-	-	-

Table E.1 Summary of Audit Findings

An action table addressing all findings of the audit has been developed by Cleary Bros and will be issued separately to this report.

1. INTRODUCTION

Environmental Resources Management Australia Pty Ltd (ERM) was commissioned to perform an Independent Environmental Audit (IEA) of the Albion Park Quarry on behalf of Cleary Bros (Bombo) Pty Ltd ('Cleary Bros'). The primary purpose of the audit was to satisfy the Department of Planning, Industry and Environment (DPIE) Ministers' Conditions of Consent (COC) Development Consent number DC 10639, which requires completion of an independent audit every three years from the date of the approval. The audit period assessed in this IEA is 9 November 2017 through 5 November 2020.

The audit must:

- be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
- include consultation with the relevant agencies;
- assess the environmental performance of the project and assess whether it is complying with the relevant requirements of this approval and any relevant mining lease or EPL (including any strategy, plan or program required under these approvals);
- review the adequacy of strategies, plans or programs required under these approvals; and, if appropriate; and
- recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.

This audit was undertaken in accordance with each of the requirements stated above. Following completion of the audit, the Proponent shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

1.1 Overview of Operations and Approvals

Albion Park Quarry is a hard rock quarry originally approved by the Minister for Planning under Development Consent DC 10639 in February 2006. Development Consent DC 10639 MOD 3 was approved in June 2017 with an expiry date of 21 February 2036.

The site also holds an Environment Protection Licence (EPL) 299, which was last varied in June 2020.

1.1.1 Description of primary processes undertaken during the audit period

The following primary activities were undertaken at the Site during the audit period, each of which are discussed in further detail in the following sections:

- Quarry Production;
- Maintenance Activities;
- Waste Management;
- Water Management; and
- Rehabilitation.

1.1.1.1 Quarry Production

Cleary Bros is approved to produce 900,000 tonnes of quarry products per annum. During the audit period hard rock quarry products produced was less than 835,205 tonnes per annum, as follows:

- 2017 665,126 t
- 2018 620,999 t

- 2019 835,205 t
- 2020 YTD 183,390 t

Quarry activities, including processing, crushing and screening and product transfer to stockpiles, occurs between the hours of 7.00 am and 5:30 pm Monday to Friday and 7:00 am and 1:00 pm Saturday.

1.1.1.2 Maintenance activities

Maintenance of plant and equipment at the Site is predominantly managed by the Cleary Bros facility in Port Kembla. A workshop located onsite primarily utilised for maintenance of road transport is covered by the EPL, however is not covered under the Development Consent.

1.1.1.3 Waste management

Wastes generated at the Site include the following:

- General waste;
- Cardboard;
- Batteries;
- Waste oil.

Cardboard, batteries and waste oil are recycled. Waste oil from machinery and equipment used on Site is collected and recycled through a specialist waste oil recycling contractor. Waste segregation was noted to be good during the audit.

Quarry overburden material is not considered waste and is retained for re-emplacement in the base of the excavation and also used to create final landforms following completion of quarrying activities.

1.1.1.4 Water management

Water management at Albion Park Quarry is undertaken in accordance with the approved Water Management Plan. The main components of water-related infrastructure include:

- a storage dam adjacent to the processing area;
- the main sediment pond in the south east portion of the quarry pit;
- a pump and discharge line associated with the main sediment pond; and
- a supertreat effluent treatment plant which discharges to a dedicated onsite irrigation area.

Water from the storage dam is utilised in the processing area and for dust suppression at the Site. Water from the main sediment pond is pumped to rehabilitation areas and discharged to the watercourse south of the quarry as needed.

1.1.1.5 Rehabilitation

Rehabilitation activities in Stages 1, 2 and 4 of the quarry during the audit period were limited to reprofiling of the quarry pit. Further rehabilitation activities adjacent to the quarry pit during the audit period included establishment and maintenance of tree species, maintenance of fencing, weed control and infill planting.

1.2 Audit Objectives

The primary objectives of the audit include:

- assess the environmental performance of the project and whether it is complying with the requirements in the COC, the EPL and any assessment, plan or program required under these approvals;
- review the adequacy of approved strategies, plans, or programs required under the abovementioned consent; and
- recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under the abovementioned consent and EPL.

1.3 Audit Scope

The scope of works in order to complete the Audit included the following:

- the audit was carried out in accordance with DP&E's Guidelines for Independent Audits and AS/NZS ISO 19011:2018: Guidelines for auditing management systems;
- review of compliance against the documentation identified in the COC (as it relates to the current activities at the Albion Park Quarry) which included:
 - document review of compliance against the COC and EPL;
 - a site inspection to assess field implementation compliance against the active COC and EPL; and
 - review of supporting plans developed as part of the COC and assessment of their adequacy towards effective environmental performance;
- review of monitoring results and trends with comparison of monitoring results against regulatory, COC and EPL limits (where applicable);
- confirmation if any additional monitoring required for identified trends;
- community complaints review including identification of trends and sources of any established trend;
- review of regulatory actions including any letters, penalty notices and prosecutions;
- review of previous Independent Environment Report audit report to verify close-out of actions;
- consultation with the relevant agencies, including DPIE, NSW Resources and Geoscience, NSW Environment Protection Authority, Shellharbour City Council and Cleary Bros Albion Park Quarry Community Consultative Committee (CCC); and
- preparation of this report detailing the results of the compliance assessment for submission to DPIE.

The audit period assessed in this IEA is 9 November 2017 through 5 November 2020 and is limited to assessing the activities completed during the audit period.

1.4 Audit Criteria

The audit covered the following specifications and standards, with a particular focus on activities associated with the current stage of operation. The documents relevant to this audit included:

- Conditions of Consent (Modification 3, June 2017) DC 10639 of 2005;
- EPL 299; and
- Approved management plans:

- Quarry Environmental Management Plan, dated May 2018;
- Air Quality Management Plan, dated December 2017;
- Heritage Management Plan, dated November 2017;
- Noise and Blast Management Plan, dated September 2017;
- Rehabilitation Management Plan, dated October 2017;
- Vegetation Management Plan, dated May 2018;
- Water Management Plan, dated August 2020; and
- Transport Management Plan, dated September 2016.

1.5 Limitations of this Report

This disclaimer, together with any limitations specified in the report, applies to this report and its use.

This report was prepared in accordance with the contracted scope of services for the specific purpose stated and subject to the applicable cost, time and other constraints. In preparing this report, ERM relied on:

- a. client/third party information which was not verified by ERM except to the extent required by the scope of services, and ERM do not accept responsibility for omissions or inaccuracies in the client/third party information; and
- b. information taken at or under the particular times and conditions specified, and ERM do not accept responsibility for any subsequent changes.

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2. AUDIT METHODOLOGY

2.1 Methodology and Process

The audit comprised a site inspection conducted on 5 November 2020, interviews with key personnel, and reviewing records and other related documentation. The audit process included the following primary components:

- Development of a Terms of Reference which included:
 - audit scope and objectives;
 - date and location of the audit;
 - members of the audit team;
 - list of people to be audited; and
 - list of reference documents and audit criteria;
- A project inception meeting, held on 7 October 2020 to confirm details of the Terms of Reference, site inspection logistics and request documentation;
- An opening meeting, held on 5 November 2020 at the site to confirm the audit objectives and scope for the site inspection. Attendees included:
 - Dean Kerr (ERM Auditor);
 - Brigitte Healey (ERM Auditor);
 - Mark Hammond (Quality and Environment Manager); and
 - Todd Kalazjich (General Manager Quarry);
- A site inspection, undertaken on 5 November 2020;
- A debrief/closeout meeting, held at the Site on 5 November 2020 involving discussion of initial findings and recommendations. Attendees were:
 - Dean Kerr (ERM Auditor);
 - Brigitte Healey (ERM Auditor);
 - Mark Hammond (Quality and Environment Manager); and
 - Todd Kalazjich (General Manager Quarry); and
- Preparation of the audit report (this report).

2.2 Agency and Community Consultation

ERM consulted with the agencies and stakeholders as required including DPIE, NSW Resources and Geoscience, NSW Environment Protection Authority (EPA), CCC and Shellharbour City Council. Emails were issued on 8 October 2020. Responses are outlined in *Table 2.1* below.

Agency/Stakeholder	Method	Consultation summary	Response	Location Addressed in Report
Department of Planning, Industry and Environment (DPIE)	Email on 8 October 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	 DPIE requested consideration of noise and any works (inaudible or otherwise) outside of the operating hours. 	Refer to Sch. 4 C 5 and 6 of COC.
NSW Resources and Geoscience	Email on 8 October 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	No response received	N/A
NSW Environment Protection Authority (NSW EPA)	Email on 8 October 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	 Current land title and address on Environment Protection Licence and Development Consent; Complaints from an adjacent resident relating to dust deposition gauges, hours of operation, blasting, annual noise surveys and the proposed extension of the quarry. 	Refer to Environment Protection Licence and Sch. 1 of COC. Refer to C M2.1 of EPL, Sch. 4 C 5 of COC, Sch. 4 C 10 of COC, Sch. 4 C 13 of COC, C L3.1 of EPL and Sch. 4 C 4, 7 and 8 of COC.
Shellharbour City Council	Email on 8 October 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	No response received	N/A
Community Consultation Committee (CCC) Chairperson	Email on 8 October 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	 Referred to the CCC Annual Report. 	N/A

Table 2.1 Agency and Stakeholder Consultation Summary

In each case, an email was sent to representatives of each agency requesting feedback on those issues considered most relevant by their Department at the time of the audit. The consultation outlining the terms of reference was provided prior to the site inspection to obtain feedback and draw attention to any key issues, within the agreed scope of the audit. The Departmental correspondence is provided in Appendix B.

Responses received requested the audit to focus on compliance against COC and EPL, the subject of historical complaints and environmental monitoring relating to air quality, noise and blasting. These areas are captured specifically in the audit findings.

2.3 Classification of Audit Findings

Findings resulting from an assessment of audit evidence were divided into six categories as follows:

- **Compliant (C)**: the intent and all elements of the audit criteria requirements have been complied with within the scope of the audit.
- Non-compliant (NC): Failure to meet the audit requirements, failure to achieve the field performance outcomes identified in documentation, or ineffective environmental management of the activity.
- Administrative non-compliance (ANC): Technical conformance with audit requirements that would not impact on performance and is considered minor in nature (e.g. report submitted but not on the due date, failed monitor or late monitoring session). This would not apply to performance-related aspects (e.g. exceedance of a noise limit) or where a requirement had not been met at all (e.g. noise management plan not prepared and submitted for approval);
- Not triggered (NT): A regulatory approval requirement has an activation or timing trigger that had not been met at the time of the audit inspection, and therefore a determination of compliance could not be made.
- Note: A statement or fact, where no assessment of compliance is required.
- **Observation (Obs):** Observations are recorded where the audit identified issues of concern which do not strictly relate to the scope of the audit or assessment of compliance.

A qualitative risk assessment was also completed on the findings, consistent with AS/NZS 4360:2004 Risk management and HB 436:2004 Risk Management Guidelines Companion to AS/NZS 4360:2004 and as described in the DPIE publication "Post Approval Requirements – Independent Audit" issued May 2020.

The overall level of risk was estimated by combining the likelihood of harm occurring with the estimated level of harm associated with each finding. Risk levels have been assigned as follows:

- High: Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence;
- Medium: Non-compliance with:
 - potential for serious environmental consequences, but is unlikely to occur; or
 - potential for moderate environmental consequences, but is likely to occur;
- Low: Non-compliance with:
 - potential for moderate environmental consequences, but is unlikely to occur; or
 - potential for low environmental consequences, but is likely to occur.

3. AUDIT FINDINGS

3.1 **Previous Audit Follow Up**

The last audit was carried out by ERM on 9 November 2017. A summary of the 2017 audit findings and their status is summarised below in *Table 3.1.*

						Table 5.1 Sullilla	. .	aan i mamgo	
Item No	Assessment	Requirement				Comment	2017 Audit Classification	CB Response/Action	:
EPL 299	-						1		
M4.1	At the Weath must monitor analysis) the licensee must measure, ave frequency, sp Parameter	r sampling an parameters s st use the san eraging perio	d obtain specifiec npling m d and sa	ing results in Column ethod, unit ample at the e other col Averaging	by n 1. The s of e	In the Annual Return FY 14/15 describes a non- compliance where the solar radiation monitoring equipment was not recording following an upgrade. The solar radiation monitoring equipment is owned by Clearly Bros and is used in the operation of the weather station at the quarry. The cause of the	NC	No actions required.	
						non-compliance was due to the			
	Rainfall Temperature@2 m	millimetres Kelvin	Continuous Continuous		AM-4 AM-4	upgrade to the equipment, and to rectify this issue a replacement solar radiation sensor was installed in April			
	Temperature@1 0 m		Continuous		AM-4	2015. The solar radiation sensor was observed. In the Annual Return			
	Wind direction@10m Wind	Compass points metres per	Continuous Continuous		AM-2 AM-2	describes a non-compliance where weather data monitoring equipment did not operate continuously through the			
	speed@10m	second				reporting period due to an external			
	Sigma theta	degrees	Continuous	1 hour	AM-2	battery failure during 3 – 14 June 2016.			
	Total solar radiation@10m	Watts per square metre	Continuous	1 hour	AM-4	This led to an intermittent outage of the weather station whereby the station			
	Siting	-	-	-	AM-1	would not operate during low light and night time conditions. The station was			
	Note: Samp NSW EPA, Sampling and	2001, Appro	oved Me	ethods for	the	online for 98% of the reporting period, within the OEH Upper Hunter Air Quality Monitoring Network's target of 95% online. The site has now installed a low voltage alarm and reviews weather data on a weekly basis. The weather station data review software and records were observed at the audit. Weather station observed with results available online. All parameters required are monitored. Real time monitoring data reviewed by auditor. EPL and consent conditions are now aligned. The AR's describe the parameters that are continuously monitored at the weather station near Belmont. Monitoring locations installed by qualified third parties to achieve siting to approved methods.			
M5.1	The licensee complaints m agent of the any activity to	hade to the lic licensee in re	censee clation to	or any empl pollution a	oyee or	Complaints register is made available online for the reporting period. Complaints presented in a table	ANC	The broken link on the Cleary Bros Albion Park website has been repaired.	

Table 3.1 Summary of 2017 Audit Findings

2020 Status

Deemed as Compliant during this audit.

Deemed as Compliant during this audit.

Item No	Assessment Requirement	Comment	2017 Audit Classification	CB Response/Action	
		detailing the complaint, date and response.			
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Complaints summary provided in Annual Reviews. Complaints records are kept for the required four year period.	0	Complaints Register page on Cleary Bros website has been updated to include past four years of records.	[
PA 10639	of 2005 (Modification 3, issued June 2017)				
4.13	 During quarrying operations on site, the Applicant shall: (a) implement best management practice to: protect the safety of people and livestock in the surrounding area; protect public or private infrastructure/property in the surrounding area from any damage; and minimise the dust and fume emissions of any blasting; (b) avoid any flyrock impacts on The Fig Tree Hill Land, or the continued rural use of that land; and (c) operate a suitable system to enable the local community to get up-to-date information on the proposed blasting schedule on site, to the satisfaction of the Secretary 	DPE provided feedback on the recently submitted (6 September 2017) Blast Management Plan. The updated BMP incorporating DPE comments to be submitted following IEA. ERM reviewed the BMP and the content aligns with the 4.13 conditions	0	No actions required. ERM understands the BMP was approved by DPIE on 15/11/17, after ERM's 2017 onsite audit.	1
4.14	 Prior to the commencement of operations in each stage of the development after Stage 1, the Applicant shall prepare, and subsequently implement, a Blast Management Plan for the development in consultation with the landowner(s) of The Fig Tree Hill Land, the EPA and to the satisfaction of the Secretary. This plan must: (a) include a summary of monitoring results for the previous quarry stage; (b) describe the objectives for noise and blasting at that stage; (c) describe the proposed blasting design for that stage, and demonstrate that the design will meet the blast criteria listed in Tables 3 and 4; (d) include a monitoring program for evaluating and reporting on the performance of the development, including: compliance with the blasting criteria in this consent; and minimising the fume emissions from the site; (e) describe the measures that would be implemented to: ensure compliance with the blasting criteria and operating conditions of this consent; avoid any flyrock impacts on The Fig Tree Hill Land; minimise, mitigate, remediate or compensate for any other blasting impacts of the development, including any such impacts on people, livestock and property, to the satisfaction of the Secretary. 	Stage 1 – 4 commenced prior to current audit period. Stage 5 is due to commence October 2018. The updated BMP currently under review acknowledges consultation with the landowner(s) of The Fig Tree Hill Land, the EPA. Page 17 of BMP.	0	Prior to Stage 5, ensure consultation with EPA and the landowner(s) of The Fig Tree Hill Land is completed, ongoing and documented.	

2020 Status

Deemed as Compliant during this audit.

Deemed as Compliant during this audit.

Deemed as Compliant during this audit. ERM reviewed consultation with the EPA and the landowner(s) of The Fig Tree Hill Land prior to commencement of operations in Stages 5 and 6.

Item No	Assessment Requirement	Comment	2017 Audit Classification	CB Response/Action	
4.17	 The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with the EPA, and submitted to the Secretary for approval by 30 September 2015; (b) be revised in consultation with the EPA and submitted to the Secretary for approval prior to the commencement of quarrying activities in either Stages 5 or 6; (c) describe the measures that would be implemented to demonstrate compliance with the relevant air quality impact assessment criteria and conditions of this consent; (d) include a site-specific best management practice determination; (e) describe the proposed air quality management system; and (f) include an air quality monitoring program that: is capable of evaluating the performance of the development; includes risk-based monitoring to demonstrate compliance with the criteria in Table 5; includes a Trigger Action Response Plan (TARP) which describes the actions to be taken when specific trigger levels are exceeded; adequately supports the air quality management system; and evaluates and reports on the adequacy of the air quality management system. The Applicant must implement the approved plan as approved from time to time by the Secretary. 	The Air Quality Management Plan, describes mitigative measures including site specific best management practice determination, mitigation measures specific to blasting activities, emission of products of combustion from plant and machinery, fugitive release of emissions from fuel storage areas and daily site inspections. The AQMP has undergone review and update to meet the requirements of the recent Development Consent Modification updated in June 2017. At the time of this audit the AQMP has been submitted to the EPA and DPE for review and approval.	ANC	Calibration of particulate monitors has not been successful to date. Monitors are currently with the manufacturer for repair and recalibration. Once returned, CB to again attempt to calibrate these monitors alongside the existing HVAS unit to allow their subsequent deployment.	
4.41	Within 5 years of providing the Rehabilitation Management Plan to the Secretary, and every 5 years thereafter, the Applicant must review and update the plan to the satisfaction of the Secretary.	The letter from the Department of Planning to CB, describes the Department has reviewed the Rehabilitation Management Plan and is satisfied that they adequately address the requirements set out in the relevant conditions of the development consent. The DPE Audit report, September 2016, found an Administrative Non- Compliance. Revised Rehabilitation Management Plan was submitted to the Department on 27 October 2014, however approval was still pending at the time of the audit. The DPE letter, Review of Management Plans, confirms that the proposed changes to the Rehabilitation	ANC	No actions required.	

2020 Status

Deemed as compliant during this audit. This issue is ongoing with re-calibration against the existing HVAS unit to be undertaken following the audit. The dust deposition gauges and existing HVAS unit were used as the primary air quality monitoring equipment during the audit period.

Deemed as compliant during this audit.

Item No	Assessment Requirement	Comment	2017 Audit Classification	CB Response/Action	1
		Management Plan provided on October 2014, were approved and accepted by the Department in October 2016. The Rehabilitation Management Plan has been reviewed, revised following Modification 3 of Development Consent 10639/2005 and provided to DPE on 6 September 2017 for approval. DPE approved the RMP on 19 October 2017.			
4.45	Prior to the commencement of works, the Applicant must formalise the Right of Way for the haulage road, to the satisfaction of the Secretary.	No evidence that there was approval of formalised Right of Way for the Haulage Road from DPE.	ANC	No action – outside of audit period.	1
4.52	The dilapidation surveys required under Condition 51 must be conducted by a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary. The owners of the Fig Tree Hill Land are to supply the applicant with three suggested nominees within 3 months from the grant of this consent. The applicant will submit one engineer from the list to be put forward by the applicant for approval by the Secretary.	CB has requested Fig Tree Hill provide nominations for potential persons to conduct dilapidation survey, however this has not been received to date. CB has not been permitted access by the nominees to conduct the survey.	0	Dilapidation surveys of The Hill Complex and Belmont completed in April 2018, prior to commencement of Stage 5 & 6.	I r r a a a a
6.5	The Applicant must immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	The outage of the meteorological station at Albion Park Quarry was reported on 22 June 2016. CB provided DPE the incident written report 8 days after the issue was identified, this is outside the 7 day notification period. ERM acknowledges that CB notified DPE when the incident was first identified, as required in the consent.	ANC	QEMP has been updated to include reporting timelines for external notification of any incident.	// t (i i i i t t

AUDIT FINDINGS

2020 Status

Not triggered during this audit.

Deemed as compliant during this audit. ERM reviewed correspondence with the owners of the Fig Tree Hill Land supplying three nominees for the dilapidation surveys. ERM also reviewed correspondence with DPIE approving the nomination of Design 5 Architects.

An exceedance of the 24-hour PM10 criteria at the High Volume Air Sampler occurred on 23 September 2020. The incident was reported to DPIE on 14 October 2020. As the notification was not submitted until 3 weeks after the incident, Cleary Bros is non-compliant with this condition.

The Site is in the process of establishing realtime particulate monitors at three locations around the Site which will provide up to date dust monitoring results, when commissioned.

3.2 Complaints Summary

Complaints registers for the audit period were available for review and are presented on the Albion Park Quarry website. Complaints over the reporting period included:

- Nil (0) complaints were received in 2017 (for the period 9 November to 31 December);
- Three complaints were received in 2018, relating to noise and vibration from blasts and dust;
- 10 complaints were received in 2019, relating to noise and vibration from blasts, damage from blasts and dust; and
- Seven complaints were received in 2020 to-date, relating to vibration from blasts, dust, operation outside of approved hours and noise.

The detailed summaries as prepared by Cleary Bros are provided on the Albion Park Quarry website.

3.3 Incident Summary

According to the Quality and Environment Manager, one incident occurred during the audit period. A minor exceedance of the 24-Hr PM10 criteria occurred on 23 September 2020, which was notified to DPIE on 14 October 2020. At the time of writing this report, a response had not been received by Cleary Bros and a formal review had not been undertaken or requested by DPIE.

3.4 Noise

Annual noise monitoring was undertaken between 2017 and 2020 by qualified third party contractors, SLR Consulting Australia Pty Ltd. Under Schedule 4 Condition 4 of the Development Consent, noise emission limits apply under conditions of wind speeds (10 m above ground) of up to 0.5 m/s and temperature gradients of up to 0°C per 100 m. As these meteorological conditions were not met during annual noise monitoring between 2017 and 2020, compliance was determined via modelled noise levels in accordance with the method described in the approved Noise and Blast Management Plan. All modelled noise levels were within the Development Consent criteria.

3.5 Air quality

Four depositional dust gauges and one PM10 High Volume Air Sampler (HVAS) are used to measure compliance against the COC and EPL assessment criteria. The depositional dust gauges were serviced by ALS Laboratory Group during the audit period. Monthly samples were taken from the HVAS. The auditors reviewed dust monitoring records for the period 2017 to 2020. No exceedances of the dust monitoring assessment criteria were identified.

An email was sent to DPIE on 14 October 2020 providing notification of a minor exceedance of the 24-hour PM10 criteria recorded at the HVAS on 23 September 2020. At the time of the site inspection a formal review had not been undertaken or requested by DPIE. A further ten exceedances of the 24 hour PM10 criteria at the High Volume Air Sampler occurred during the audit period. However, these did not exceed the daily incremental impact of Albion Park Quarry and were therefore considered compliant with the COC.

The auditors sighted the weather station onsite which provides the site's meteorological data and reviewed a sample of data for the audit period.

3.6 Blasting

Blasting was conducted during the audit period at a maximum rate of once per day and at times between 9 am and 5 pm on weekdays. Air blast overpressure and vibration from blasting was monitored at the blast monitoring station adjacent to the nearest non-project related sensitive receptor, The Cottage residence on the Figtree Hill property. Based on monitoring during the audit period, blasting was conducted in accordance with criteria described in the COC and EPL.

3.7 Water Management

3.7.1 Surface water

Surface water management comprising a storage dam adjacent to the processing area, the main sediment pond in the south east part of the quarry pit, a pump and discharge line associated with the main sediment pond and a supertreat effluent treatment plant (with on-site irrigation) were in place and established as per the Water Management Plan (WMP) (dated May 2018).

Under the COC and EPL the Site is required to monitor water quality at the Sewerage Treatment Plant (supertreat effluent treatment plant), Quarry Extension Discharge, Main Sedimentation Pond, Watercourse West of Quarry Manager's Office, Watercourse 1 and Watercourse 2 at various frequencies. There were no exceedances of the assessment criteria during the audit period.

3.7.2 Groundwater

The groundwater monitoring program is stipulated in Section 7.3 of the approved WMP (dated May 2018). Neither the COC nor EPL stipulate criteria for groundwater quality. Under the COC, the Site must implement a groundwater monitoring program. The WMP specifies that groundwater monitoring occur biannually at four (two shallow and two deep) monitoring wells. Groundwater monitoring data provided showed that monitoring was completed more frequently than required by the WMP.

3.7.3 Erosion and Sediment Control

The erosion and sediment control program includes operational controls, design considerations a routine maintenance program and contingencies for excessive rainfall. The COC includes qualitative performance criteria for the erosion and sediment control plan, including complying with the requirements of the Department of Housing's *Managing Urban Stormwater: Soils and Construction* document and identifying and describing sources, controls, monitoring and review of erosion and sediment controls.

3.8 Management Plan Adequacy

The approved Management Plans for the Site were reviewed and their adequacy assessed in view of current operations at the Site. In general, Management Plans were considered to be appropriate for the Site's operations at the time of the site visit. However, a number of management plans contain outdated information which should be updated to be consistent with current Site operations.

The findings of the Management Plan review are outlined in Table 3.2 and Appendix A.

3.9 Environmental Protection Licence

The Site operates under Environment Protection Licence (EPL) 299 issued to Cleary Bros (Bombo) Pty Ltd. The EPL has been varied once during the audit period on 2 June 2020.

The Site submitted Annual Returns to the EPA, as required for the audit period and zero noncompliances were recorded.

Findings identified against the Site's EPL are outlined in *Table 3.2* and *Appendix A*.

3.10 Compliance with Regulatory Instruments

A compliance check of the COC and EPL conditions as well as management plan review has been completed and is provided in *Appendix A*. Non-compliances and observations for each component are summarised in *Table 3.2*.

As discussed in *Section 2.3*, a qualitative risk assessment was also completed on the findings as follows:

non-compliance assessed as 'high' have been colour coded red;

- non-compliance assessed as 'moderate' have been colour coded orange;
- non-compliance assessed as 'low' have been colour coded yellow; and
- administrative non-compliance have been colour coded blue.

ltem No	Assessment Requirement		Comment	Audit Classification	Response/Action
Minist	er's Conditions of Consent DC 10639				
61.	The Applicant must ensure that the storage, handling, and trar is done in accordance with the relevant Australian Standards, AS1596, and the Dangerous Goods Code.		A 110 kL above ground storage tank containing diesel is located at the Site and the diesel, as currently stored on site, constitutes a dangerous good. AS1940 requires a bund to be 110% capacity of the largest tank or 25% of the total capacity of all tanks within the bund, whichever is greater. According to the Quality and Environment Manager, the diesel tank is 110 kL (the oil tanks are smaller) and the bunds are 158 m2 with a 900 mm – 950 mm height which has a 142 kL to 150 kL capacity. A minimum capacity of 121 kL is required, therefore the bunds meet the AS1940 requires a suitable high level alarm (LAH) set at a maximum of 97% of tank capacity for tanks over 25,000 L capacity storing combustible liquids (e.g. diesel). The diesel tank onsite does not have a suitable high level alarm, therefore Cleary Bros does not meet this requirement. Minor quantities of other dangerous goods were observed to be appropriately stored with visible dangerous goods signs.	NC	Install a high level alarm (LAH) set at a maximum of 97% of tank capacity for the 110 kL diesel tank.
15.	Particulate matter < 10 μm Annual (PM10) Particulate matter < 10 μm 24 hour (PM10) Total suspended Annual particulates (TSP) Table 5: Air quality criteria	generated by the	Air quality monitoring results are reported within the Annual Reviews. An exceedance of the 24-hour PM10 criteria at the High Volume Air Sampler occurred on 23 September 2020. According to the Quality and Environment Manager, Cleary Bros undertook an investigation into the cause of the exceedance. The incident was reported to DPIE on 14 October 2020 and at the time of writing this report, Cleary Bros is awaiting a response from DPIE. ERM notes that results immediately before and after the exceedance were within criteria and the isolated exceedance event is not considered representative of widespread failure to manage particulate matter emissions.	NC	Comply with direction from DPIE with regard to the reported 24-hour PM10 criteria exceedance.
	Notes to Table 5: a Total impact (i.e. incremental increase in concentrations due background concentrations due to all other sources); b Incremental impact (i.e. incremental increase in concentration on its own); c Deleted d Excludes extraordinary events such as bushfires, prescribed fog, fire incidents, illegal activities or any other activity agreed consultation with EPA. e "Reasonable and feasible avoidance measures" includes, bu operational requirements in conditions 16 and 17 to develop a management system that ensures operational responses to the criteria.	ons due to the development d burning, dust storms, sea by the Secretary in ut is not limited to, the and implement air quality			

ltem No	Assessment Requirement	Comment	Audit Classification	Response/Action
11.	The Applicant must ensure that all plant and equipment at the site, or used in connection with the development, are: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Maintenance records and preventative maintenance schedules are managed through MEX and managed by the Port Kembla workshop. ERM reviewed a variety of maintenance work orders for plant and equipment on-site and confirmed that, in general, Cleary Bros conduct routine preventative maintenance in accordance with manufacturer's specifications and regulatory requirements. It is recommended that future preventative maintenance for in-ground concrete infrastructure, such as tank bunds and water treatment plant sumps include integrity inspections to confirm that sumps are not leaking to the subsurface and secondary containment is in good working order.	Obs (C)	Incorporate additional preventative maintenance for concrete bunds and sumps, comprising routine integrity inspections to confirm stored product is fully contained.
29.	The Erosion and Sediment Control Plan must: (a) be consistent with the requirements of the Department of Housing's Managing Urban Stormwater: Soils and Construction manual; (b) identify activities that could cause soil erosion and generate sediment; (c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters (d) describe the location, function, and capacity of erosion and sediment control structures; and (e) describe what measures would be implemented to maintain the structures over time.	The Water Management Plan contains an Erosion and Sediment Control plan. According to the Department of Housing's Managing Urban Stormwater: Soils and Construction manual Volume 2E Mines and quarries, the nature and level of detail in an ESCP should reflect the potential significance of erosion and sediment control at the site. As such, all elements included in the manual may not be required for Cleary Bros Site. Given that the Site's ESCP identifies activities that may cause sediment and erosion (section 4.2), measures to mitigate potential impact including the impact from sediment-laden water released into the environment (section 4.3), a maintenance strategy (section 4.4), an approach to assess measures (section 4.5), and a map that details the location and types of proposed erosion and sediment control measures (Appendix C), the Site's ESCP is compliant with part (b) to (e) and broadly in compliance with the Department of Housing's Managing Urban Stormwater: Soils and Construction manual.	Obs (C)	Review the sediment control plan (Appendix C) and update the plan to only describe controls that are practicable given the current state of operations.
		 According to the ESCP, routine maintenance and works comprise: Installation and maintain erosion and sediment controls in accordance with the approved plans. Inspection of erosion and sediment controls after each major rain event, repair any damage and ensure correct functioning. Removal of accumulated silt periodically from sediment traps / basins. Auditors observed vegetated buffers, well maintained haul roads and sediment ponds used to minimise erosion and the transport of sediment to downstream water. A portion of the natural flow paths and vegetated buffers shown in Appendix C of the Water Management Plan, are no longer present onsite due to the expanded quarry pit. Erosion and sediment controls in the Sediment Control Plan should be updated to describe current practicable onsite controls. 		

ltem No	Assessment Requirement	Comment	Audit Classification
59.	All liquid and non liquid wastes resulting from activities and processes at the site must be assessed, classified and managed in accordance with the EPA's Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Wastes (1999), or any other EPA document superseding this guideline.	Waste management onsite is conducted by segregating workshop waste, office waste and other waste generated at the Site for recycling or disposal. Waste such as cardboard, batteries and waste oil are recycled. Waste oil from machinery and equipment used onsite is collected and recycled through a specialist waste oil recycling contractor. Waste segregation was noted to be conducted effectively during the audit. Quarry overburden material is not considered waste and is retained for placement in the base of the excavation and used to create the final landform. Waste collection and disposal from the site is managed by third party contractors JJ	Obs (C)
		Richards, a licensed waste management company. ERM reviewed example waste invoices which documented the collection and removal of waste from the site. ERM considers waste is being managed in accordance with the EPA and waste management is conducted generally in accordance with this condition, however there is no document that identifies and pre-classifies common waste streams generated by site operations.	
Enviro	onmental Protection Licence 299		
O5.1	All liquid and non liquid wastes resulting from activities and processes at the site must be assessed, classified and managed in accordance the EPA's Waste Classification Guidelines (2014) or any other EPA document superceding this guideline.	Waste management onsite is conducted by segregating workshop waste, office waste and other waste generated at the Site for recycling or disposal. Waste such as cardboard, batteries and waste oil are recycled. Waste oil from machinery and equipment used onsite is collected and recycled through a specialist waste oil recycling contractor. Waste segregation was noted to be conducted effectively during the audit. Quarry overburden material is not considered waste and is retained for placement in the base of the excavation and used to create the final landform. Waste collection and disposal from the site is managed by third party contractors JJ Richards, a licensed waste management company. ERM reviewed example waste invoices which documented the collection and removal of waste from the site. ERM considers waste is being managed in accordance with the EPA and waste management is conducted generally in accordance with this condition, however there is no document that identifies and pre-classifies common waste streams generated by site operations.	Obs (C)

Response/Action

Update the QEMP to identify the common waste streams generated by site activities and preclassify the material where possible in accordance with the EPA Waste Classification Guidelines.

Update the QEMP to identify the common waste streams generated by site activities and preclassify the material where possible in accordance with the EPA Waste Classification Guidelines.

4. CONCLUSION

An audit of COC and EPL conditions has been completed as well as a check against commitments made in the management plans developed as part of COC conditions for the Site.

Overall, compliance was generally achieved with the audit documents that were reviewed. The number of non-compliances with the statutory conditions and implementation of the management plans is summarised in *Table 4.1* below.

Review	Non-compliances (NC)	Administrative Non-compliances (ANC)	Observations (Obs NC)	Observations (Obs C)
Statutory Instruments	2	-	-	4
Implementation of Plans	-	-	-	-

Table 4.1 Summary of Audit Findings

An action response table has been developed by Cleary Bros addressing all audit findings and will be submitted separately to this report.

APPENDIX A CONDITIONS OF APPROVAL, ENVIRONMENTAL PROTECTION LICENCE AND MINING LEASE COMPLIANCE TABLES

Νο	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
CHEDU	JLE 3 – ADMINISTRATIVE CONDITIONS				-
oligation	n to Minimise Harm to the Environment				
	The Applicant must implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.	 Quarry Environment Management Plan ISO 14001:2015 Certificate, valid 06 October 2020 to 06 October 2023 	CB has implemented a Quarry Environmental Management Plan and has a Management System certified to ISO14001. Environmental ManagemenPlan and has an Environmental	С	N/A
ope of I	Development				
	 The Applicant must carry out the development generally in accordance with: (a) DA No. 466–11-2003; (b) The EIS titled Proposed Quarry Extension Albion Park, dated October 2003, and prepared by Perram & Partners; (c) Modification Application 10639 of 2005 MOD 1 and the accompanying SEE titled "Albion Park Quarry: Application to Modify Development Consent Increase Production Limit", dated November 2008, as amended by the correspondence to the Department dated 24 June 2009; (d) Modification Application 10639 of 2005 MOD 2 and the accompanying Environmental Assessment titled Modification of Development Consent 10639 of 2005 (LEC) Albion Park Quarry – Increased Production Limit prepared by Martin Morris & Jones Pty Ltd and dated November 2013; (e) Modification Application 10639 of 2005 MOD 3 and the accompanying Environmental Assessment titled Modification of Development Consent 10639 of 2005 (LEC) Albion Park Quarry – Increased Production Limit prepared by Martin Morris & Jones Pty Ltd and dated November 2013; (e) Modification Application 10639 of 2005 MOD 3 and the accompanying Environmental Assessment titled Modification of Development Consent 10639 of 2005 (LEC) Activation of Approved Stages 5 & 6 – Albion Park Quarry prepared by Martin Morris & Jones Pty Ltd and dated August 2016, including the associated Response To Submissions dated 23 December 2016 and supplementary letter titled Further Response to Matters Raised in Updated Submissions dated 28 February 2017, and the Aboriginal Cultural Heritage Desktop Assessment: Albion Park Quarry prepared by Biosis Pty Ltd dated 21 February 2017; and (f) The Site Layout Plan. Note: The Site Layout Plan is reproduced in Appendix 1. 	 Site Observations Interview with Quality and Environment Manager 	There were no significant changes to the onsite processes during the audit period. CB operates as a hard rock quarry with associated crushing and screening. The new concrete batching plant is currently under construction.	С	N/A
	The Applicant must carry out the development in accordance with the conditions of this consent.	Noted	Compliance with the Development Consent has been assessed throughout this table.	Note	N/A
	If there is any inconsistency between the documents listed in condition 2 of Schedule 3, the conditions of this consent shall prevail to the extent of the inconsistency.	Noted	Noted.	Note	N/A
	 The Applicant must comply with any reasonable requirement/s of the Secretary arising from: (a) any reports, plans, strategies, programs, reviews, audits or correspondence that are submitted in accordance with this consent; (b) any reports, reviews or audits commissioned by the Department regarding compliance with this consent; and (c) the implementation of any actions or measures contained in these documents. 	 Interview with Quality and Environment Manager DPIE Letter Stating Acceptance of Annual Review dated 1 August 2018 DPIE Letter Stating Acceptance of Annual Review dated 20 August 2019 DPIE Letter Stating Acceptance of Annual Review 17 August 2020 	ERM reviewed submission letters and the responses from DPIE confirming receipt and acceptance of the Annual Reviews. All management plans are provided to DPIE for comment and approval. According to the Quality and Environment Manager, there have been no formal requests from DPIE during the audit period. As such, Cleary Bros is compliant with this condition.	С	N/A
	Deleted	-	-	-	
	Deleted		-	-	-

Period of	Approval				
7.	The Applicant may carry out quarrying operations on the site until 21 February 2036. Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary. Consequently, this consent will continue to apply in all other respects other than the right to conduct quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.	■ NT	The period of approval did not lapse during this audit period, therefore this condition was not triggered.	NT	N/A
Limits on	Production				
8.	The production of quarry products from the quarry must not exceed 900,000 tonnes in any financial year.	 Annual Reviews for FY17/18, FY18/19 & FY19/20 FY18/19 	According to the information available, the production of quarry products did not exceed 900,000 tonnes in any financial year during the audit period, therefore Cleary Bros is compliant with this condition. Production figures from Annual Reviews:	С	N/A
			 FY19/20 835,205 tonnes FY18/19 620,999 tonnes FY17/18 665,126 tonnes 		
9.	The Applicant must: (a) provide annual production data to the DRG using the standard form for that purpose; and (b) include a copy of this data in the Annual Review.	 Annual Reviews for FY17/18, FY18/19 & FY19/20 	The Return for Extractive Materials (Form S1) is the standard form for providing annual production data to the DRG. Auditors confirmed that the forms were present in each Annual Review for the audit period, therefore Cleary Bros is compliant with this condition.	С	N/A
Protectio	n of Public Infrastructure				
10.	The Applicant must: (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and No. 10639 of 2005 Page 5 (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.	 Interview with Quality and Environment Manager 	According to the Quality and Environment Manager, no public infrastructure was damaged or required relocation due to the development during the audit period, therefore this condition has not been triggered.	NT	N/A
Operation	n of Plant and Equipment				
11.	The Applicant must ensure that all plant and equipment at the site, or used in connection with the development, are: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	 MEX work planning for scheduled maintenance Site observations 	Maintenance records and preventative maintenance schedules are managed through MEX and managed by the Port Kembla workshop. ERM reviewed a variety of maintenance work orders for plant and equipment on-site and confirmed that, in general, Cleary Bros conduct routine preventative maintenance in accordance with manufacturer's specifications and regulatory requirements. It is recommended that future preventative maintenance for in-ground concrete infrastructure, such as tank bunds and water treatment plant sumps include integrity inspections to confirm that sumps are not leaking to the subsurface and secondary containment is in good working order.	Obs (C)	Incorporate additional preventative maintenance for concrete bunds and sumps, comprising routine integrity inspections to confirm stored product is fully contained.
Demolitio					
12.	The Applicant must ensure that all demolition work is carried out in accordance with AS 2601-2001: The Demolition of Structures, or its latest version.	 Interview with Quality and Environment Manager 	According to the Quality and Environment Manager, no demolition work occurred during the audit period, therefore this condition has not been triggered.	NT	N/A
Compliar	ice				
13.	Prior to commencement of operations, the Applicant must commission an independent person(s) or organisation(s), approved by the Secretary, to certify in writing to the satisfaction of the Secretary, that the Applicant has complied with all conditions of this consent applicable prior to that event.	 Outside scope period. 	Operations commenced prior to the current audit period, therefore this condition has not been triggered.	NT	N/A

1.								
	At least two weeks pric Applicant must notify th commencement of the	he owners of the Fig	ment of works in each J Tree Hill Land, in wri	n Stage of the Quarry, the iting, of the date of	 Works Commencement Correspondence dated 18 April, 2018 Interview with Quality and Environment Manager 	Cleary Bros provided a letter from to the owners of Fig Tree Hill Land on 18 April 2018 notifying of the commencement of Stages 5 and 6. This letter was provided on 18 April 2018, more than two weeks prior to the planned commencement date of 3 May 2018, therefore Cleary Bros is compliant with this condition.	С	N/A
HED	OULE 4 – SPECIFIC E	ENVIRONMENT	AL CONDITIONS	;				
NTIFI	ICATION OF BOUNDARI	ES						
	Stages 5 and 6 of the 6 (a) engage a registered extraction; (b) submit a survey pla (c) ensure that these b allows operating staff a Note: The limit of extra	Quarry, the Applican d surveyor to mark o an of these boundarie ooundaries are clearl and inspecting office action includes the a	nt must: out the boundaries of t ies to the Secretary; a ily marked at all times ers to clearly identify th area described in the E	ind in a permanent manner that	 Survey Plan by K.F. Williams and Associates Pty Ltd dated 30 April 2018 Letter of submission to the Department dated 1 May 2018 	Cleary Bros engaged a registered surveyor with K.F. Williams to mark out the Stage 5 and 6 boundaries at the development. The boundary markers were observed to be clearly marked in a permanent manner that was visible to operating staff and inspecting officers during the site inspection. Auditors reviewed the submission letter to the Department for the survey and observed the Survey Report, therefore Cleary Bros is compliant with this condition.	С	N/A
FER								
		858245 and the sou 10 metre buffer area /visual bunds, alignm	uthern boundary of Lot a. The buffer may be	t 4, DP 3709. No extraction used for landscaping, minor	Survey Plan ObservationSite observations	The 10 m buffer area was observed during the site inspection, therefore this condition is compliant.	С	N/A
SE								
nstruc	ction of Noise/Visual Bu	nds						
	extraction of production	mplete construction	of the noise/visual bu	inds prior to commencing	 Outside scope period. 	Operations commenced prior to current audit period,	NT	N/A
		n material, and must nds within 26 weeks	t make all reasonable	efforts to complete	 Site observations 	therefore this condition is not triggered. Auditors observed noise and visual bunds.		
se Lir			t make all reasonable	e efforts to complete	 Site observations 			

	 Cleary Bros Albion Park Quarry' (13 December 2002). At the time of the DA the above were the nearest affected residences. 3. The receiver locations and noise limits in the above table may be varied in the instance that negotiated agreements are entered into by the licensee and affected residents/occupiers or if existing agreements become void, or the nearest receiver location changes due to urban encroachment. These limits may be subject to change with an EPL variation. 4. Noise from the premises is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise level limits in Table 1. Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy. The modification factors presented in Section 4 of the NSW Industrial Noise Policy must also be applied to the measured noise level where applicable. 5. The noise emission limits in Table 1 apply under meteorological conditions of: Wind speed up to 0.5m/s in any direction at 10 metres above ground level; or Temperature gradient (environmental lapse rate) conditions of less than or equal to 0oC/100m (lapse). 		
Operatir	ng Hours	-	
5.	Activity Days of the Week Time Drilling, rock breaking, Monday – Friday 7.00 am – 5.30 pm loading and haulage of Saturday 7.00 am – 1.00 pm material from quarry to processing plant, processing and stockpiling, processing and other stage preparatory works, all site construction activities, rehabilitation works, general plant and maintenance. Processing and product transfer to stockpiles	 Annual Reviews for FY17/18, FY18/19 & FY19/20EPL Blast Monitoring 2020 - 2021, 2019 – 2020, 2018 – 2019, 2017 – 2018 Interview with Quality and Environment Manager Complaints Register 2017 – 2020 	Quarry activities, including processing, crushing and screening and product transfer to stockpiles, occur between the hours of 7.00 am and 5:30 pm Monday to Friday and 7:00 am and 1:00 pm Saturday. Certain tasks, such as refuelling, are undertaken outside of allowable operation hours. Annual reviews describe a maximum of one blast per day, on weekdays only, with blast times reported between 9am and 5pm. During the audit period there was one complaint relating to operation outside of approved hours. Investigation determined that noise emissions from other quarry sites were likely to have caused the complaint.
6.	Table 2: Operating Hours for the Development The following activities may be carried out at the premises outside the hours specified in Table 2: (a) the delivery of materials as requested by Police or other authorities for safety reasons; (b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm; (c) workshop activities and other maintenance work inaudible at the nearest affected receiver.	 Interview with Quality and Environment Manager Noise monitoring records during out of hours maintenance work, email dated 10th June 2020. 	According to the Environmental Manager, no material deliveries were requested by Police or emergency work to avoid loss of lives. Maintenance work such as refuelling activities have been undertaken during the audit period outside of the hours specified in Table 2. Noise monitoring undertaken during a refuelling operation in June 2020 confirmed that the works would be inaudible to the nearest affected receivers.
Operatir	ng Conditions		
7.	 The Applicant must: (a) implement all reasonable and feasible mitigation measures to minimise the operational and road noise of the development; (b) minimise the noise impacts of the development during meteorological conditions under which the noise criteria in this consent do not apply; and (c) carry out regular noise monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary. 	 Quarry Environment Management Plan Quarry Operation Noise Monitoring Reports by SLR dated August 2018, October 2019, July 2020 Noise monitoring records during out of hours maintenance work, email dated 10th June 2020. Complaints Register 2017 – 2020 	 The Quarry Environment Management Plan details the following mitigation measures related to noise limits: Construction of a noise/sight bund;Site design features include a vegetated noise bund; Maintenance of plant and equipment; and Operating hours.Annual noise monitoring was undertaken between 2018 and 2020 by qualified third party contractors, SLR Consulting Australia Pty Ltd. Monitoring results were compared against

С	N/A	
С	N/A	
С	N/A	
С	N/A	
С	N/A	

A4

Airblast Overpressure Criteria		
BLASTING AND VIBRATION		
9. Deleted	-	-
 Noise Management Plan The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with the EPA, and submitted to the Secretary for approval by 30 September 2015; (b) describe the measures that would be implemented to ensure compliance with the relevant noise criteria and operating conditions in this consent; (c) describe the proposed noise management system on site; and (d) include a monitoring program that: uses attended monitoring to evaluate the compliance of the development against the noise criteria in this consent; evaluates and reports on the effectiveness of the noise management system and the best practice noise management measures; and defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents. The Applicant must implement the approved plan as approved from time to time by the Secretary. 	 Letter from the DPIE approving the Noise, Blast and Rehabilitation Management Plans dated 15 November 2017 Email from Cleary Bros to EPA providing Noise, Blast and Rehabilitation Management Plans dated 21 August 2017 	 Auditors reviewed correspondence between Cleary Bros and EPA providing the Noise and Blast Management Plans to the EPA with the opportunity to comment. ERM reviewed correspondence from DPIE, approving the Noise and Blast Management Plans. The plan describes the measures that would be implemented to ensure compliance with the relevant noise criteria and operating conditions in this consent (section 3) and describes the proposed noise management system on site (section 4). The plan includes a monitoring program that: uses attended monitoring to evaluate the compliance of the development against the noise criteria in this consent (section 4.3); evaluates and reports on the effectiveness of the noise management system and the best practice noise management measures (section 6); and defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents (6.4). Therefore, Cleary Bros is compliant with this condition.
		 consent conditions to assess compliance, and is therefore compliant with part (c). Maintenance work such as refuelling activities has been undertaken during the audit period. Noise monitoring to confirm maintenance works were inaudible was undertaken. During the audit period there were five complaints on the complaints register that related to noise from blasts and quarry-related noise. Noise and vibration levels were within approved limits for all corresponding blast complaints. As a result of the complaint related to quarry noise, the bulldozer reversing beacon was replaced. ERM considers the mitigation measures to minimise the operational and road noise of the development are compliant with parts (a), (b) and (c).

10.	The Applicant must ensure that the airblast of development does not exceed the criteria in 3.5m from any residence or other sensitive r Airblast overpressure level [dB(Lin Peak)] 115 120 Table 3: Airblast Overpressure Limits	Table 3 at any point that is located at least	 EPL Blast Monitoring 2020 - 2021, 2019 – 2020, 2018 – 2019, 2017 - 2018 	According to the blast monitoring records from the audit period, there were no exceedances of the 115 dB airblast overpressure level limit for more than 5% of the total number of blasts during any reporting period and no exceedances of the 120 dB airblast overpressure level limit at any time, therefore Cleary Bros is compliant with this condition.
Ground \	/ibration Criteria			

С	N/A
-	-

С	N/A	

11.		rticle velocity from blasting at the development y residence or sensitive receiver on privately- Allowable exceedance 5% of the total number of blasts over any 12 month reporting period 0%	 EPL Blast Monitoring 2020 - 2021, 2019 – 2020, 2018 – 2019, 2017 - 2018 	According to blast monitoring records from the audit period, there were no exceedances of the 5 mm/s ground vibration level for more than 5% of the total number of blasts carried out on the premises during each reporting period and no exceedances of 10 mm/s at any time, therefore Cleary Bros is compliant with this condition.	С	N/A
Blasting	Restrictions					
12.	Blasting operations on the premises may onl (a) between 9am and 5pm Monday to Friday (b) are limited to 1 blast each day; and (c) at such other times as may be approved l	/ inclusive;	 EPL Blast Monitoring 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018 Blast Monitoring Reports 2017 - 2020, February, April, September 	According to blast monitoring records from the audit period, all blasts took place between Monday and Friday. Additionally, example individual blast monitoring reports reviewed by ERM indicated that blasting occurred between 9:00 am and 5:00 pm, There were no example blast monitoring reports reviewed by ERM that indicated blasting had occurred outside of the allowable hours, therefore Cleary Bros is compliant with this condition.	С	N/A
Operatir	ng Conditions					
13.	land; and	: in the surrounding area; perty in the surrounding area from any any blasting; e Hill Land, or the continued rural use of that ocal community to get up-to-date information	 Noise and Blast Management Plans Cleary Bros Albion Park Quarry website Phone calls and emails to stakeholders Example Videos of Blasting Operations 	 CB has implemented Noise and Blast Management Plans which include: blast design procedures such as deck charging and blasting away from the closest receiver direction; flyrock management for example placing inert material in the front row blast holes when required; and mitigation measures for fume control such as prescribed meteorological conditions for blasting. ERM considers the implementation of the Noise and Blast Management Plans to be compliant with part (a). Auditors reviewed a sample of blasting videos and confirmed no visible flyrock, therefore flyrock management onsite is considered compliant with part (b). The local community is given up-to-date information on the proposed blasting schedule via the blasting schedule that is posted on the Cleary Bros website. Furthermore, ERM observed internal records stating that key stakeholders were notified directly prior to blasting, including an adjoining land holder, EPA and Holcim (neighbouring operation), therefore Cleary Bros is compliant with part (c). 	С	N/A
Blast Ma	anagement Plan		1			1
14.	the Applicant shall prepare, and subsequent	for the previous quarry stage;	 Blast Management Plan Letter from the DPIE approving the Blast Management Plan dated 15 November 2017 	The Blast Management Plan was prepared on 5 September 2017 by SLR prior to the planned commencement of Stages 5 and 6 (i.e. 3 May 2018). The plan includes a summary of historical monitoring results (Table 4), describes the objectives for noise	С	N/A

(b) describe the objectives for noise and blasting at that stage;(c) describe the proposed blasting design for that stage, and demonstrate that the design will meet the blast criteria listed in Tables 3 and 4;

(d) include a monitoring program for evaluating and reporting on the performance of the development, including:

• compliance with the blasting criteria in this consent; and

minimising the fume emissions from the site;

- Email from Cleary Bros to EPA providing the Blast Management Plan dated 21st August 2017
- Annual Reviews for FY17/18, FY18/19 & FY19/20

4), describes the obje and blasting, describes the proposed blasting design, demonstrates that the design will meet the blast criteria listed in Tables 3 and 4, includes a monitoring program and describes the measures that would be implemented, therefore this plan is compliant with part (a) to (e).

С	N/A

	 avoid any flyrock impacts o minimise dust and fume em minimise, mitigate, remedia 	blasting criteria and opera n The Fig Tree Hill Land; nissions; and ate or compensate for any c v such impacts on people, li	ting conditions of this consent;		Consultation with the landowners of The Fig Tree Hill Land are described on page 17. ERM reviewed correspondence between Cleary Bros and EPA providing the Blast Management Plan to the EPA with the opportunity to comment. ERM reviewed correspondence from DPIE, approving the Blast Management Plan including the changes to real-time dust monitoring as a replacement for the HVAS and deposited dust gauges. Blasts are monitored and results are reported in Annual Reviews. All blasts within the audit period have been in compliance with this consent.
AIR QU	ALITY				
Impact /	Assessment Criteria				
15.	 do not exceed the criteria in T owned land. Pollutant Particulate matter < 10 μm (PM10) Particulate matter < 10 μm (PM10) Total suspended particulates (TSP) Table 5: Air quality criteria Notes to Table 5: a Total impact (i.e. incrementa background concentrations du b Incremental impact (i.e. incremental b Incremental impact (i.e. incremental b Incrementa	at particulate matter emissi able 5 at any sensitive rece Averaging Period Annual 24 hour Annual al increase in concentration te to all other sources); emental increase in concer hts such as bushfires, prese ties or any other activity ag voidance measures" include onditions 16 and 17 to deve	ions generated by the development eiver or residence on privately- Criterion a,c 30 μg/m3 b 50 μg/m3 a,c 90 μg/m3 s due to the development plus ntrations due to the development cribed burning, dust storms, sea preed by the Secretary in es, but is not limited to, the	 Annual Reviews for FY17/18, FY18/19 & FY19/20 Email notification of 24hr PM10 criteria exceedance dated 14 October 2020 	Air quality monitoring results are reported within the Annual Reviews. An exceedance of the 24-hour PM10 criteria at the High Volume Air Sampler occurred on 23 September 2020. According to the Quality and Environment Manager, Cleary Bros undertook an investigation into the cause of the exceedance. The incident was reported to DPIE on 14 October 2020 and at the time of writing this report, Cleary Bros is awaiting a response from DPIE. ERM notes that results immediately before and after the exceedance were within criteria and the isolated exceedance event is not considered representative of widespread failure to manage particulate matter emissions.

Operating Conditions

The Applicant must: (a) implement best management practice to minimise the dust emissions of the development; (b) regularly assess meteorological and air quality monitoring data to guide the day-to-day planning of operations and implementation of air quality mitigation measures to ensure compliance with the relevant conditions of this consent; (c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note d to Table 5 above); (d) monitor and report on compliance with the relevant air quality conditions in this consent; and (e) minimise surface disturbance of the site, other than as permitted under this consent, to the satisfaction of the Secretary.	 Annual Reviews for FY17/18, FY18/19 & FY19/20 Site observations Real time weather monitoring data Quarry Environment Management Plan 	Cleary Bros implements a QEMP which includes dust mitigation measures such as prescribed meteorological conditions for blasting, sealed access to the Site, progressive revegetation of long term stockpiles and limits on stockpile heights, water spray of haul road, designated vehicle roads onsite with speed limits and covered loads for trucks exiting the Site. ERM considers these measures compliant with part (a), (c) and (e). Auditors reviewed the real-time weather monitoring web application and the short term weather monitoring records automatically sent weekly to the Environmental Manager, therefore Cleary Bros is compliant with part (b). Air quality monitoring results are reported within Annual Reviews in compliance with part (d).	С	N/A	
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NC	Comply with direction from DPIE with regard to the reported 24-hour PM10 criteria exceedance.
С	N/A

Air Quality Management Plan

- 17. The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:(a) be prepared in consultation with the EPA, and submitted to the Secretary for approval
 - by 30 September 2015; (aa) be revised in consultation with the EPA and submitted to the Secretary for approval
 - prior to the commencement of quarrying activities in either Stages 5 or 6;
 - (b) describe the measures that would be implemented to demonstrate compliance with the relevant air quality impact assessment criteria and conditions of this consent:
 - (c) include a site-specific best management practice determination;
 - (d) describe the proposed air quality management system; and
 - (e) include an air quality monitoring program that:
 - is capable of evaluating the performance of the development;
 - includes risk-based monitoring to demonstrate compliance with the criteria in Table 5;
 - includes ongoing real-time particulate monitoring;
 - includes a Trigger Action Response Plan (TARP) which describes the actions to be taken when specific trigger levels are exceeded;
 - adequately supports the air quality management system; and
 - evaluates and reports on the adequacy of the air quality management system.
 - The Applicant must implement the approved plan as approved from time to time by the Secretary.

- Air Quality Management Plan
- Letter from DPIE to Cleary Bros approving the Air Quality Management Plan dated 13 December 2017
- Letter from EPA to Cleary Bros dated 21 August 2017
- Annual Reviews for FY17/18, FY18/19 & FY19/20

ERM reviewed correspondence from DPIE, approving the Air Quality Management Plan. The current Air Quality Management Plan (dated December 2017) was prepared prior to commencement of Stage 5 and 6 of the excavation (i.e. 3 May 2018), which is in compliance with part (aa).

The plan includes measures that would be implemented to demonstrate compliance with relevant criteria (sections 4 and 5), a site-specific best management practice determination (section 4.3), the proposed air quality management system (section 3) and an air quality management plan that addresses part (e) (sections 3, 4, 5, 6).

The Site currently monitors particulates via a HVAS. However, this does not allow adjustment of operational activity in real-time (as required by part (e)) as a response to elevated concentrations. As such, the AQMP proposes implementation of real-time particulate monitors. At the time of the Site inspection, the calibration process for the real-time particulate monitors with the HVAS required for their deployment was ongoing.

Air quality is monitored and results are reported in Annual Reviews. A minor exceedance of the 24-hour PM10 criteria at the High Volume Air Sampler occurred on 23 September 2020. According to the Quality and Environment Manager, Cleary Bros undertook an investigation into the cause of the exceedance. The incident was reported to DPIE on 14 October 2020. Cleary Bros is awaiting a response from DPIE.

As the exceedance was identified, notified to DPIE and investigated in accordance with the AQMP, Cleary Bros is compliant with this condition.

ΜΕΤΕΟ	ROLOGICAL MONITORING			
18.	For the life of the development, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline.	 Annual Reviews for FY17/18, FY18/19 & FY19/20 Site observationsbservations Real time weather monitoring Weather monitoring short term records 	Cleary Bros maintain a continuous weather monitoring station adjacent to the development. The Annual Review's describe the parameters that are continuously monitored. Auditors reviewed a sample of meteorological data from the onsite weather station, confirming that monitoring is occurring. Auditors also observed that the weather station was unobstructed with open sky access, therefore Cleary Bros are considered compliant with this condition. ERM considered this compliant with the condition.	
SURFA	CE & GROUNDWATER			
Water S	Supply			
19.	The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of quarrying operations on site to match its available supply, to the satisfaction of the Secretary. Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development, including in respect of the extraction and/or interception of groundwater	 Water Management Plan Interview with Quality and Environment Manager Email from Webster Consulting dated 11 November 2016 	A Water Balance (date 30 April 2018) prepared by Cardno is included as Appendix B in the Water Management Plan. The dam is sized in accordance with the basic landholder rights permission level and no instances of the dam running dry have occurred to date.	

С	N/A
С	N/A
С	N/A

Wator P	ollution		Auditors reviewed a correspondence from Webster Consulting, dated 11 November 2016 stating that a reduction in the dam size had been arranged to bring the dam size into alignment with the current leaseholder basic water rights allocation. Given the development is adequately supplied with water and stores water in accordance with the leaseholder allocation, ERM considered Cleary Bros compliant with this condition.		
20.	Unless an EPL or the EPA authorises otherwise, the Applicant must comply with section	Annual Returns for FY17/18.	According to the Annual Returns, there were no	С	N/A
20.	120 of the Protection of the Environment Operations Act 1997 during the carrying out of the development.	FY18/19 & FY19/20 Annual Reviews for FY17/18, FY18/19 & FY19/20	incidents where the pollution incident response plan (PIRMP) has been activated for water in FY 17/18, FY 18/19 or FY 19/20.	0	
		 Interview with Quality and Environment Manager 	Furthermore, there have been no environmental incidents or complaints related to pollution to waters reported in the Annual Returns or Annual Reviews for the audit period, therefore Cleary Bros is compliant with this condition.		
21.	The Applicant must ensure that the discharges from any licensed discharge point/s comply	Annual Reviews for FY17/18, EV40/00 & EV40/00	According to the EPL, the limits for some locations	С	N/A
	with the limits in Table 6, unless otherwise agreed by the EPA.PollutantUnits of MeasureMaximum LimitTSSmg/L50pHpH6.5 - 8.5	FY18/19 & FY19/20	require measurement in turbidity, which measures a similar physical parameter to TSS. The Annual Reviews reported water discharges were within the required limits for both TSS, turbidity and pH for the audit period, therefore Cleary Bros is compliant with		
	Table 6: Water Discharge Pollution Limits		this condition.		
Ground	water				
22.	In the event that groundwater in any aquifer is intersected during extraction activities, the Applicant must undertake a hydrogeological investigation in consultation with DPI Water and to the satisfaction of the Secretary. The investigation must report on groundwater sources, levels, yield and quality; identify any risks to groundwater users or groundwater dependent ecosystems and propose recommended management measures.	 Interview with Quality and Environment Manager 	According to the Quality and Environment Manager, no aquifers have been intersected during the audit period, therefore this condition was not triggered.	NT	N/A
	measures to the satisfaction of the Secretary. Deleted				
1.23		-	-	-	-
Storm V	Vater Management System				
4.	The Applicant must ensure that the stormwater management system for the development is designed, constructed and operated to capture and treat polluted waters from storm event(s) of less than, and including a 1:10 year, 24 hour duration, average recurrence	 Interview with Quality and Environment Manager 2017 Independent Environmental 	According to previous audits, the design of the stormwater system met this condition.	С	N/A
	interval (that is 225 mm of total rainfall within the 24 hour period).	 2017 Independent Environmental Audit 	During the audit period, the stormwater system was maintained in a manner capable of capturing in excess of 225 mm of total rainfall within a 24 period due to the storage capacity of the pit. Treatment has not been required at any point given the excess storage capacity affords site management the ability to only commence discharging when parameters are within the limits set by the consent and the EPL, therefore Cleary Bros are compliant with this condition.		
25.	Within 5 days of a rainfall event, the Applicant must ensure that the basins in the stormwater management system are treated and emptied to maintain the required storage volume.	 Interview with Quality and Environment Manager Interview with Quality and Environment Manager 	According to the Quality and Environment Manager, treatment has not been required at any point and monitoring results indicate all discharges have occurred within the required limits.	С	N/A
			Emptying of basins has not been required to meet storage levels as the pit storage has exceeded the required storage capacity even after heavy rainfall		

			events, therefore Cleary Bros is compliant with this condition.			
occul	ant Management					
6.	The Applicant must not use a flocculant, other than gypsum, without the written approval of the EPA.	 Interview with Quality and Environment Manager 	According to the Quality and Environment Manager, no flocculant or other treatment has been applied to discharged water, therefore this condition has not been triggered.	NT	N/A	
lonitor	ring and Management	1				
7.	 Within 12 months of the date of this consent, the Applicant must prepare a Water Management Plan for the development, in consultation with DPI Water and to the satisfaction of the Secretary. This plan must be prepared by a qualified hydrogeologist and include: (a) a Water Balance; (b) an Erosion and Sediment Control Plan; (c) a Surface Water Monitoring Program; (d) a Ground Water Monitoring Program; and (e) an Integrated Water Management Strategy, if the water balance shows a potential demand for water above that which can be collected from rainfall. Prior to the commencement of quarrying activities in Stages 5 and 6, the Water Management Plan must be revised, in consultation with DPI Water and to the satisfaction of the Secretary. The revised Water Management Plan must include a detailed description of the surface water management system on site, including the area, depth and capacity of any in-pit sumps. The Applicant must implement the approved plan as approved from time to time by the Secretary. 	 Water Management Plan Letter from DPIE to Cleary Bros approving the Water Management Plan dated 29 May 2019 	The Water Management Plan was originally prepared by Cardno on 6 September 2017 prior to the commencement of quarrying activities in Stages 5 and 6 (i.e. 3 May 2018). The plan was revised on 8 May 2018 following receipt of comments from DPIE. The latest version of the plan was revised on 20 August 2020 to include an updated stormwater plan. ERM reviewed correspondence from DPIE, approving the latest revision which takes into account part (a) to (d) and includes a detailed description of the surface water management system onsite, therefore is considered compliant with this condition. The Water Management Plan notes that an Integrated Water Management Strategy is not required given the water balance indicates there is a surplus of water under a range of climatic condition. According to the Quality and Environment Manager, the Site has had sufficient water during the audit period.	C	N/A	
	The Water Balance must include: (a) consideration of the existing quarry and processing site, existing water storage dam and the proposed quarry and haul road; (b) the source of all water collected or stored on the site, including rainfall, stormwater and groundwater; (c) the estimated water use demand in wet, average and drought years.	Water Management Plan Interview with Quality and Environment Manager	 The Water Management Plan contains a Water Balance prepared on 30 April 2018 for the Site. Total annual water use is estimated to be 93 ML in a dry year, 85 ML in a median year and 75 ML in a wet year and is therefore compliant with part (c). The total annual water use takes into account the following items: evaporation from the 18 ML capacity on-site dam; dust suppression for the main processing plant, and haul roads and environs; and water use in the concrete batching plant. ERM considers these items compliant with part (a). The plan also includes an estimate of water availability for the storage dam based on rainfall, catchment area (dam, forest, pasture, pit and roads) and the proportion of rainfall assumed to become surface water runoff for each land use. Groundwater contribution was considered likely to be negligible and not included in the water balance calculation. As rainfall, stormwater and groundwater are considered, Cleary Bros is compliant with part (b). According to the Quality and Environment Manager, the Site has had sufficient water during the audit period. 	C	N/A	

29.	The Erosion and Sediment Control Plan must: (a) be consistent with the requirements of the Department of Housing's Managing Urban Stormwater: Soils and Construction manual; (b) identify activities that could cause soil erosion and generate sediment; (c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters (d) describe the location, function, and capacity of erosion and sediment control structures; and (e) describe the location function and capacity of erosion and sediment control structures; and (e) describe what measures would be implemented to maintain the structures over time.	 Water Management Plan Site Observations Interview with Quality and Environment Manager 	 The Water Management Plan contains an Erosion and Sediment Control plan. According to the Department of Housing's Managing Urban Stormwater: Soils and Construction manual Volume 2E Mines and quarries, the nature and level of detail in an ESCP should reflect the potential significance of erosion and sediment control at the site. As such, all elements included in the manual may not be required for Cleary Bros Site. Given that the Site's ESCP identifies activities that may cause sediment and erosion (section 4.2), measures to mitigate potential impact including the impact from sediment-laden water released into the environment (section 4.3), a maintenance strategy (section 4.4), an approach to assess measures (section 4.5), and a map that details the location and types of proposed erosion and sediment control measures (Appendix C), the Site's ESCP is compliant with part (b) to (e) and broadly in compliance with the Department of Housing's Managing Urban Stormwater: Soils and Construction manual. According to the ESCP, routine maintenance and works comprise: Installation and maintain erosion and sediment controls in accordance with the approved plans. Inspection of erosion and sediment controls after each major rain event, repair any damage and ensure correct functioning. Removal of accumulated silt periodically from sediment traps / basins. Auditors observed vegetated buffers, well maintained haul roads and sediment ponds used to minimise erosion and the transport of sediment to downstream water. A portion of the natural flow paths and vegetated buffers shown in Appendix C of the Water Management Plan, are no longer present onsite due to the expanded quarry pit. Erosion and sediment controls in the Sediment Control Plan should be updated to describe current practicable onsite controls.
30.	The Surface Water Monitoring Program must include: (a) detailed baseline data on surface water flows and quality; (b) surface water impact assessment criteria; (c) a program to monitor surface water flows and quality; (d) a program to manage water releases from the site, including consideration of water treatment measures, such as vegetated swales; (e) a program to monitor bank and bed stability; (f) a protocol for the investigation, notification and mitigation of identified exceedances of the surface water impact assessment criteria; and (g) a program to monitor the effectiveness of the Erosion and Sediment Control Plan.	 Water Management Plan Annual Reviews for FY17/18, FY18/19 & FY19/20 Interview with Quality and Environment Manager Flow Measurement Field Sheet 	 The latest version of the Water Management Plan was revised on 20 August 2020 to include an updated stormwater plan. The quarry extension discharge, main sediment pond and watercourse west of the Quarry Manager's office are monitored for pH, turbidity and TSS during overflow events. Additionally, Surface water flows and analytes such as electrical conductivity, pH, temperature, turbidity, oil and grease, TSS and major cations are monitored quarterly at watercourse 1 and 2. The results of this monitoring are reported in the Annual Reviews. Excess water from the main sediment pond is discharged offsite. In the case that water exceeds EPL criteria for turbidity, the discharge is delayed or, If discharge cannot be delayed, gypsum is added and pH is checked prior to discharge. A protocol for the investigation, notification and mitigation of identified exceedances of the surface water impact assessment criteria in included in section 8 of the plan.

Oba (C)	Poviou the addiment control plan				
Obs (C)	Review the sediment control plan (Appendix C) and update the plan to only describe controls that are practicable given the current state of operations.				
С	N/A				
C					
			According to the Quality and Environment Manager, an internal review in June 2020 identified that the Site had not been monitoring bed and bank stability in line with the requirements of the Water Management Plan. The Site subsequently updated the flow monitoring fieldsheet that ALS use to capture this information. ERM reviewed the Flow Measurement Field Sheet used by ALS and confirmed that bed and bank erosion is monitored. The effectiveness of the Sediment Control Plan is assessed through water quality monitoring results and annual ecological and rehabilitation surveys. These results are reported in Annual Reviews and were compliant for the audit period. According to the Quality and Environment Manager, gypsum has not been required at any point. ERM considers Cleary Bros compliant with this condition.		
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31.	The Ground Water Monitoring Program must include: (a) detailed baseline data on groundwater levels and quality, based on statistical analysis; (b) groundwater impact assessment criteria; (c) a program to monitor regional groundwater level and quality; (d) a program to monitor groundwater level effects on vegetation, and on groundwater supply to adjoining properties; (dd) a program for monitoring groundwater inflows into the quarry from the quarry face or floor, or into any in-pit sumps; (e) a protocol for the investigation, notification and mitigation of identified exceedances of the groundwater impact assessment criteria; and (f) a protocol to consult with DPI Water prior to any re-injection of groundwater.	 Water Management Plan Groundwater Monitoring Results Routine Inspection Sheets Annual Reviews for FY17/18, FY18/19 & FY19/20 	The Water Management Plan contains a Ground Water Monitoring Program that takes into account all required criteria including: (a) detailed baseline data on groundwater levels and quality, based on statistical analysis (Appendix A); (b) groundwater impact assessment criteria (section 6.3); (c) a program to monitor regional groundwater levels and quality (section 7); (d) a program to monitor groundwater level effects on vegetation, and on groundwater supply to adjoining properties (section 7); (dd) a program for monitoring groundwater inflows into the quarry from the quarry face or floor, or into any in- pit sumps (section 7); (e) a protocol for the investigation, notification and mitigation of identified exceedances of the groundwater impact assessment criteria (section 8); and (f) a protocol to consult with DPI Water prior to any re- injection of groundwater (section 8.4). Routine inspections of the pit face for seepage and running water is undertaken. ERM reviewed example completed inspection sheets and confirmed that routine seepage monitoring was undertaken. Prior to the audit period, groundwater monitoring was increased from biannual to quarterly in response to increases in major ions and changes to certain dissolved metal concentrations observed within groundwater samples. Quarterly monitoring continued throughout the audit period. The impact assessment criteria stipulates certain triggers for further investigation. A trigger was reported in Annual Review FY19/20. Certain bores exhibited trends that were outside of the historical range of measurements for groundwater level and certain species related to salinity. As such, sampling of these species was increased to monthly for the following 6 months. This is in line with the response required by the Water Management Plan, indicating successful implementation of the monitoring program and investigation protocol.	C	N/A

		No re-injection of water has been reported in Annual Reviews for the audit period, therefore part (f) has not been triggered.		
The Integrated Water Management Strategy must include: (a) exploration of a range of options for a sustainable resource alternative for water supply to the site; (b) identification of all possible and available sources of water; (c) consistency with Government Water Reform initiatives and policies; (d) quality of water to meet usage requirements including any possible effects on product; (e) costs of supply; (f) health and environmental impacts; (g) legislative requirements; (h) assessment of the feasibility, benefits and costs of options; (i) a process to identify and evaluate preferred options for implementation; and (j) the identification of a timetable for implementation of the selected options.	Water Management Plan	According to the Water Management Plan, an Integrated Water Management Strategy is not required given the water balance indicates there is a surplus of water under a range of climatic conditions, therefore this requirement has not been triggered.	NT	N/A

Reporting

33.	 Each year, the Applicant must: (a) review the Water Management Plan; (b) update each sub-plan; and (c) report the results of this review in the Annual Review, including: the results of monitoring; details of the review for each sub-plan; amendments to the sub-plans; and details of the measures undertaken/proposed to address any identified issues. 	Annual Reviews for FY17/18, FY18/19 & FY19/20	 The annual review of the Water Management Plan and sub-plans is described in the Annual Reviews in compliance with this condition. The current revision of the Water Management Plan was approved by DPIE on 29 May 2018 and included improvements to water accounting methodologies. In FY18/19, the plan remained applicable to the project and no revisions were required. In FY 19/20, the plan remained current for the Site with the exception of the Erosion and Sediment Control Plan, which is scheduled to be updated following this audit. The Annual Reviews for the audit period include reporting on monitoring results, sub-plan reviews and amendments and measures to address issues. 	С	N/A
FLORA	& FAUNA				
Vegetati	ion Clearing Protocol				

vegeta			
34.	 Prior to the commencement of works, the Applicant must prepare a Vegetation Clearing Protocol for the development in consultation with Council and the OEH, and to the satisfaction of the Secretary. This plan must: (a) delineate the areas of remnant vegetation to be cleared; and (b) describe the procedures that would be implemented for: pre-clearance surveys; progressive clearing; fauna management; conserving and reusing topsoil; collecting seed from the site; salvaging and reusing material from the site; and controlling weeds. 	 Vegetation Management Plan Letter from DPIE approving the Vegetation Management Plan dated 9 May 2018 Email from CB to OEH requesting feedback on the VMP dated 26 March 2020 	The Vegetation Management Plan contains a Vegetation Clearing Protocol that contains a delineation of the areas of remnant vegetation and describes the procedures for surveys, progressive clearing, fauna management, topsoil management, seed collection, material salvaging and weed control, which is compliant with this condition. ERM reviewed correspondence requesting feedback from the OEH and from DPIE approving the Vegetation Management Plan. According to site management, no vegetation clearing has occurred during the audit period.
Southe	ern Remnant Vegetation and Revegetation Area		
35.	The Applicant must conserve and maintain the southern areas of remnant vegetation marked on the map in Appendix 2.	 Vegetation Management Plan Annual Monitoring Reports dated July 2020, July 2019, June 2018egetation Management Plan Biannual Inspection Reports dated December 2019, December 2018, January 2018 	The Vegetation Management Plan describes measures to conserve and maintain the southern areas of remnant vegetation. Annual monitoring is undertaken to assess the health of remnant vegetation and biannual inspections are conducted to assess the efficacy of the Vegetation Management Plan. Both the annual monitoring and biannual inspection reports recommended weed management. ERM reviewed reports from Good Bush demonstrating that weed management have been undertaken during the audit

С	N/A	

С	N/A	

Planted' and 'Weed Control to Promote Natural Vegetation' on the map in Appendix 2. Revegetation must be in accordance with the Vegetation Management Plan described in	Site Observations Vegetation Management Plan	Auditors observed the revegetation areas to be in a		
Note: Other revegetation areas must be covered in the Vegetation Management Plan referred to in Condition 37 below.	Annual Monitoring Reports dated July 2020, July 2019, June 2018 Biannual Inspection Reports dated December 2019, December 2018, January 2018 Good Bush Work Summary Reports	good condition with vegetation actual to be in a good condition with vegetation established and no evidence of poorly maintained vegetation. The Vegetation Management Plan describes the restoration zone (weed suppression) and planting zone. According to the Biannual Inspection Report, planting has occurred in the fenced revegetation areas (i.e. zone 1,2 and 3) and been predominantly successful. Planting also occurred in zone 4 and 5 with minimal success. Both the annual monitoring and biannual inspection reports recommended additional planting and weed management. ERM reviewed reports from Good Bush demonstrating that weed management and revegetation activities have been undertaken during the audit period, therefore Cleary Bros is compliant with this condition.	С	N/A
etation Management Plan				
 Plan for the development in consultation with Council and the OEH, and to the satisfaction of the Secretary. The plan must be prepared by a suitably qualified ecologist / bush regenerator, and must address: (a) establishment of baseline data for existing vegetation and habitat in the area; (b) vegetation management on all areas of the site outside the working area of the quarry; (c) conservation, maintenance and enhancement of threatened communities, including 'Illawarra Subtropical Rainforest' and 'Illawarra Lowlands Grassy Woodlands'; (d) conservation, maintenance and enhancement of threatened plant species, including Cynanchum elegans (White Cynachum), Daphnandra sp.aff micrantha (Illawarra Socketwood), and Zieria granulata (Illawarra Zieria); (a) establishment and maintenance of vegetation/babitat for threatened fauna species 	Vegetation Management Plan Letter from DPIE approving the Vegetation Management Plan dated 9 May 2018 Good Bush Work Summary Reports Internal Vegetation Management Reports Annual Monitoring Reports dated July 2020, July 2019, June 2018 Biannual Inspection Reports dated December 2019, December 2018, January 2018	The Vegetation Management Plan was originally revised on 15 January 2018 prior to quarrying in Stages 5 and 6 (i.e. 3 May 2018) as required by this condition. Subsequent revisions occurred on 26 March 2018, 17 April 2018 and 7 May 2018 to incorporate feedback from DPIE and OEH and correct minor errors. The plan addresses: (a) establishment of baseline data for existing vegetation and habitat in the area (section 2.1); (b) vegetation management on all areas of the site outside the working area of the quarry (section 3); (c) conservation, maintenance and enhancement of threatened communities, including 'Illawarra Subtropical Rainforest' and 'Illawarra Lowlands Grassy Woodlands' (section 3.4); (d) conservation, maintenance and enhancement of threatened plant species, including Cynanchum elegans (White Cynachum), Daphnandra sp.aff micrantha (Illawarra Socketwood), and Zieria granulata (Illawarra Zieria) (section 3.5); (e) establishment and maintenance of vegetation/habitat for threatened fauna species, including the Grey-headed flying fox (section 3.6); (f) ongoing management of weeds and pests, including the provision of stock-proof fencing and replacement of damaged plantings (section 5.1); (h) a program for how the performance of the measures described in (b) to (f) above would be monitored over time (section 5.1); (h) a program for monitoring the effect of quarrying, including water management, on vegetation communities (section 5.1). ERM review a letter from DPIE approving the Vegetation Management Plan. ERM reviewed reports from Good Bush demonstrating that weed management and revegetation activities have been undertaken during the audit period. Prior to 2019, weed management and revegetation vas undertaken internally and ERM reviewed internal	C	N/A

				correspondence examples demonstrating weed spraying and revegetation was undertaken. Monitoring of performance is conducted as part of annual monitoring and biannual inspections undertaken by external ecological consultants.		
eportin	ng					
8.	The Applicant must include a progress rep Management Plan in the Annual Review.	port on the implementation of the Vegetation	Annual Reviews for FY17/18, FY18/19 & FY19/20	The Site has biannual inspections and annual monitoring conducted by external ecologists (Good Bush Pty Ltd, Kevin Mills and Associates, Niche Environment and Heritage). The FY19/20 Annual Review found that weeds had proliferated and grazing had occurred within the fenced revegetation areas. The FY18/19 reported that native species are common and native species diversity is present even in seemingly weed-dominated zones, however, there was increase in weed coverage in the planting zones 1, 2 and 3. The FY17/18 Annual Review reported that due to the regular work on the Site by the contractor, there were no serious weed issues in the most recent planting areas (Zones 2 and 3). Lantana was present in some places in Zones 1 and 2. A survey identified multiple significant plant species.	С	N/A
	LITATION tation Objectives			-		
3A.	The Applicant must rehabilitate the site to rehabilitation must be generally consisten	 the satisfaction of the Secretary. This t with the rehabilitation strategy in the EIS and the 2 and must comply with the objectives in Table Objective Safe Hydraulically and geotechnically stable Non-polluting Fit for the intended post-mining land use(s) Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and minimising visual impacts when viewed from surrounding land Decommissioned and removed, unless otherwise agreed by the Secretary 	 Rehabilitation Management Plan Annual Monitoring Report dated July 2020 Site Observations Geotechnical Stability Assessment and Mine Plan by Cardno dated 31st May 2017 	The Rehabilitation Management Plan describes methods proposed to meet rehabilitation objectives in this condition. These objectives are medium and long term objectives and represent the rehabilitation criteria to be achieved prior to surrendering the Development Consent for the project. Currently, the quarry benches and pit floor are still operational. As such, compliance against this condition was limited to an assessment of the Site's progress towards objectives. A Geotechnical Stability Assessment and Mine Plan was prepared in order to outline requirements to maintain a specific landform shape to promote geotechnical stability and the long term safety of users of the land. Annual Reviews FY17/18, FY18/19 and FY 19/20 reported that overburden material was placed in Stages 1, 2 and 4 of the quarry during the audit period and re-profiled to a stable batter. The pit appeared stable based on Site observations. Based on this, the Site is progressing towards an appropriate final landform. Revegetation activities during Annual Review FY17/18 and FY18/19 included the establishment of tree	С	N/A

С	N/A	

			rehabilitation objectives, Cleary Bros is compliant with this condition. It is noted that no progressive rehabilitation areas have been signed off by DPIE at the time of this audit.		
roares	sive Rehabilitation				
39.	 The Applicant must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation. Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to future re-disturbance. 	 Rehabilitation Management Plan Interview with Quality and Environment Manager 	The Rehabilitation Management Plan describes the rehabilitation program and methodology. According to the Quality and Environment Manager, the Stages 1-3 areas have undergone re-profiling to the final landform as part of initial rehabilitation in compliance with this condition. Cleary Bros plan to undertake further planting in this area in the coming years. Auditors observed established rehabilitation areas adjacent to the HVAS, which appeared to be well maintained. As such, Cleary Bros is complaint with this condition.	С	N/A
Rehabili	tation Management Plan		1		
40.	 Within 6 months of the date of this consent, the Applicant must prepare a Rehabilitation Management Plan to the satisfaction of the Secretary. This plan must: (a) identify the disturbed area at the site; (aa) provide details of the conceptual final landform and associated land uses for the site; (b) describe in general the short, medium, and long-term measures that would be implemented to ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent; (c) describe in detail the measures that would be implemented over the next 5 years to rehabilitate the site; (d) include detailed performance and completion criteria for evaluating the rehabilitation of the site (including progressive rehabilitation) including triggers for any necessary remedial action; (e) include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria; and (f) include details of who is responsible for monitoring, reviewing, and implementing this plan. Prior to the commencement of quarrying activities in Stages 5 and 6, the Rehabilitation Management Plan must be revised to the satisfaction of the Secretary. The Applicant must implement the approved plan as approved from time to time by the Secretary.	 Rehabilitation Management Plan Letter from the DPIE approving the Rehabilitation Management Plan dated 15 November 2017 	The Rehabilitation Management Plan revised on 18 October 2017 prior to the planned commencement date of Stage 5 and 6 (i.e. 3 May 2018) takes into account the following requirements: (a) identify the disturbed area at the site (figure 1); (aa) provide details of the conceptual final landform and associated land uses for the site (section 3.3); (b) describe in general the short, medium, and long- term measures that would be implemented to ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent (section 4); (c) describe in detail the measures that would be implemented over the next 5 years to rehabilitate the site (section 4.1); (d) include detailed performance and completion criteria for evaluating the rehabilitation) including triggers for any necessary remedial action (section 5); (e) include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria (sections 5 and 6); and (f) include details of who is responsible for monitoring, reviewing, and implementing this plan (section 3.1). ERM reviewed correspondence from DPIE approving the Rehabilitation Management Plan. According to the Quality and Environment Manager, the Stages 1-3 areas have undergone re-profiling to the final landform as part of initial rehabilitation. Cleary Bros plan to undertake further planting in this area in the coming years. Auditors observed established rehabilitation areas adjacent to the HVAS, which appeared to be well maintained. As such, Cleary Bros is complaint with this condition.	С	N/A
41.	Within 5 years of providing the Rehabilitation Management Plan to the Secretary, and every 5 years thereafter, the Applicant must review and update the plan to the satisfaction of the Secretary.	 Rehabilitation Management Plan Letter from the DPIE approving the Rehabilitation Management Plan dated 15 November 2017 	The Rehabilitation Management Plan was revised on 18 October 2017 prior to the planned commencement date of Stage 5 and 6 (i.e. 3 May 2018) and approved by DPIE. Additionally, the 2017 Independent	С	N/A

		 2017 Independent Environmental Audit Report 	Environmental Audit Report indicates the previous Rehabilitation Management Plan was approved in October 2016 less than five years prior to the approval of the current plan, therefore Cleary Bros is complaint with this condition.		
Rehabilit	tation Bond				
42.	 Within 6 months of the date of this consent, the Applicant must lodge a suitable rehabilitation and conservation bond for the development with the Secretary. The sum of the bond must be calculated at: (a) \$2.50/m2 for the total area of disturbance at the development; and (b) \$3.00/m2 for the total area of the revegetation area, to the satisfaction of the Secretary. Notes: If the rehabilitation and revegetation area is completed to the satisfaction of the Secretary will release the rehabilitation and conservation bond. If the rehabilitation and revegetation area is not completed to the satisfaction of the Secretary, the Secretary will call in all or part of the rehabilitation and conservation bond, and arrange for the satisfactory completion of these works. 	Email from the Department relinquishing the previous bond and accepting the updated bond dated 3 November 2017	ERM reviewed the correspondence from DPIE confirming that the bond amount was accepted and updated in November 2017 and the previous bond was closed. The sum of the bond was calculated at \$3.02/m ² for the disturbance area and \$3.63/m ² for the revegetation area adjusted for estimate of inflation between 2017 (last revision) and 2020 (latest data available) of 3.3% (based on change from 2017 - 2020), therefore Cleary Bros is compliant with this condition.	С	N/A
3.	 Within 3 years of lodging the rehabilitation and conservation bond with the Secretary, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must review, and if necessary revise, the sum of the rehabilitation bond to the satisfaction of the Secretary. This review must consider: (a) the effects of inflation; (b) any changes to the total area of disturbance; and (c) the performance of the revegetation area. 	Email from the Department relinquishing the previous bond and accepting the updated bond dated 3 November 2017	Cleary Bros revised the bond amount based on current site status and rehabilitation activities undertaken to date and submitted a revised bond amount on 23 October 2020 in compliance with this condition. At the time of this audit, DPIE had not yet issued a response to the updated bond calculation amount. The bond was amended to address the increased disturbance footprint, revegetation progress, and the effects of inflation.	С	N/A
eportin	la l		· · · · · · · · · · · · · · · · · · ·		
4.	The Applicant must include a progress report on the Rehabilitation Management Plan in the Annual Review.	Annual Reviews for FY17/18, FY18/19 & FY19/20	All Annual Reviews from the audit period describe a progress report on the Rehabilitation Management Plan in compliance with this condition. FY 17/18 described the Rehabilitation Management Plan most recently revised and approved by the Department of Planning and Environment on 15th November 2017, following changes to the development consent relating to rehabilitation, included with modification 3 of the consent. FY18/19 and FY 19/20 reported the Rehabilitation Management Plan remains current and appropriate for the Site.	С	N/A
RAFFIC	AND TRANSPORT				
ight of	Way				
5.	Prior to the commencement of works, the Applicant must formalise the Right of Way for the haulage road, to the satisfaction of the Secretary.	 2017 Independent Environmental Audit Report 	This condition was previously considered an administrative non-compliance. The condition is not triggered as this requirement is outside of the audit period.	NT	N/A
ite Acce	ess	1			1
δ.	All access to the site is to be via the roundabout at East-West Link Road, except in an emergency, as agreed by the Secretary in consultation with Council.	 Site Observations 	The only access to the Site was observed to be by the roundabout at East-West Link, therefore Cleary Bros is compliant with this condition.	С	N/A
ranspor	rt Management Plan		·		
7.	The Applicant must prepare a Transport Management Plan for the development to the satisfaction of the Secretary. This plan must:	Transport Management PlanAnnual Review FY 19/20	Part (a) is not triggered for this audit as it was covered in the previous audit period and was considered compliant. The Transport Management Plan was most	С	N/A

NT	N/A
NT	N/A
C	N/A

			driver monitoring checks are undertaken to confirm trucks have covered loads.		
).	The Applicant must ensure all loaded vehicles leaving the site are cleaned of materials that may fall on the road before they are allowed to leave the site.	 Traffic Management Plan Site Observations 	Trucks are required to be inspected at the weighbridge to ensure they are clean of quarry materials. Auditors observed loaded vehicles leaving the Site which were free from materials. There is also a washbay prior to the site exit available for trucks to remove materials entrained on the outside of the vehicle, therefore Cleary Bros is compliant with this condition.	С	N/A
RITA	GE				
	 Within 3 months of the date of this consent, and prior to the disturbance of any relic, in consultation with the OEH and Council, and to the satisfaction of the Secretary. The plan must be prepared by a suitably qualified heritage consultant and must include: (a) a program for baseline dilapidation surveys of residences and other existing buildings on The Fig Tree Hill Land and the 'Belmont' property (subject to reasonable access being granted by the respective landowners). Surveys must be undertaken at least prior to the commencement of each quarrying stage: (b) archival recording of 'Kyawana' and 'Belmont' properties, the dry stone walls and other heritage elements affected by the development; (c) a plan for the salvage and on-site reconstruction of the dry stone walls affected by the proposal, in accordance with a conservation and interpretation strategy; (d) a plan for the conservation and maintenance of the dry stone walls on the eastern boundary of the allohment; (e) a plan for providing Council the opportunity to salvage any relic proposed to be destroyed by the development, including 'Kyawana'; (f) measures to manage previously unidentified heritage objects or the discovery of any human remains on site; (g) a procedures to ensult on surve ongoing consultation with Aboriginal stakeholders in the conservation and management of any Aboriginal stakeholders in the conservation and management of any Aboriginal stakeholders in the conservation and management of any Aboriginal stakeholders in the Secretary. The Applicant must be revised, in consultation with DCH and to the satisfaction of the Secretary. 	 Heritage Management Plan Annual Review FY19/20 Submission of Heritage Management Plan to DPIE dated 22 November 2017 Letter from DPIE approving the Heritage Management Plan dated 18 December 2017 Interview with Environment Officer Dilapidation Reports dated April 2018 	The current Heritage Management Plan (dated 22 November 2017) was prepared by Biosis Pty Ltd and revised by Cleary Bros prior to the planned commencement of Stage 5 and 6 of the excavation (i.e. 3 May 2018) and is compliant with this condition. ERM reviewed correspondence with DPIE approving the Heritage Management Plan. A program for baseline dilapidation surveys prior to the commencement of each quarrying stage is included in section 8 of the plan. ERM reviewed dilapidation surveys for the Belmont Residence and the Hill Farm Complex dated April 2018 prior to the planned commencement of Stage 5 and 6 of the excavation, therefore Cleary Bros is compliant with part (a). The archival recording of the dry stone walls and other heritage elements is included in sections 3, 4 and 5 of the plan, therefore Cleary Bros is compliant with part (b). Plans for the salvage and on-site reconstruction of the dry stone walls A and B, and conservation and maintenance of dry stone wall C are included in sections 5 and 6 of the plan. Annual Review FY19/20 reported repairs had been made to the wall at the entrance to the Belmont property off Dunsters Lane that had been damaged by the elements and cattle. Auditors observed the dry stone wall adjacent to the Belmont entrance, which appeared to be well maintained. Therefore, Cleary Bros is compliant with part (c) and (d). The Site utilises an unexpected finds (Aboriginal and non-Aboriginal) protocol contained in section 9 of the plan to manage previously unidentified heritage objects. In the event that any relic is proposed to be destroyed, Council will be notified and provided with the opportunity to salvage the relic. No aboriginal and cultural heritage values have been identified at the Site. As such, Cleary Bros is compliant with part (e) and (f). It is noted that Kyawana has not been disturbed and there are no plans to disturb it. According to the plan, exclusions under the EP&A Act relating to State Significant Developments negate the requirement for Cleary Bros to obtain an Abo	C	N/A

52.	The dilapidation surveys required under Condition 51 must be conducted by a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary. The owners of the Fig Tree Hill Land are to supply the applicant with three suggested nominees within 3 months from the grant of this consent. The applicant will submit one engineer from the list to be put forward by the applicant for approval by the Secretary.	 Dilapidation Report dated April 2018 Email from the owners of the Fig Tree Hill Land supplying three nominees for the dilapidation surveys dated 8 March 2018 Email from DPIE approving Design 5 Architects for the dilapidation surveys dated 9 April 2018. 	 period. As such, Cleary Bros is compliant with part (h).excavation. According to the HMP, in the event that Aboriginal objects or ancestral remains are identified and impacts are anticipated, Aboriginal community consultation will be required as per (h). Dilapidation surveys were undertaken by Design 5 – Architects in compliance with this condition. ERM reviewed correspondence with the owners of the Fig Tree Hill Land supplying three nominees for the dilapidation surveys, which included the nominee from Design 5 Architects. ERM also reviewed correspondence with DPIE approving the nominee from Design 5 Architects as a suitably qualified, 	C	N/A
			experienced and independent person. Therefore, Cleary Bros is compliant with this condition. 5 & 6.		
Reportin	-	1			
53.	The Applicant must include a progress report on the Heritage Management Plan in the Annual Review.	 Annual Reviews for FY17/18, FY18/19 & FY19/20 	Refer to Section 4.51. A progress report of the Heritage Management Plan is included in all Annual Reviews, therefore Cleary Bros is compliant with this condition.	С	N/A
VISUAL	ІМРАСТ	' 			
/isual A	menity				
54.	The Applicant must minimise the visual impacts of the development to the satisfaction of the Secretary	 Observations 	Cleary Bros has established a vegetated visual bund to shield the development from outside the premises. The bund was established in accordance with the requirements of this approval, as detailed in Conditions $55 - 57$ below and was observed to be maintained in a healthy condition, therefore Cleary Bros is compliant with this condition.	С	N/A
55.	The visual/noise bunds and screen plantings must be designed and established in accordance with a Landscape Plan prepared in consultation with Council, and to the satisfaction of the Secretary. The Landscape Plan must be prepared by a suitably qualified landscape architect with heritage experience, and must have regard to the cultural landscape of Wentworth Hills. The plantings must be commenced prior to the commencement of extraction and completed within six months of this consent.	 2017 Independent Environmental Audit Report 	The visual/noise bund was designed and established prior to the audit period, therefore this condition has not been triggered. The previous Independent Environment Audit considered this condition compliant.	NT	N/A
56.	The Applicant must ensure that the trees in the bund are maintained, and that in the event that trees die that they are replaced within 28 days to the satisfaction of the Secretary.	 Observations 	Auditors observed the visual/noise bund and did not identify any gaps, dead trees or trees requiring replacing, therefore Cleary Bros is compliant with this condition.	С	N/A
57.	Following construction of the visual/noise bunds, the Applicant must undertake an independent review of their effectiveness, and undertake any improvements to the satisfaction of the Secretary.	 2017 Independent Environmental Audit Report 	The visual/noise bund was constructed prior to the audit period, therefore this condition has not been triggered. The previous Independent Environment Audit considered this condition compliant.	NT	N/A
WASTE	MANGEMENT				
Naste M	linimisation				
58.	The Applicant must minimise the amount of waste generated by the development to the satisfaction of the Secretary.	 QEMP Annual Reviews for FY17/18, FY18/19 & FY19/20 Interview with Quality and Environment Manager 	Waste management is described in the QEMP All Annual Reviews describe the implementation of waste minimisation. Quarry overburden material has been retained for placement in the base of the excavation and used to create the final landform. According to the Quality and Environment Manager, red rock, ostensibly a waste product is utilised by Cleary Bros to make lower quality products for sale. Given this, waste minimisation onsite is considered compliant with this condition.	С	N/A

Waste Cla	ssification		
59.	All liquid and non liquid wastes resulting from activities and processes at the site must be assessed, classified and managed in accordance with the EPA's Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Wastes (1999), or any other EPA document superseding this guideline.	 QEMP JJ Richards Monthly Invoice Example Interview with Quality and Environmental Manage 	Waste management onsite is conducted by segregating workshop waste, office waste and other waste generated at the Site for recycling or disposal. Waste such as cardboard, batteries and waste oil are recycled. Waste tyres are removed by a third party contractor at the time new tyres are brought to site and installed on mobile plant. Waste oil from machinery and equipment used onsite is collected and recycled through a specialist waste oil recycling contractor. Waste segregation was noted to be conducted effectively during the audit. Quarry overburden material is not considered waste and is retained for placement in the base of the excavation and used to create the final landform. Waste collection and disposal from the site is managed by third party contractors JJ Richards, a licensed waste management company. ERM reviewed example waste invoices which documented the collection and removal of waste from the site. ERM considers waste is being managed in accordance with the EPA and waste management is conducted generally in accordance with this condition, however there is no document that identifies and pre-classifies common waste streams generated by site operations.
Reporting			
60.	The Applicant must describe what measures have been implemented to minimise the amount of waste generated by the development in the Annual Review.	 Annual Reviews for FY17/18, FY18/19 & FY19/20 FY18/19 & FY17/18 Interview with Quality and Environment Manager 	All Annual Reviews describe what measures have been implemented to minimise the amount of waste generated by the development in compliance with this condition. Quarry overburden material is not considered waste and has been retained for placement in the base of the excavation and used to create the final landform. Other waste including workshop waste, office waste and personnel waste (food scraps etc) is separated where appropriate and separately removed for recycling or disposal. Waste oil from machinery and equipment used on Site is collected and recycled through a specialist waste oil recycling contractor.
EMERGEN	NCY AND HAZARDS MANAGEMENT		
Dangerou	is Goods		
61.	The Applicant must ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code.	 Observations Interview with Quality and Environment Manager 	A 110 kL above ground storage tank containing diesel is located at the Site and the diesel, as currently stored on site, constitutes a dangerous good. AS1940 requires a bund to be 110% capacity of the largest tank or 25% of the total capacity of all tanks within the bund, whichever is greater. According to the Quality and Environment Manager, the diesel tank is 110 kL (the oil tanks are smaller) and the bunds are 158 m ² with a 900 mm – 950 mm height which has a 142 kL to 150 kL capacity. A minimum capacity of 121 kL is required, therefore the bunds meet the AS1940 requires a suitable high level alarm (LAH) set at a maximum of 97% of tank capacity for tanks over 25,000 L capacity storing combustible liquids (e.g. diesel). The diesel tank onsite does not have a suitable high level alarm, therefore Cleary Bros does not meet this requirement.

Obs (C)	Update the QEMP to identify the common waste streams generated by site activities and pre-classify the material where possible in accordance with the EPA Waste Classification Guidelines.

С	N/A
_	
NC	Install a high level alarm (LAH) set

NC	Install a high level alarm (LAH) set at a maximum of 97% of tank capacity for the 110 kL diesel tank.

			Minor quantities of other dangerous goods were observed to be appropriately stored with visible dangerous goods signs.		
fety					
	The Applicant must secure the development to ensure public safety to the satisfaction of the Secretary.	 Site Observations 	Auditors observed that the Site was securely fenced to prevent public access and the weigh bridge is manned during operating hours, therefore Cleary Bros is compliant with the condition.	С	N/A
ergen	ncy Management	-			
	 Within 6 months of the date of this consent, the Applicant must document, and subsequently implement, measures to minimise the environmental impacts of any emergency situations that could arise as a result of the operation of the quarry to the satisfaction of the EPA and the Secretary. This documentation must: (a) identify any significant threats to the environment and/or public health that could arise from activities associated with the operation of the quarry or construction works associated with the production increase. These threats may include excessive rainfall, pump failures, excess flocculation, power or other utility failure, natural disaster, landslip, accidental spills and discharges, spillage from trucks, fire etc; (b) identify any subsequent direct or indirect environmental effects as a result of the threats; (c) identify the pollution that would result due to these threats and impacts on operations and what impact the pollution would have on the health of the community and the environment; (d) develop actions to effectively respond to the disruption of operations so the risk of pollution is minimised; (e) develop a communications strategy for alerting relevant agencies and the potentially affected community in the event of the disruption to operations leading to significant pollution; (f) ensure that all relevant employees are familiar with the documentation; and (g) when developing this documentation, identify any opportunities to integrate with Cleary Bros Emergency plans. 	 QEMP, Emergency Management Procedures Pollution Incident Response Plan dated 25 September 2020 Annual Emergency Drill for Environmental Release dated September 2020 	The Emergency Management Procedures contained in the QEMP identifies appropriate hazards, identifies resulting environmental effects and pollution and develops actions to effectively to respond to pollution. These hazards include excessive rainfall, fire, fuel spill, blasting mishap, unauthorised access and major truck accidents. There hazards are considered relevant and appropriate for the Site's activities, therefore Cleary Bros is compliant with part (a) – (d). The Pollution Incident Response Plan is available on the website. It describes the communications plan with neighbours and community, and emergency contact phone numbers, therefore is compliant with part (e). ERM reviewed records for an example emergency release drill event which involved Site staff including the Quarry Manager in compliance with part (f). The potential environmental impacts are identified and discussed in the Emergency response and mitigation, therefore Cleary Bros is compliant with part (g).	c	N/A
			and offere elearly pree to compliant that part (g).		
SHFIF					
	The Applicant must: (a) ensure that the development is suitably equipped to respond to any fires on-site; (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire on-site.	 QEMP Interview with Quality and Environment Manager Observations 	The QEMP describes the threat from bushfire, and the precautionary measures in place to minimise the risk of fire and fire damage, which include firefighting equipment, extinguishers and staff training. Auditors observed extinguishers hanging on walls of buildings and mobile plant carrying extinguishers. According to the Quality and Environment Manager, there have been no bushfires onsite during the audit period, therefore the requirement to assist the Rural Fire Service and emergency services in the event of a fire has not been triggered. Given the training and equipment onsite, ERM considers Cleary Bros compliant with this condition.	С	N/A
	Within 6 months of the date of this consent, the Applicant must prepare a Bushfire Management Plan for the development, to the satisfaction of Council and the Rural Fire	 QEMP Interview Quality and Environment Manager 	The Bushfire Management Plan is included as part of the QEMP. The plan takes into account the risk of bushfires threatening the property from external	С	N/A

		Although the QEMP was updated recently, the Bushfire Management component has not been updated since the original QEMP.
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SCHEDULE 5 – ADDITIONAL PROCEDURES

NOTIFICA	TION OF LANDOWNERS						
1.	If the results of monitoring required in schedule 4 identify that emissions generated by the development are greater than the criteria in schedule 4, then the Applicant must notify the Secretary and the affected landowners and/or existing or future tenants (including tenants of quarry owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the development is complying with the criteria in schedule 4.	 Interview with Quality and Environment Manager Cleary Bros letter to DPIE dated 20 October 2020 	According to the Quality and Environment Manager, one exceedance of the 24-Hr PM_{10} criteria occurred during the audit period. Given that the exceedance was minor in magnitude and brief in duration, with subsequent results returning to within allowable limits, it was deemed that no landowners were affected, therefore no quarterly monitoring was provided. The exceedance was notified to the Department on 14 October 2020 and was subsequently investigated, therefore Cleary Bros is compliant with this condition.				
INDEPEN							
2.	If a landowner (excluding quarry owned properties) considers that the operations of the quarry are exceeding the criteria in schedule 4, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land. If the Secretary is satisfied that an independent review is warranted, the Applicant must within 3 months of the Secretary advising that an independent review is warranted: (a) consult with the landowner to determine his/her concerns; (b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to conduct monitoring on the land, to determine whether the development is complying with the relevant criteria in schedule 4, and identify the source(s) and scale of any impact on the land, and the development's contribution to this impact: and (c) give the Secretary and landowner a copy of the independent review.	 Interview with Quality and Environment Manager 	According to the Quality and Environment Manager, no landowner has requested the Secretary for an independent review during the audit period that the Secretary deemed to be warranted, therefore this condition has not been triggered during the audit period.				

SCHEDULE 6 - ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING

ENVIRONMENTAL MANAGEMENT STRATEGY

1. Within 6 months of the date of this consent, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This	QEMP	Six months from the consent date is outside of the
 strategy must: (a) provide the strategic context for environmental management of the development; (b) identify the statutory requirements that apply to the development; (c) describe in general how the environmental performance of the development would be monitored and managed during the development; (d) describe the procedures that would be implemented to: keep the local community and relevant agencies informed about the operation and environmental performance of the development; receive, handle, respond to, and record complaints; resolve any disputes that may arise during the course of the development; respond to any non-compliance; manage cumulative impacts; and respond to emergencies; (e) describe the role, responsibility, authority, and accountability of all key personnel involved in environmental management of the development; and (f) include: copies of any strategies, plans and programs approved under the conditions of this consent. The Applicant must implement the approved strategy as approved from time to time by the Secretary. 	 Letter from DPIE approving the QEMP dated 29 May 2018 	 audit period. The latest version of the QEMP was approved by DPIE on 29 May 2018. Section 1 of the QEMP provides a strategic context for environmental management of the development by including the background of the Site, the purpose and objectives of the QEMP, management plans, and performance requirements. Therefore, Cleary Bros is compliant with part (a). The statutory requirements that apply to the development are listed in section 1.6 in compliance with part (b). Environmental monitoring is included in section 6 in compliance with part (c). The following procedures are described in the QEMP: Consultation with the community and relevant agencies through auditing and reporting (section 7) and the community consultative committee (section 8); Complaints management (section 5); Dispute management. This is addressed through an independent review process that can be initiated by the Secretary (section 8);

С	N/A
NT	N/A

С	N/A	

		 Response to non-compliance (under the relevant environmental topics in section 6); Cumulative impacts (section 8). This is addressed through the independent review process. If more than one quarry is responsible for an exceedance, the Site will prepare and implement a cumulative management plan; and Emergency and hazard management (section 4.16) Based on these procedures, Cleary Bros is compliant with part (d). Section 3 describes the roles and responsibilities of the CEO, Quarry Production Manager, Operational Staff and Environmental Officer in compliance with part (e). The QEMP includes copies of any strategies, plans and programs approved under the conditions of this consent or summaries of these plans. This is outlined in Table 1.1. Monitoring requirements are included in section 6. As such, Cleary Bros is complaint with part (f). ERM did not observe any examples of practices not being undertaken in accordance with the approved QEMP, therefore Cleary Bros is compliant with this condition.' 		
 AL REVIEW By the end of September each year, or other timing as may be agreed by the Secretary, the Applicant must submit a report to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary. This review must: a) describe the development (including rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year; b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against: the relevant statutory requirements, limits or performance measures/criteria; the monitoring results of previous years; and the relevant predictions in the documents referred to in condition 2 of Schedule 3; c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; d) identify any trends in the monitoring data over the life of the development; e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and 	 Annual Reviews for FY17/18, FY18/19 & FY19/20Confirmation of Submission of FY19/20 Annual Review via Planning Portal dated 17 July 202024th July 2019 Submission Letter from Cleary Bros to DPIE for Annual Review Submission Letter from Cleary Bros to DPIE for Annual Review dated 24 July 2018 DPIE Letter Stating Acceptance of Annual Review dated 1 August 2018 DPIE Letter Stating Acceptance of Annual Review dated 20 August 2019 DPIE Letter Stating Acceptance of Annual Review 17 August 2020 	Sections 2.2 and 2.3 of the Annual Reviews describe the development (including rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year. A comprehensive review of the monitoring results and complaints records of the development over the previous financial year is included in sections 3 and 4. Section 7 identifies any non-compliance over the last year (section 7). It is noted no non-compliances were identified in Annual Review FY17/18 to Annual Review FY19/20. Trends in the monitoring data over the life of the development are identified and discussed under the relevant environmental topic in section 3. Discrepancies between the predicted and actual impacts of the development are included in section 8 and under each environmental topic in sections 3 and 5. All Annual Reviews during the audit period reported that predicted impacts of the development where largely valid. While impacts to groundwater and surface water resources were reported, this was considered to be a "product of the current dry climate rather than any site-specific impacts that were not predicted in the EIS". Measures that will be implemented over the current calendar year to improve the environmental performance of the development, such as the establishment of real-time particulate monitors, are discussed under the relevant environmental topic in sections 3 and 5, as well as summarised in section 8. ERM reviewed submission letters and the responses from DPIE confirming receipt and acceptance of the Annual Reviews, therefore Cleary Bros is compliant with this condition.	C	N/A

3.	 Within 3 months of a modification to this consent or following the submission of an: (a) annual review under condition 2 above; (b) incident report under condition 5 below; or (c) audit report under condition 8 below, the Applicant must review and if necessary revise, the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. Within 4 weeks of conducting any such review, the Applicant must advise the Secretary of the outcomes of the review, and provide any documents that have been revised to the Secretary for review and approval. Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and to incorporate any recommended measures to improve the environmental performance of the development. 	 Annual Reviews for FY17/18, FY18/19 & FY19/20 QEMP Email submission of QEMP to DPIE dated 14 May 2018 	All Annual Reviews describe the review of management plans and if a revised version was required or not. The previous Independent Environmental Audit conducted by ERM identified that the AQMP was reviewed and updated to meet the requirements of the Development Consent Modification dated June 2017. Annual Review 16/17 dated 29 August 2017 reported that a review of the management plan was underway. The previous Independent Environmental Audit (submitted 29 January 2018) conducted by ERM recommended that CB maintain files to demonstrate chain of communication with Secretary following an incident. Review of the QEMP indicates it has been updated to include reporting timelines for external notification of any incident (section 4.16.2). The document revision register indicates the revision to the QEMP after the 2017 audit (dated 23 January 2018) occurred in May 2018, which is within the 3 month and 4 week review and revision period, therefore Cleary Bros is compliant with this condition. The QEMP was provided to DPIE on 14 May 2018.
UPDATIN	G & STAGING STRATEGIES, PLANS OR PROGRAMS		
ЗА.	 The Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis. With the agreement of the Secretary, the Applicant may prepare a revision or stage of any strategy, plan or program required under this consent without undertaking consultation with all parties nominated under the applicable condition in this consent. The Applicant must continue to apply existing approved management plans, strategies or monitoring programs that have most recently been approved under this consent, until the approval of a similar plan, strategy or program under this consent. Notes: While any strategy, plan or program may be submitted on a staged basis, the Applicant must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times. If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program. 	 Letter from DPIE approving the Vegetation Management Plan dated 9 May 2018 Letter from DPIE approving the QEMP dated 29 May 2018 Letter from DPIE to Cleary Bros approving the Water Management Plan dated 29 May 2019 Letter from DPIE to Cleary Bros approving the Air Quality Management Plan dated 13 December 2017 Letter from the DPIE approving the Noise, Blast and Rehabilitation Management Plans dated 15 November 2017 Letter from DPIE approving the Heritage Management Plan dated 18 December 2017 	 Management plans are reviewed, revised and submitted to DPIE as required by this condition. Auditors reviewed DPIE approval for the following plans required under this consent: Vegetation Management Plan; Quarry Environmental Management Plan; Water Management Plan; Air Quality Management Plan; Noise and Blast Management Plans; Heritage Management Plan; Rehabilitation Management Plan. Activities taking place onsite are covered by the plans including extraction, processing, blasting, transport of quarry products, maintenance and environmental management. The plans cover all stages of the development that are currently active (i.e. extraction from stages 5 and 6). As such, Cleary Bros is compliant with this condition.
COMMUN	ITY CONSULTATIVE COMMITTEE		
4.	 The Applicant must operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be operated in general accordance with the Community Consultative Committee (CCC) Guidelines for State Significant Projects (Department of Planning, 2016, or its latest version). Notes: The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent. In accordance with the guideline, the Committee should comprise of an independent chair and appropriate representation from the Applicant, Council, recognised environmental groups and the local community. The Applicant may, with the approval of the Secretary, combine the function of this CCC with the function of other CCCs in the area. 	 CCC Meeting Minutes CCC 2019-2020 Annual Report DPIE website 	The Albion Park Quarry CCC meets biannually. CCC meeting minutes are available on the Cleary Bros website. CCC members include an independent chairperson, a Fig Tree Hill representative, a community representative, a Shellharbour City Council representative, the Cleary Bros Quality and Environment Manager and a Cleary Bros representative. The independent chairperson for the Albion Park Quarry CCC is included in DPIE's online talent pool of independent chairpersons. As such, the CCC is considered to be operated in general accordance with the Community Consultative Committee (CCC) Guidelines for State Significant

C N/A	
C N/A	
C N/A	
C N/A	

			Projects. Therefore, Cleary Bros is compliant with this condition.		
REPORTI	NG				
ncident F	Reporting				
5.	The Applicant must immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Email notification of 24hr PM10 criteria exceedance dated 14 October 2020	An exceedance of the 24-hour PM10 criteria at the High Volume Air Sampler occurred on 23 September 2020. The incident was reported to DPIE on 14 October 2020, within 24 hours of receiving the monitoring results. Due to the sampling and analysis process for High Volume Air Samplers, monitoring results are received between a week and a month after the sample period. Monitoring at the HVAS occurs over 24 hours on a 6 day basis, which contributed to the inability to notify within 7 days of the date of the incident occurring, however given that it is not necessarily possible to confirm that an exceedance has occurred within this timeframe and Cleary Bros notified as soon as practicable following receipt of the results, Cleary Bros is compliant with this condition. The Site is in the process of establishing real-time particulate monitors at three locations around the Site which will provide up to date dust monitoring results, when commissioned. However, calibration of the new real time PM10 monitors against the existing High Volume Air Sampler (HVAS) has encountered difficulties and is ongoing. No incident report was requested by DPIE during the audit period.	C	N/A
6.	Reporting The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent, and to the satisfaction of the Secretary.	Cleary Bros website	 ERM reviewed the Cleary Bros website and identified the results of monitoring on the 'Environmental Information' page. The monitoring results include: EPL Blasting Monitoring records; EPL Dust Monitoring records; EPL Supertreat Monitoring records; and Noise Monitoring records. The monitoring results are presented for the items requiring monitoring under the EPL and DA and records are maintained dating back to 2015. Cleary Bros are therefore compliant with this condition 	С	N/A
IDEPEN	DENT ENVIRONMENTAL AUDIT		' · · · · · · · · · · · · · · · · · · ·		
7.	 Within 2 years of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission, commence and pay the full cost of an Independent Environmental Audit of the development. This audit must: (a) be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by the Secretary; (b) include consultation with the relevant agencies; (c) assess the environmental performance of the development, and whether it is complying with the relevant requirements in this consent and any relevant EPL (including any assessment, plan or program required under these approvals); (d) review the adequacy of any approved strategy, plan or program required under these approvals; (e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals. (f) be conducted and reported to the satisfaction of the Secretary. 	 Independent Environmental Audit by ERM dated November 2017 Independent Environmental Audit by ERM dated December 2014 DPI&E letter dated 13 July 2020 approving audit team 	 Independent environmental audits were conducted by ERM in 2014 and 2017. This audit was conducted in 2020, within three years of the previous audit. a) The audit team was approved by the Secretary and comprises suitably qualified experts in the fields of noise, air quality and mining; b) The IEA included consultation with local council, DPI&E, EPA and CCC (as discussed in the Main Report); c) This report assesses the environmental performance of the project and compliance 	С	N/A

	Note: This audit team must be led by a suitably qualified auditor and may include additional experts in any field specified by the Secretary			 with relevant requirements in the approval and EPL; d) The adequacy of strategies, plans and/or programs required under the approval and EPL were reviewed throughout this report; and e) Improvement recommendations have been provided throughout this report; and f) This audit has been prepared in accordance with relevant regulatory guidelines. ERM considers that all the requirements of this Condition have been met. 		
8.	Within 12 weeks of commencing each audit, unless the Secretary agrees otherwise, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of any measures to address the recommendations.	•	Letter to DPIE submitting previous audit report dated 29 January 2018Previous Audit Report	The previous environmental audit commenced on 9 November 2017. ERM reviewed the submission letter for the previous environmental audit which was dated 29 January 2018 and included Cleary Bros response to recommendations from the report and a timetable for implementing measures to address recommendations. The submission was within the twelve week period, therefore Cleary Bros is compliant with this condition.	С	N/A
ACCESS	TO INFORMATION					
9.	 For the duration of the development, the Applicant must: (a) make copies of the following publicly available on its website: the documents referred to in condition 2 of Schedule 3; current statutory approvals for the development; approved strategies, plans and programs required under the conditions of this consent; a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; a complaints register, which is to be updated monthly; minutes of CCC meetings; the annual reviews of the development (for the last 5 years); any independent environmental audit of the development, and the Applicant's response to the recommendations in any audit; any other matter required by the Secretary; and (b) keep this information up-to-date, to the satisfaction of the Secretary. 	-	Cleary Bros website Interviews with Site Management	ERM reviewed the Cleary Bros website and identified all of the documents required by this condition on the 'Environmental Information' page. The complaints register was last updated in August, which is greater than a month prior to the audit, suggesting that it is not being updated monthly. However, no new complaints were recorded between August 2020 and the audit date and site management reported that the register is updated when new complaints are received, therefore this is not considered to be a non-compliance.	С	N/A

ltem		Assessment Requirement		Reference/ Evidence	Comments	Compliance	Recommendations
ADM	INISTRATIVE CONDITIONS						
1 Wh	at the licence authorises and regu	lates					
1.1	A2. The activities are listed accordi classification and the scale of the o	g out of the scheduled activities listed ng to their scheduled activity classifi peration. Unless otherwise further re vity is carried out must not exceed the	cation, fee-based activity stricted by a condition of this	 Annual Returns for FY17/18, FY18/19 & FY19/20 Annual Reviews for FY17/18, FY18/19 & FY19/20 Interview with Quality and Environmental Manager 	According to the Annual Reviews, the following production quantities for extractive activities and crushing, grinding or separating activities were undertaken during the audit period: 2019: 835,205 tonnes [BH1]	С	N/A
	Scheduled Activity	Fee Based Activity	Scale		2018: 620,999 tonnes 2017: 665,126 tonnes [DK2][BH3]		
	Crushing, grinding or separating	Crushing, grinding or separating	> 500000 - 2000000 T annual processing capacity		These quantities are within the scale specified, therefore Cleary Bros is compliant with this		
	Extractive activities	Extractive activities	> 500000 - 2000000 T annual capacity to extract or process		condition.		
2 Pre	mises or plant to which this licenc	e applies					
2.1	The licence applies to the following Premises Details CLEARY BROS (BOMBO) PTY LT			Note	Noted	Note	N/A
	81 EAST WEST ROUTE CROOM						
	NSW 2527						
	LOT 1 DP 858245, LOT 420 DP 12 TEMPORARY ACCESS TO A POP	252087, LOT 421 DP 1252087 RTION (11540 SQ. METRES) OF LC	IT 2 DP				
	858245 AS SHOWN ON QUARRY	EMP FIG 2.1.					
3 Oth	er activities						1
3.1		ivities carried on at the premises, inc	luding:	Note	Noted	Note	N/A
	Ancillary Activity Concrete works						
4 Info	ormation supplied to the EPA						
4.1		d out in accordance with the proposition of this licence.	al contained in the licence	EPL 299	Compliance with the EPL is discussed against the individual conditions throughout this report.	С	N/A
	In this condition the reference to "the second se	ne licence application" includes a refe	erence to:				
		(including former pollution control ap ment Operations (Savings and Trans	pprovals) which this licence replaces sitional) Regulation 1998; and				
	b) the licence information form provised in the licence information form provised in the licence.	vided by the licensee to the EPA to a	ssist the EPA in connection with the				

		Assessment Re	quirement	Reference/ Evidence	Comments	Compliance	Recommendations
HARGES TO	AIR AND WATER AND	APPLICATIONS T	O LAND				
	· · · · · · · · · · · · · · · · · · ·						
	itoring/discharge points						
			ntified in this licence for the purposes of pollutants to the air from the point.	 Annual Returns for FY17/18, FY18/19 & FY19/20 Site Observations 	Dust deposition monitoring was reported for all the points listed in all annual returns from the audit period.	С	N/A
EPA identificat n no. 1		Type of Discharge Point	Location Description APD 1 - within 100m of the premises entrance gate, labelled as EPL ID#1 in the map titled 'EPL299 Site Map' (dated 22		The Site inspection confirmed that the monitoring points were located generally at the locations specified in the table. As the points listed in the table were all monitored for dust deposition and example locations were confirmed to be present at the		
2	Dust deposition monitoring		May 2020) and received by the EPA on 22 May 2020. APD 2 - approximately 200 metres east of original quarry area, labelled as EPL ID#2 in the map titled 'EPL299 Site Map' (dated 22 May 2020) and received by the EPA on 22 May 2020.		locations specified, Cleary Bros is compliant with this condition.		
3	Dust deposition monitoring		APD 3 - approximately 200m East of main holding and sedimentation dam, labelled EPL ID#3 in the map titled 'EPL299 Site Map' (dated 22 May 2020) and received by the EPA on 22 May 2020.				
8	Dust deposition monitoring		APD 4 - approximately 150m North East of quarry extension, labelled as EPL ID#8 in the map titled 'EPL299 Site Map' (dated 22 May 2020) and received by the EPA on 22 May 2020.				
			w are identified in this licence for the purposes of ion of solids or liquids to the utilisation area.	Note	Noted	Note	N/A
The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point. Water and land				 Annual Returns for FY17/18, FY18/19 & FY19/20 	Effluent quality monitoring was reported for the points listed in all annual returns in the audit period when required. There was no requirement to monitor the main holding and	С	N/A
EPA identificat n no.	io Monitoring Point	Discharge Point	Location Description	 EPL Quarry Pit 2021, 2019 – 2020, 2018 – 2019, 2017 – 2018 spreadsheet 	sedimentation pond or the water course west of the quarry manager's office as no discharges from the main holding and sedimentation pond		
4	Effluent Quality Monitoring - Discharge to waters	Effluent Quality Monitoring - Discharge to waters	Outlet of main holding and sedimentation pond, labelled as EPL ID#4 in the map titled 'EPL299 Site Map' (dated 22 May 2020) and received by the EPA on 22 May 2020.	 EPL Supertreat Monitoring 2021, 2019 – 2020, 2018 – 2019, 2017 – 2018 spreadsheet 	occurred during the period. The site inspection confirmed that the monitoring points were located generally at the locations		
5	Effluent Quality Monitoring		Package Sewage Treatment Plant. See drawing No ESA PQ011 (Rev 1) titled "Water Pollution Control Plan" for Lic 299.		specified in the table. As the points listed in the table were all monitored for effluent quality when required and		
6	Effluent quality monitoring - Discharge to waters	monitoring	Any discharge from the quarry extension (Lot 1 DP858245), labelled as EPL ID#6 in the map titled 'EPL299 Site Map' (dated 22 May 2020) and received by the EPA on 22 May 2020.		monitoring locations were confirmed to be present at the locations specified, Cleary Bros is compliant with this condition.[DK4][BH5]		
7	Effluent Quality Monitoring		Water course west of the Quarry Managers Office at the point where the creek exits the premises, labelled as EPL ID#7 in the map titled				

1 Polluti 1.1 E	onditions ion of waters						Evidence	Comments	-	Recommendations
1 Polluti 1.1 E					e Map' (dated 22 the EPA on 22 Ma	May 2020) and y 2020.				
1.1 E	ion of waters									
		be expressly provident of the Protection of the	•		ice, the licensee n	nust comply with	 Annual Reviews for FY17/18, FY18/19 & FY19/20 EPL Quarry Pit 2021, 2019 – 2020, 2018 – 2019, 2017 – 2018 spreadsheet EPL Supertreat Monitoring 2021, 2019 – 2020, 2018 – 2019, 2017 – 2018 spreadsheet 	There were no discharges to water with parameters in excess of the allowable limits during audit period and no incidents were reported where releases impacted waters at the site. As such, Cleary Bros is compliant with this condition.	С	N/A
2 Conce	entration limits									
tł	For each monitoring/discharge point or utilisation area specified in the table\s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.						Note	Noted. Refer to statement for L2.4	Note	N/A
	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.						Note	Noted. Refer to statement for L2.4	Note	N/A
	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\s.						Note	Noted	Note	N/A
	Vater and/or La POINT 4	nd Concentration L	imits			 EPL Quarry Pit 2021, 2019 – 2020, 2018 – 2019, 2017 – For Points 4 and 6, each of the specified parameters was analysed when required. T auditor reviewed EPL monitoring results did 	parameters was analysed when required. The	С	N/A	
	Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit	2018 spreadsheet	identify exceedances of the total suspended solids limit or the turbidity limit and pH was within the required range, therefore Cleary Bros is compliant with this condition. [DK6][BH7]		
	рН	рН				6.5 - 8.5				
	Total suspended solids	milligrams per litre				50				
F	POINT 6									
	Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit				
	рН	рН				6.5 - 8.5				
	Turbidity	nephelometric turbidity units				32.2				
⊔ 3 Blastir	na	1	<u> </u>	<u>I</u>	1	<u> </u>		1		

L3.1 The airblast overpressure level from blasting operations in or on the premises must not exceed:
a) 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; and
b) 120 dB (Lin Peak) at any time.

 EPL Blast Monitoring 2020 -2021, 2019 - 2020, 2018 - 2019, 2017 - 2018 spreadsheet

According to the blast monitoring records from the audit period, there were no exceedances of the 115 dB airblast overpressure level limit for more than 5% of the total number of blasts

f	С	N/A

	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
	At any point that is located at least 3.5m from any residence or other sensitive receiver on privately-owned land.		during any 12 month reporting period and no exceedances of the 120 dB airblast overpressure level limit at any time, therefore Cleary Bros is compliant with this condition.[DK8][BH9]		
2	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed: a) 5mm/s for more than 5% of the total number of blasts carried out on the premises during each reporting period; and b) 10 mm/s at any time. At any point that is located at least 3.5m from any residence or other sensitive receiver on privately-owned land.	 EPL Blast Monitoring 2020 - 2021, 2019 – 2020, 2018 – 2019, 2017 – 2018 spreadsheet 	According to the blast monitoring records from the audit period, there were no exceedances of 5 mm/s for more than 5% of the total number of blasts carried out on the premises during each reporting period and there were no exceedances of 10 mm/s at any time, therefore Cleary Bros is compliant with this condition.[DK10][BH11]	С	N/A
5	Blasting must be limited to one blast each day. Where compelling safety reasons exist, the Authority may permit additional blasts to occur where prior written (or facsimile) notification of any additional blasts are made to the Authority.	 EPL Blast Monitoring 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018 spreadsheet 	According to the blast monitoring records from the audit period, blasts were limited to one per day, therefore Cleary Bros is compliant with this condition.	C	N/A
4	Blasting operations at the premises may only take place between 9:00am – 5:00pm Monday to Friday. Where compelling safety reasons exist, the Authority may permit a blast to occur outside the abovementioned hours. Prior written (or facsimile) notification of any such blast must be made to the Authority	 EPL Blast Monitoring 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018 spreadsheet Blast Monitoring Reports 2017 - 2020, February, April, September spreadsheet 	The Auditor reviewed the blast monitoring records and confirmed that all blasts took place between Monday and Friday during the audit period. A selection of individual blast monitoring reports were reviewed and no instances of blasting outside of the allowable hours were identified, therefore Cleary Bros is compliant with this condition.	С	N/A
pera	ating Conditions				
Acti	vities must be carried out in a competent manner				

ltem	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
			The auditors reviewed a site-specific induction form, required to be completed by visitors entering operational areas, contractors and employees that includes safety and environment information. Topics such as incidents, hazards, safety alerts and improvements are discussed with employees during daily toolbox talks. Given the training and monitoring undertaken, ERM considers operations are carried out in a competent manner and Cleary Bros are compliant with this condition.		
O2 Mai	intenance of plant and equipment		•		
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: a) must be maintained in a proper and efficient condition; and b) must be operated in a proper and efficient manner.	 MEX work order system for scheduled maintenance 	All maintenance records and preventative maintenance schedules are managed through MEX, with many of the work orders undertaken by a separate site (the Port Kembla workshop).[DK14][BH15] The auditors reviewed the MEX system, including sample work orders, and confirmed that the work orders demonstrated plant and equipment being routinely maintained in accordance with the manufacturer's requirements. ERM did not observe any examples of plant and equipment not being maintained in a proper and efficient condition or lapsed maintenance requirements, therefore Cleary Bros is compliant with this condition.	C	N/A
O3 Dus	st				
O3.1	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	 Quarry Environment Management Plan Site Observations 	The QEMP describes mitigation measures such as sealed access to the Site, progressive revegetation of long-term stockpiles, limits on stockpile heights, operation of a water cart on haul roads, designated vehicle roads onsite with speed limits and covered loads for trucks exiting the Site. [DK16][BH17] Auditors observed instances of progressive revegetation, vehicles using designated roads onsite and observing speed limits and trucks leaving the Site with covers. Haul road spraying was not observed due to the wet weather conditions during the inspection. Cleary Bros monitors dust deposition routinely and dust results indicated that significant dust deposition events were not generally taking place adjacent to the site. Given controls are in place, no dust was observed and records indicate significant dust deposition events are not regularly occurring, ERM considers Cleary Bros compliant with this condition.	C	N/A

ltem		Assessment Requirem	nent	Reference/ Evidence	Comments	Compliance	Recommendations
O3.2	The licensee must ensure all loaded	d vehicles leaving the premis	es are covered.	 Truck Drivers Code of Conduct Site Observations 	The Truck Drivers Code of Conduct requires all loaded trucks departing Site to have an effective cover over their load for the duration of the trip. Auditors observed trucks leaving the Site with covers and did not observe any examples of trucks leaving site without covered loads, therefore Cleary Bros is compliant with this condition.[DK18][BH19]	С	N/A
O3.3	The licensee must ensure all loaded public roads before they are allowed	÷ .	es are cleaned of materials that may fall on	 Traffic Management Plan 	Trucks must be inspected at the weighbridge to ensure they are clean of quarry materials prior to leaving site[DK20] and[BH21] the Truck Drivers Code of Conduct requires drivers to ensure that all loose debris from the vehicle body and wheels is removed prior to leaving the site and again after unloading. Auditors observed trucks washing down onsite prior to leaving site and did not observe any examples of loaded vehicles with material entrained on the outside of the vehicle, therefore Cleary Bros is compliant with this condition.	C	N/A
D4 Eff D4.1	achieve the effluent quality limits list If any of these limits is exceeded the (a) Immediately service the plant, and	ted in the table below at all ti e licensee must: nd	area must be maintained and operated to mes: uality limits specified in this condition are Concentration Limit 30 50 150	 EPL Supertreat Monitoring 2021, 2019 – 2020, 2018 – 2019, 2017 – 2018 spreadsheet 	The auditors reviewed the EPL monitoring results for the effluent treatment system and did not identify any exceedances of the oil and grease, total suspended solids or biochemical oxygen demand concentration limits during the audit period, therefore Cleary Bros is compliant with this condition.	C	N/A
04.2	The quantity of effluent/solids applie effectively utilise the effluent/solids. For the purpose of this condition, 'effort the purpose of this condition, 'effort the production, as well as the ability of the solution of th	ed to the utilisation area mus ffectively utilise' include the u the soil to absorb the nutrien	t not exceed the capacity of the area to use of the effluent/solids for pasture or crop t, salt, hydraulic load and organic material.	 Interview with Quality and Environmental Manager Site Observations 	The capacity of the utilisation area has not changed since the last audit. The auditors observed that the utilisation area was not flooded and there was no evidence of solids on the utilisation area, excess salt or organic material or other indicators of overloading, therefore Cleary Bros is compliant with this condition.	C	N/A
94.3	If weather or soil condition preclude tankered away and disposed of in a	u	must not overflow and effluent must be ute waters.	 Interview with Quality and Environmental Manager Site Observations 	According to site management, the effluent from the holding tanks was applied to the irrigation area for the duration of the audit period and no tanker removal was required. The auditors did not observed any evidence of the holding tanks having overflowed and no evidence of run off was observed, therefore this condition has not been triggered.	NT	N/A
04.4	A minimum of 2500 square metres r	must be retained for use as t	he wastewater utilisation area.	 Google Earth review of the water utilisation area 	An aerial review of the utilisation area on Google Earth showed the water utilisation area is	С	N/A

ltem	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
			approximately 2,500 m ² , therefore Cleary Bros is compliant with this condition.[DK22][BH23]		
D5 Wa	ste management				
D5.1	All liquid and non liquid wastes resulting from activities and processes at the site must be assessed, classified and managed in accordance the EPA's Waste Classification Guidelines (2014) or any other EPA document superceding this guideline.[BH24]	 QEMP JJ Richards Monthly Invoice Example Interview with Quality and Environmental Manager 	Waste management onsite is conducted by segregating workshop waste, office waste and other waste generated at the Site for recycling or disposal. Waste such as cardboard, batteries and waste oil are recycled. Waste oil from machinery and equipment used onsite is collected and recycled through a specialist waste oil recycling contractor. Waste segregation was noted to be conducted effectively during the audit. Quarry overburden material is not considered waste and is retained for placement in the base of the excavation and used to create the final landform.[DK25][BH26] Waste collection and disposal from the site is managed by third party contractors JJ Richards, a licensed waste management company. ERM reviewed example waste invoices which documented the collection and removal of waste from the site. ERM considers waste is being managed in accordance with the EPA and waste management is conducted generally in accordance with this condition, however there is no document that identifies and pre-classifies common waste streams generated by site operations.	Obs (C)	Update the QEMP to identify t common waste streams generated by site activities and pre-classify the material where possible in accordance with th EPA Waste Classification Guidelines.
6 Oth	ner operating conditions				
06.1	FLOCCULANTS USED IN WATER TREATMENT The licensee must not use a flocculant other than gypsum, without the written approval of the Authority.	 Interview with Quality and Environmental Manager 	According to site management, flocculants were not used in the water treatment system at any point during the audit period, therefore this condition has not been triggered.	NT	N/A
Moni	itoring and Recording Conditions				
11 Mo	nitoring records				
11.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Note	Noted	Note	N/A
11.2	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	 Monitoring records Interview with Quality and Environmental Manager 	The auditors reviewed monitoring records dating back to FY 2015 -2016. The records were noted to be maintained in excel spreadsheets and presented on the company website in a legible form.[DK27][BH28] According to site management, the monitoring records were not requested by the EPA during the audit period. As such, Cleary Bros is compliant with this condition.	С	N/A

Item		Assessment	Requirement			Reference/ Evidence	Comments	Compliance		Recommendations
W1.3	this licence: a) the date(s) on which b) the time(s) at which the c) the point at which the		amples required to be	e collected for the purposes of	•	Chains of Custody EPL monitoring results	Review of CoCs for lab results and Turbidity and Pit Sampling confirms Cleary Bros is compliant with part (a), (c) and (d). Field sheets for sampling of discharge water include the time at which samples were collected, therefore the requirements of part (b) have been met and Cleary Bros are compliant with the requirements of this condition.	С	N/A	
/I2 Re	quirement to monitor co	ncentration of pollutants dis	scharged							
M2.1	must monitor (by sampl	ee must use the sampling met	alysis) the concentra	a point number), the licensee tion of each pollutant specified a, and sample at the frequency,	•	EPL Dust Monitoring 2021, 2019 – 2020, 2018 – 2019, 2017 – 2018 Annual Reviews for FY17/18, FY18/19 & FY19/20 Site Observations	 Auditor reviewed monthly ash and insoluble solids monitoring data for point 1, 2, 3 and 8. The following monitoring results were absent: Point 1 August 2019, attributed to the dust gauge being removed by the property owner. Point 2 June 2020, attributed to sample compromised due to a missing funnel; and August 2020, attributed to a damaged sample. The missing samples result in Cleary Bros failing to monitor at the monthly frequency required. However, given that samples were intended to be collected, sampling was attempted, the issues preventing sampling were rectified and sample failure was not widespread during the audit period, the failure to collect samples at a monthly frequency is not considered a nonconformance with the requirements of the EPL. The Annual Returns provide a summary of concentrations of total insoluble solids and ash, presented in the required units of g/m²/month. The auditors observed that the dust gauges were upright and free from overhanging obstructions with a clear view to the sky. The funnel appeared to be approximately 2 m above ground level and was noted to be within a glass bottle contained in a canister. Based on these observations, the dust monitoring method is considered appropriate and compliant with this condition. 	C	N/A	
M2.2	Air Monitoring Requiren	nents				See condition M2.1	See condition M2.1.	С	N/A	
	POINT 1									
	Pollutant	Units of measure	Frequency	Sampling Method						
	Ash	grams per square metre	Monthly	AS/NZS						
		per month	Maria de l	3580.10.1:2016						
	Insoluble solids	grams per square metre	Monthly	AS/NZS 3580.10.1:2016						

	Assessment	Requirement			Reference/ Evidence	Comments		
DOINT								
POINT 2		F	O annu lin a Matha d	_				
Pollutant	Units of measure	Frequency	Sampling Method	_				
Ash	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016					
Insoluble solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016					
POINT 3								
Pollutant	Units of measure	Frequency	Sampling Method					
Ash	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016					
Insoluble solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016					
			3360.10.1.2010					
POINT 8								
Pollutant	Units of measure	Frequency	Sampling Method					
Ash	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016					
Insoluble solids	grams per square metre	Monthly	AS/NZS 3580.10.1:2016					
POINT 4	Ionitoring Requirements		•	Annual Reviews for FY17/18, FY18/19 & FY19/20	The auditors reviewed quarterly supertre monitoring (i.e. poi[BH29]nt 5). Monitorin for the audit period was available for ear			
Pollutant	Units of measure	Frequency	Sampling Method			quarter and included the required comp		
pН	pH	Each overflow event	Grab sample	EPL Quarry Pit 2021, 2019 –	BOD, oil and grease, and TSS. Annual I			
Total suspended so	-	Each overflow event	Grab sample		2020, 2018 – 2019, 2017 – 2018	reported the monitoring data with the requ		
POINT 5					EPL Supertreat Monitoring	units of measurement (mg/L).		
Pollutant	Units of measure	Frequency	Sampling Method	■		The Annual Review for FY19/20 reporte		
Biochemical oxyge		Quarterly	Grab sample		2021, 2019 – 2020, 2018 – 2019, 2017 – 2018	discharges from the Quarry Extension (i.e 6) across 11 days during the reporting per		
Oil and Grease	milligrams per litre	Quarterly	Grab sample			The auditors reviewed the quarry pit mo		
Total suspended so	č :	Quarterly	Grab sample	_		data and identified 11 samples from the Extension on 11 days in February 2020,		
		Q				corresponding to the discharge days, w		
POINT 6						meets the required monitoring frequency		
Pollutant	Units of measure	Frequency	Sampling Method			samples measured the required pollutar		
рН	рН	Daily during any discharge	Grab sample			and turbidity. The Annual Review for FY18/19 reporte		
	nephelometric turbidity units	Daily during any	Grab sample			discharges from the Quarry Extension a		
Turbidity		discharge				two days. The auditors reviewed the qua monitoring data and identified two samp		
	units		POINT 7					
Turbidity POINT 7	unto					the Quarry Extension across two days,		
POINT 7 Pollutant	Units of measure	Frequency	Sampling Method			corresponding to the discharge days, w		
POINT 7		Frequency Daily during any discharge	Sampling Method Grab sample			corresponding to the discharge days, wi meets the required monitoring frequence		
POINT 7 Pollutant	Units of measure	Daily during any	÷			corresponding to the discharge days, where		

	Compliance	Recommendations
	С	N/A
l	0	
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ltem	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
13 Tos	sting methods - concentration limits		identified four samples from the Quarry Extension over four days, corresponding to the discharge days, which is in accordance with the required monitoring frequency. The samples measured the required pollutants pH and turbidity. No discharges from Point 4 or Point 7 were reported in any Annual Reviews, therefore monitoring at these points was not required during the audit period. Monitoring occurred at the required frequency and measured the required pollutants in FY 17/18, FY18/19 and FY19/20 in compliance with this condition. The sampling method was not described in the ARs or monitoring data.		
3.1	 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place. Note: The Protection of the Environment Operations (Clean Air) Regulation 2010 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW". 	 Annual Reviews for FY17/18, FY18/19 & FY19/20 Site Observations 	According to the ARs, depositional dust is assessed in accordance with AS/NZS 3580.10.1-2003. The auditors observed that the dust gauges were upright and free from obstructions overhanging the gauge. The funnel appeared to be approximately 2 m above ground level and contained within a glass bottle in a canister. Based on these observations, the dust monitoring method was appropriate and compliant with this condition.	C	N/A
3.2	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.	Note	Noted	Note	N/A

At the Weather Station Monitoring Point, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.				•	Annual Reviews for FY17/18, FY18/19 & FY19/20	A permanent weather station is operated adjacent to the Belmont homestead. According to the Annual Reviews, the weather station was	С	N/A	
Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method	Site Observations	operated continuously throughout the reporting period. The auditors sighted the weather station onsite and reviewed an example of			
Rainfall	millimetres	Continuous	24 hour	AM-4					
Temperature@2m	Kelvin	Continuous	1 hour	AM-4			meteorological data for the audit period which included all parameters, units of measure, averaging periods required by the condition.		
Temperature@10 m	Kelvin	Continuous	1 hour	AM-4					
Wind direction@10m	Compass points	Continuous	1 hour	AM-2					
Wind speed@10m	metres per second	Continuous	1 hour	AM-2					

ltem		As	ssessment Requi	rement		Reference/ Evidence	Comments	Compliance	Recommendations
	Sigma theta Total solar radiation@10m	degrees Watts per square metre	Continuous Continuous	1 hour 1 hour	AM-2 AM-4				
	Siting Note: Sampling Met and Analysis of Air I		- with the NSW EPA,	- , 2001, Approved M	AM-1 ethods for the Sampling				
15 Rec	cording of pollution	complaints							
M5.1		eep a legible record of			or any employee or agent of applies.	 Cleary Bros Albion Park Quarry Website Complaints Register 2016, 2017, 2018, 2019, 2020 	A complaints register is maintained on the Cleary Bros website dating back to FY 16-17. The register includes the date, time, nature, and method of the complaint, and the investigation and action taken and no complaints not recorded in the register were identified by the Auditors, therefore Cleary Bros is compliant with this condition.	С	N/A
M5.2	The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.					 Cleary Bros Albion Park Quarry Website Confidential Complaints Register 	Auditors reviewed a confidential complaints register held by the Site. The register displayed the date, time, complaint nature, method of complaint, personal details of the complainant and action taken in response to the complaint. There were no examples of failure to note all the required information observed by the auditors, therefore Cleary Bros is compliant with this condition. [BH30]	С	N/A
M5.3	The record of a com	nplaint must be kept for	r at least 4 years a	fter the complaint w	as made.	 Cleary Bros Albion Park Quarry Website Complaints Register 2016, 2017, 2018, 2019, 2020 	The complaints register dates back to FY 2016- 17, which is greater than 4 years prior to the current audit period, therefore Cleary Bros is compliant with this condition.	С	N/A
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.					 Management Interviews 	According to site management, the EPA has not requested to see records during the audit period, therefore this condition has not been triggered.[DK31][BH32]	NT	N/A
M6 Tele	ephone complaints l	line							
M6.1	receiving any compl		f the public in relati	ion to activities con	e for the purpose of ducted at the premises or	 Cleary Bros Albion Park Quarry Website 	A telephone complaints number is displayed on the Albion Park Quarry website.	С	N/A
W6.2	by the vehicle or mobile plant, unless otherwise specified in the licence. The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.					 Cleary Bros Albion Park Quarry Website 	The Cleary Bros website directs the public to call a hotline number displayed on the Albion Park Quarry website for enquiries regarding environmental management. The auditor tested the hotline number and found it to be working.[DK33][BH34]	С	N/A

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
M6.3	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.	Note	Noted	Note	N/A
M7 Bla	asting	1			1
M7.1	Each production blast must be monitored and recorded at the permanent station established near the Dunster residence.	 EPL Blast Monitoring 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018 spreadsheet Site Observations 	Blasts are monitored and recorded at "The Cottage" residence (Fig Tree Hill residence).[DK35][BH36] The auditors observed records from one blast that was recorded by an alternative monitoring system, due to the permanent monitoring system being non- operational at the time of the blast. The secondary monitoring system was set up adjacent to the permanent station, therefore the results are considered to be comparable to those from the permanent monitoring station. There were no instances identified of blasts not being monitored, therefore Cleary Bros is compliant with this condition.	С	N/A
M7.2	To determine compliance with the blasting limits contained in this licence: (a) Airblast overpressure and ground vibration levels must be measured for all production blasts carried out in or on the premises; and (b) The written record must include: (i) the time and date of each blast; (ii) the station(s) at which the noise was measured; (iii) the ground vibration for each blast; (iv) the airblast overpressure for each blast; (v) evidence that during the past 12 month period, a calibration check had been carried out on each blast monitor to ensure accuracy of the reported data; and (vi) the waveform for the ground vibration and overpressure for each blast that exceeds a ground vibration of 5mm/sec (peak particle velocity) or an airblast overpressure and ground vibration levels must meet the requirements of Australian Standard 2187.2 of 1993 or as updated.	 EPL Blast Monitoring 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018 spreadsheet Example Blast Monitoring Reports 2017 - 2020, February, April, September Texcel ETM Calibration certificate 19 December 2017, 17 December 2018, 13 January 2020 	The auditors reviewed the blast monitoring spreadsheet and did not identify any examples of blasts that were not monitored. Dates were recorded for all blasts and were observed to be between Monday and Friday, however blast times were only recorded in individual blast monitoring reports. All blasts recorded the station where the noise was measured (The Cottage). The ground vibration for each blast and the airblast overpressure for each blast was recorded, with the exception of a blast on 10 September 2019, which was a small blast that failed to trigger the monitor. The auditors reviewed a sample of individual blast monitoring reports, which indicated blasting occurred between 9:00 am and 5:00 pm. No blast records exceeded a ground vibration of 5 mm/sec (peak particle velocity) or an airblast overpressure of 115 dB(L), therefore part (b) (vi) was not triggered. Review of the Texcel ETM Calibration certificates confirm that calibration checks occurred annually and the instrumentation meets the requirements of Australian Standard 2187.2 2006.[DK37] ERM considers Cleary Bros compliant with this condition.[BH38]	C	N/A
	orting Conditions				
R1 An	nual return documents				
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:1. a Statement of Compliance,2. a Monitoring and Complaints Summary,	 Annual Returns for FY17/18, FY18/19 & FY19/20 eConnect record of submission for FY17/18 & FY18/19 POEO Register 	The auditors reviewed the annual returns for the audit period and the associated proof of submission. All annual returns were provided to the EPA within the reporting period, using the	С[ВН39]	N/A

;	С[ВН39]	N/A

ltem	Assessment Requirement	Reference/ Evidence	Comments
	3. a Statement of Compliance - Licence Conditions,		approved template, therefore Cleary Bros are
	4. a Statement of Compliance - Load based Fee,		compliant with this condition.
	5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,		
	6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and		
	7. a Statement of Compliance - Environmental Management Systems and Practices.		
	At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.		
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below.	Annual Returns for FY17/18, EX40/00 a EX40/00	Auditors reviewed annual returns confirming
	Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.	FY18/19 & FY19/20	annual returns were prepared and submitted for each reporting period from the audit period.
R1.3	Where this licence is transferred from the licensee to a new licensee:	Interview with Quality and Environmental Manager	According to site management, the licence was
	a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and	Environmental Manager	not transferred to a new licensee during the audit period, therefore this requirement has not been triggered.
	b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.		
	Note: An application to transfer a licence must be made in the approved form for this purpose.		
R1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:	 Interview with Quality and Environmental Manager 	According to site management, the licence was not surrendered or revoked during the audit period, therefore this requirement has not been
	a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or		triggered.
	b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.		
R1.5	The Annual Return for the reporting period must be supplied to the EPA via eConnect EPA or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	 eConnect record of submission for FY17/18 & FY18/19 POEO Register 	The auditors sighted eConnect records of submission and the POEO register confirming Annual Returns were provided to EPA within 60 days of the end of each reporting period, therefore Cleary Bros is compliant with this condition.
R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	 Annual Returns for FY16/17, FY17/18, FY18/19 & FY19/20 	Copies of annual returns dating back to FY16/17 were reviewed by the auditors, which exceeds the four year requirement, therefore Cleary Bros is compliant with this condition.[DK40][BH41]
R1.7	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:	 Annual Returns for FY17/18, FY18/19 & FY19/20 	ERM reviewed the Annual Returns and observed that each was signed by the license
	a) the licence holder; or		holder as required by this condition.
	b) by a person approved in writing by the EPA to sign on behalf of the licence holder.		

R2 Notification of environmental harm

Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

	R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	Environmental Manager	According to site management, there were no instances of notifications of environmental harm during the audit period, therefore this requirement was not triggered.	NT	N/A	
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	Compliance	Recommendations
or	С	N/A
IS	NT	N/A
ot		
IS	NT	N/A
n		
	С	N/A
60		
17	С	N/A
os		
	С	N/A

ltem	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	 Interview with Quality and Environmental Manager 	According to site management, there were no instances of notifications of environmental harm during the audit period, therefore this requirement was not triggered.	NT	N/A
R3 Wri	tten report	1			1
3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	 Interview with Quality and Environmental Manager 	According to site management, there were no formal requests for written reports from an authorised officer of the EPA during the audit period, therefore this requirement was not triggered.	NT	N/A
3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	 Interview with Quality and Environmental Manager 	According to site management, there were no formal requests for written reports from an authorised officer of the EPA during the audit period, therefore this requirement was not triggered.	NT	N/A
83.3	 The request may require a report which includes any or all of the following information: a) the cause, time and duration of the event; b) the type, volume and concentration of every pollutant discharged as a result of the event; c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and g) any other relevant matters. 	Interview with Quality and Environmental Manager	According to site management, there were no formal requests for written reports from an authorised officer of the EPA during the audit period, therefore this requirement was not triggered.	NT	N/A
3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	 Interview with Quality and Environmental Manager 	According to site management, there were no formal requests for written reports from an authorised officer of the EPA during the audit period, therefore this requirement was not triggered.	NT	N/A
Gene	ral Conditions			l 	·
1 Cop	by of licence kept at the premises or plant				
1.1	A copy of this licence must be kept at the premises to which the licence applies.	 Site Observations 	The auditors observed a copy of the EPL stored in the Quarry Manager's Office.	С	N/A
1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	 Interview with Quality and Environmental Manager 	The NSW EPA conducted a site visit on 16 th October 2019 and requested to view the licence and PIRMP, which was produced by Cleary Bros at the time.	С	N/A

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	 Cleary Bros Albion Park Quarry Website 	The EPL is available on the Cleary Bros website which is accessible to all employees and agents of the licensee working at the premises.	С	N/A

APPENDIX B DEPARTMENTAL CORRESPONDENCE

From: Sent: To: Cc: Subject: Attachments: Brigitte Healey Thursday, 8 October 2020 3:38 PM mark.miller@shellharbour.nsw.gov.au Dean Kerr Albion Park Quarry 2020 IEA - Stakeholder Feedback 0426099 - Albion Park IEA Terms of Reference.pdf

Dear Mark,

ERM are currently completing the Independent Environmental Audit (IEA) for Cleary Bros on the Conditions of Approval issued to the Albion Park Quarry, DA No. 10639 of 2005.

One of the requirements of the audit is that it is to be undertaken in consultation with relevant agencies. To that end, this email invites you to raise any questions or concerns regarding this project from an environmental management aspect.

The attached Terms of Reference outlines the audit process, and also introduces the approved team of suitably qualified, experienced and independent experts who will be undertaking the audit. The site inspection will be completed on November 5, therefore it would be appreciated if there are any concerns, areas of focus etc., they are raised by 2 November 2020.

I can be contacted at the details outlined below to discuss further.

Kind regards,

Brigitte Healey Consultant

ERM

Level 15 | 309 Kent Street | Sydney NSW 2000 T +61 2 8584 8863 M +61 422 902 109 E Brigitte.Healey@erm.com | W www.erm.com



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From: Sent:	Georgia Dragicevic <georgia.dragicevic@planning.nsw.gov.au> Monday, 12 October 2020 9:36 AM</georgia.dragicevic@planning.nsw.gov.au>
То:	Brigitte Healey
Cc:	Dean Kerr
Subject:	RE: Albion Park Quarry 2020 IEA - Stakeholder Feedback

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Thanks Brigitte,

Please consider noise and any works (inaudible or otherwise) outside of the operating hours.

Kind Regards, Georgia

From: Brigitte Healey <Brigitte.Healey@erm.com>
Sent: Thursday, 8 October 2020 3:40 PM
To: Georgia Dragicevic <Georgia.Dragicevic@planning.nsw.gov.au>
Cc: Dean Kerr <dean.kerr@erm.com>
Subject: Albion Park Quarry 2020 IEA - Stakeholder Feedback

Dear Georgia,

ERM are currently completing the Independent Environmental Audit (IEA) for Cleary Bros on the Conditions of Approval issued to the Albion Park Quarry, DA No. 10639 of 2005.

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I can be contacted at the details outlined below to discuss further.

Kind regards,

Brigitte Healey Consultant

ERM

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From:	James Crawford <james.crawford@epa.nsw.gov.au></james.crawford@epa.nsw.gov.au>
Sent:	Thursday, 8 October 2020 4:06 PM
То:	Brigitte Healey
Cc:	Dean Kerr
Subject:	RE: Albion Park Quarry 2020 IEA - Stakeholder Feedback

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Hi Brigitte,

Thanks for the heads up.

A couple of things regarding the Albion Park quarry that you should be aware of:

Current land title and address

 The quarry lost some of the land at the front (north) of the premises when land was acquired for the Albion Park bypass. The EPA have since varied the licence to update the street address and the Lot and DP details.
 It would be important to check these are correct both in the Environment Protection Licence and the DA.

Aggrieved neighbour

- A local family that live near the quarry (**based on the second on the**

- They believe the dust deposition gauges are not installed or maintained to the correct standard (AS/NZS 3580.10.1:2016). The family have often reported the gauges "lean at a considerable angle".

- They were told that Cleary Bros will replace the dust deposition gauges with High Volume dust samplers in 2018. This has still not been completed and is angering the family.

- They believe the quarry are operating outside of Consent hours.
- They believe the blasts at the quarry are above licence and Consent limits.

- They believe the quarry is not conducting the annual noise survey appropriately. (they believe the quarry is using "noise modelling" rather than an actual logger at their residence).

- They have reported fly rock from blasting landing near their residence.

- They are particularly worried about the proposed expansion of the quarry (Stage 7) that would bring the quarry pit to within a few hundred metres of their residence.

- The EPA and DPIE have investigated these allegations and found little evidence of breaches of consent of licence, but it would be good for an independent party to look into these allegations.

Feel free to call me if you need any further information.

Thank you,

James Crawford

Operations Officer – Regulatory Operations NSW Environment Protection Authority

(02) 4224 4100

James.crawford@epa.nsw.gov.au www.epa.nsw.gov.au 🎐 @NSW EPA 💽 EPA YouTube

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From: Brigitte Healey <Brigitte.Healey@erm.com>
Sent: Thursday, 8 October 2020 3:42 PM
To: James Crawford <James.Crawford@epa.nsw.gov.au>
Cc: Dean Kerr <dean.kerr@erm.com>
Subject: Albion Park Quarry 2020 IEA - Stakeholder Feedback

Dear James,

ERM are currently completing the Independent Environmental Audit (IEA) for Cleary Bros on the Conditions of Approval issued to the Albion Park Quarry, DA No. 10639 of 2005.

One of the requirements of the audit is that it is to be undertaken in consultation with relevant agencies. To that end, this email invites you to raise any questions or concerns regarding this project from an environmental management aspect.

The attached Terms of Reference outlines the audit process, and also introduces the approved team of suitably qualified, experienced and independent experts who will be undertaking the audit. The site inspection will be completed on November 5, therefore it would be appreciated if there are any concerns, areas of focus etc., they are raised by 2 November 2020.

I can be contacted at the details outlined below to discuss further.

Kind regards,

Brigitte Healey Consultant

ERM Level 15 | 309 Kent Street | Sydney NSW 2000 T +61 2 8584 8863 M +61 422 902 109 E Brigitte.Healey@erm.com | W www.erm.com



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From:	Brigitte Healey
Sent:	Thursday, 8 October 2020 3:46 PM
То:	'mineral.royalty@geoscience.nsw.gov.au'
Cc:	Dean Kerr
Subject:	Albion Park Quarry 2020 IEA - Stakeholder Feedback
Attachments:	0426099 - Albion Park IEA Terms of Reference.pdf

To Whom it May Concern,

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Condition Number	Descri	ption of Condition		Comments	Recommendations	Proposed Action	Completion Date
PA 4.61	The Applicant must ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant Australian Standards, particularly AS 1940 and AS1596, and the Dangerous Goods Code.			A 110 kl above ground storage tank containing diesel is located at the Site and the diesel, as currently stored on site, constitutes a dangerous good. AS1940 requires a suitable high level alarm (LAH) set at a maximum of 97% of tank capacity for tanks over 25,000 L capacity storing combustible liquids (e.g. diesel). The diesel tank onsite does not have a suitable high level alarm, therefore Cleary Bros does not meet this requirement.	Install a high level alarm (LAH) set at a maximum of 97% of tank capacity for the 110 kl diesel tank.	Install a high-level alarm on the bulk diesel tank	30/6/2021
PA 4.15	The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not exceed the criteria in Table 5 at any sensitive receiver or residence on privately-owned land.		Air quality monitoring results are reported within the Annual Reviews. An exceedance of the 24-hour PM 10 criteria at the High Volume Air Sampler occurred on 23 September 2020. According to the Quality and	Comply with direction from OPIE with regard to the reported 24- hour PM10 criteria exceedance.	No further action required at this time	N/A	
	Pollutant	Averaging Period	Criterion	Environment Manager, Cleary Bros undertook			
	Particulate matter <10 μm (PM10)	Annual	30 µg/m3	an investigation into the cause of the exceedance. The incident was reported to OPIE on 14 October 2020 and at the time of writing	dance. The incident was reported to OPIE		
	Particulate matter <10 μm (PM10)	24 hour	50 μg/m3	this report, Cleary Bros is awaiting a response from OPIE. ERM notes that results immediately			
	Total suspended particulates (TSP)Annual90 μg/m3		before and after the exceedance were within criteria and the isolated exceedance event is not considered representative of widespread failure to manage particulate matter emissions.				

Proposed Corrective Actions from Albion Park Quarry Independent Environmental Audit – 2020

Condition Number	Description of Condition	Comments	Recommendations	Proposed Action	Completion Date
PA 3.11	The Applicant must ensure that all plant and equipment at the site, or used in connection with the development, are: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	It is recommended that future preventative maintenance for in-ground concrete infrastructure, such as tank bunds and water treatment plant sumps include integrity inspections to confirm that sumps are not leaking to the subsurface and secondary containment is in good working order.	Incorporate additional preventative maintenance for concrete bunds and sumps, comprising routine integrity inspections to confirm stored product is fully contained.	Update preventative maintenance program to include physical inspections of bund. Undertake inspection of bund	31/3/2021
PA 4.29	The Erosion and Sediment Control Plan must: (a) be consistent with the requirements of the Department of Housing's Managing Urban Stormwater: Soils and Construction manual; (b) identify activities that could cause soil erosion and generate sediment; (c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters (d) describe the location, function , and capacity of erosion and sediment control structures; and (e) describe what measures would be implemented to maintain the structures over time.	A portion of the natural flow paths and vegetated buffers shown in Appendix C of the Water Management Plan, are no longer present onsite due to the expanded quarry pit. Erosion and sediment controls in the Sediment Control Plan should be updated to describe current practicable onsite controls.	Review the sediment control plan (Appendix C) and update the plan to only describe controls that are practicable given the current state of operations.	Update Erosion and Sediment Control Plan to ensure consistency with site layout.	31/3/2021
PA 4.59	All liquid and non liquid wastes resulting from activities and processes at the site must be assessed, classified and managed in accordance with the EPA's Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Wastes (1999), or any other EPA document superseding this guideline.	ERM considers waste is being managed in accordance with the EPA and waste management is conducted generally in accordance with this condition, however there is no document that identifies and pre-classifies common waste streams generated by site	Update the QEMP to identify the common waste streams generated by site activities and preclassify the	Update QEMP to further describe current waste management practices.	31/3/2021
EPL 05.1	All liquid and non liquid wastes resulting from activities and processes at the site must be assessed, classified and managed in accordance the EPA's Waste Classification Guidelines (2014) or any other EPA document superceding this guideline.	operations.	material where possible in accordance with the EPA Waste Classification Guidelines.		