

Margaret Kirton
Senior Planner
Department of Planning & Environment
23-33 Bridge Street
Sydney NSW 2000

June 30, 2016

Dear Margaret,

Holcim (Australia) Pty Ltd (Holcim) is the owner and operator of the Jandra Quarry, located on Lots 10-15 DP790056 and Lot 2 DP255621 on the Pacific Highway, Possum Brush.

A modification to the existing Development Consent was granted on March 13, 2015 and allows for an increase in the production and transport of quarry materials from 250,000 Tonnes per Annum (TpA) to 490,000 TpA (production) and 475,000 TpA (transport).

Schedule 5, Conditions 8 (a-e) & 9 of the Development Consent require the site to commission an independent consultant to undertake an Environmental Audit in the following manner:

8. *By 31 March 2016, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:*

- (a) be conducted by 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 and/or Water License (including any assessment, plan or program required under these approvals);*
- (d) review the adequacy of any approved strategy, plan or program required under the these approvals; and*
- (e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals.*

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.

9. *Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.*

GHD was commissioned to undertake the audit on 30 March, 2016 with a site inspection conducted on 20 May 2016. The audit period was taken to be from 20 May 2016 with a final report provided to Holcim's Planning & Environment team on 27 June 2016.

The audit report listed a total of 18 recommendations identified by the audit team. All recommendations have been actioned to relevant staff and logged in Holcim's internal reporting tool (INX).

In accordance with Schedule 5, Condition 8 and 9 of the Jandra Development Consent this document provides a response to each of the non-compliant items and recommendations outlined in the GHD audit report.

Response to Recommendations

Based on the non-compliance summary table provided by GHD, Holcim has provided a response to each recommendation outlined in the independent audit report.

All recommendations identified by GHD in the independent audit report as well as Holcim's response and proposed actions to each recommendation are discussed in detail in Attachment 1 of this letter.

Should you wish to contact me with regards to any of the information above, please do not hesitate to contact me on (02) 9412 6592.

Yours sincerely,



Daniel Lidbetter

NSW/ACT Planning & Environment Coordinator

Attachment 1: Independent Audit Findings and Recommendations

TABLE 1: GHD Independent Audit Findings & Recommendations				
Schedule	Condition	Status	Recommendations	Holcim Action
Condition 18 of Schedule 2	The Applicant shall provide annual quarry production data to DRE using the standard form for that purpose; and report these data in the Annual Review (see condition 4 of Schedule 5).	ANC	Recommendation 1 Ensure annual quarry production data is provided to DRE using the standard form.	With regards to Recommendation 1 Holcim will undertake the following actions to ensure compliance with this condition: Action: Holcim will submit all annual production data to DRE using the standard format.
Condition 1 of Schedule 3	The Applicant shall ensure that the noise generated by the development does not exceed the criteria in Table 2 or Table 3 at any residence on privately-owned land.	NV	Recommendation 2 Commence monitoring as soon as practicable following approval of the EMS and sub-plans to ensure effective management should any exceedance occur.	With regards to Recommendation 2 Holcim will undertake the following actions to ensure compliance with this condition: Action: Holcim will begin monitoring as soon as each individual management plan is approved by the DP&E.
Condition 8 (b) of Schedule 3	(b) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site; and	C	Recommendation 3 Advise local neighbours of blasting via a group email, in addition to a phone call.	With regards to Recommendation 3 Holcim will undertake the following actions to ensure compliance with this condition: Action: Holcim staff will develop a generic email that includes the surrounding neighbour's email address' and will send out advising the next time and date of the proposed blast.
Condition 9 (d) of Schedule 3	(d) include a blast fume management protocol to demonstrate how emissions will be minimised including risk management strategies if blast fumes are generated;	ANC	Recommendation 4 Update the NBMP to include a reference to the Blast Fume Code of Practice (available on site via USAFE), or this be included as an appendix to the NBMP.	With regards to Recommendation 4 Holcim will undertake the following actions to ensure compliance with this condition: Action: Update the NBMP to include a reference to the Blast Fume Code of Practice (available on site via USAFE), or this be included as an appendix to the NBMP.

TABLE 1: GHD Independent Audit Findings & Recommendations

Schedule	Condition	Status	Recommendations	Holcim Action
Condition 10 of Schedule 3	The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables 5, 6 and 7 at any residence on privately-owned land.	NC (Low Risk)	<p>Recommendation 5</p> <p>Confirm DP&E's approval of proposed PM10 monitoring locations and commence monitoring as soon as practicable to ensure effective management should any exceedance occur.</p>	<p>With regards to Recommendation 5 Holcim will undertake the following actions to ensure compliance with this condition:</p> <p>Action: Send email correspondence to members of the DP&E to confirm that the proposed location of the PM10 monitor is practicable.</p>
Condition 10 of Schedule 3	The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables 5, 6 and 7 at any residence on privately-owned land.	NC (Low Risk)	<p>Recommendation 6</p> <p>Advise DP&E in writing of the installation and location of the PM10 monitor following installation.</p>	<p>With regards to Recommendation 6 Holcim will undertake the following actions to ensure compliance with this condition:</p> <p>Action: Advise DP&E in writing of the installation and location of the PM10 monitor following installation.</p>
Condition 13(a) of Schedule 3	<p>The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria in Tables 5, 6, and 7 at any occupied residence on quarry-owned land unless:</p> <p>(a) the tenant has been notified of any health risks associated with such exceedances in accordance with the notification requirements under Schedule 4 of this consent;</p>	ANC	<p>Recommendation 7</p> <p>Notify the tenant of potential health risks associated with exceedances of particulate matter criteria in accordance with Condition 13(a).</p>	<p>With regards to Recommendation 7 Holcim will undertake the following actions to ensure compliance with this condition:</p> <p>Action: The site Quarry Manager will notify the tenant at the location specified in this condition on the risks associated with exceedances of particulate matter criteria.</p>

TABLE 1: GHD Independent Audit Findings & Recommendations				
Schedule	Condition	Status	Recommendations	Holcim Action
Condition 15 of Schedule 3	For the life of the development, the Applicant shall 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.	NC (Low Risk)	Recommendation 8 Following installation of the meteorological station, provide written notification to DP&E.	With regards to Recommendation 8 Holcim will undertake the following actions to ensure compliance with this condition: Action: Advise DP&E in writing of the installation and location of the meteorological weather station following installation.
Condition 19 of Schedule 3	The Applicant shall prepare and implement a Soil and Water Management Plan for the development to the satisfaction of the Secretary. This plan must be prepared in consultation with the Council and NOW, by suitably qualified and experience person/s whose appointment has been approved by the Secretary, and be submitted to the Secretary for approval by 31 August 2015.	ANC	Recommendation 9 Update the SWMP to include details of documentation referred to in Table 8 of the SWMP, or include Attachment 4.1H as an Appendix to the SWMP	With regards to Recommendation 9 Holcim will undertake the following actions to ensure compliance with this condition: Action: Update the SWMP to include details of documentation referred to in Table 8 of the SWMP, or include Attachment 4.1H as an Appendix to the SWMP.
Condition 19 of Schedule 3	The Applicant shall prepare and implement a Soil and Water Management Plan for the development to the satisfaction of the Secretary. This plan must be prepared in consultation with the Council and NOW, by suitably qualified and experience person/s whose appointment has been approved by the Secretary, and be submitted to the Secretary for approval by 31 August 2015.	ANC	Recommendation 10 Update the SWMP to include requirements for the investigation and reporting of exceedances of water quality performance criteria in accordance with Condition 6 of Schedule 5 of DA 213-10-99.	With regards to Recommendation 10 Holcim will undertake the following actions to ensure compliance with this condition: Action: Update the SWMP to include requirements for the investigation and reporting of exceedances of water quality performance criteria in accordance with Condition 6 of Schedule 5 of DA 213-10-99.
Condition 20 of Schedule 3	The Applicant shall manage on-site sewage to the satisfaction of Council and the EPA.	NV	Recommendation 11 Liaise with GTCC to resolve the issue of on-site OSSM systems.	With regards to Recommendation 11 Holcim will undertake the following actions to ensure compliance with this condition: Action: Liaise with GTCC to resolve the issue of on-site OSSM systems.

TABLE 1: GHD Independent Audit Findings & Recommendations

Schedule	Condition	Status	Recommendations	Holcim Action
Condition 25 (b) of Schedule 3	<p>The Applicant shall prepare and implement a Biodiversity and Rehabilitation Management Plan for the site to the satisfaction of the Secretary. This plan must:</p> <p>(b) be prepared in consultation with OEH and Council, and submitted to the Secretary for approval by 31 August 2015;</p>	ANC	<p>Recommendation 12</p> <p>Provide Council with an updated copy of the DP&E approved BRMP.</p>	<p>With regards to Recommendation 12 Holcim will undertake the following actions to ensure compliance with this condition:</p> <p>Action: Provide Council with an updated copy of the DP&E approved BRMP.</p>
Condition 29 (c) of Schedule 3	<p>The Applicant shall prepare and implement an Aboriginal Cultural Heritage Management Plan for the Project to the satisfaction of the Secretary. This plan must:</p> <p>(c) describe the measures that would be implemented to:</p> <ul style="list-style-type: none"> - manage known Aboriginal objects and sites; - monitor all new surface disturbance on site for unidentified Aboriginal objects; - manage the discovery of any human remains or previously unidentified Aboriginal objects on site; 	C	<p>Recommendation 13</p> <p>Update the ACHMP to include monitoring of all new surface disturbances on site and include an unexpected finds procedure for unidentified Aboriginal objects and submit to DP&E for approval.</p>	<p>With regards to Recommendation 13 Holcim will undertake the following actions to ensure compliance with this condition:</p> <p>Action: Update the ACHMP to include monitoring of all new surface disturbances on site and include an unexpected finds procedure for unidentified Aboriginal objects and submit to DP&E for approval.</p>
Condition 36 of Schedule 3	<p>Except as expressly permitted in an EPL, the Applicant must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.</p>	ANC (Low Risk)	<p>Recommendation 14</p> <p>Consult with DP&E and seek an administrative modification to permit the reprocessing of concrete waste on site.</p>	<p>With regards to Recommendation 14 Holcim will undertake the following actions to ensure compliance with this condition:</p> <p>Action: Consult with DP&E and seek an administrative modification to permit the reprocessing of concrete waste on site.</p>

TABLE 1: GHD Independent Audit Findings & Recommendations

Schedule	Condition	Status	Recommendations	Holcim Action
Condition 3 (g) of Schedule 5	<p>The Applicant shall ensure that the Management Plans required under this consent are prepared in accordance with any relevant guidelines, and include:</p> <p>(g) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> - incidents; - complaints; - non-compliances with statutory requirements; and - exceedances of the impact assessment criteria and/or performance criteria; and 	ANC	<p>Recommendation 15</p> <p>Update the SWMP and ACHMP to include a procedure for addressing non-compliances.</p>	<p>With regards to Recommendation 15 Holcim will undertake the following actions to ensure compliance with this condition:</p> <p>Action: Update the SWMP and ACHMP to include a procedure for addressing non-compliances.</p>
Condition 10 of Schedule 5	<p>By 31 August 2015, the Applicant shall:</p> <p>(a) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> - the documents listed in condition 2 of Schedule 2; - current statutory approvals for the development; - approved strategies, plans or programs; - a summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent; - a complaints register, which is to be updated on a quarterly basis; - the annual reviews (over the last 5 years); - any independent environmental audit, and the Applicant's response to the recommendations in any audit; and <p>- any other matter required by the Secretary; and</p> <p>(b) keep this information up-to-date to the satisfaction of the Secretary.</p>	ANC	<p>Recommendation 16</p> <p>Upload depositional dust monitoring results and the DP&E approved management plans (when approved) to the Holcim website</p>	<p>With regards to Recommendation 16 Holcim will undertake the following actions to ensure compliance with this condition:</p> <p>Action: Upload depositional dust monitoring results and the DP&E approved management plans (when approved) to the Holcim website.</p>

TABLE 1: GHD Independent Audit Findings & Recommendations				
Schedule	Condition	Status	Recommendations	Holcim Action
Condition P1.2 of EPL	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.	C	<p>Recommendation 17</p> <p>Install a sign at the licenced discharge point from the Main Dam to notify that this location is the discharge point.</p>	<p>With regards to Recommendation 17 Holcim will undertake the following actions to ensure compliance with this condition:</p> <p>Action: Install a sign at the licenced discharge point from the Main Dam to notify that this location is the discharge point.</p>
Condition M1.3 of EPL	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.	C	<p>Recommendation 18</p> <p>Prepare a field record sheet for environmental monitoring rather than use the chain of custody and include the field sheet as an Appendix to the SWMP.</p>	<p>With regards to Recommendation 18 Holcim will undertake the following actions to ensure compliance with this condition:</p> <p>Action: Prepare a field record sheet for environmental monitoring rather than use the chain of custody and include the field sheet as an Appendix to the SWMP.</p>

Attachment 2: Jandra Independent Audit Report (GHD 2016).



Holcim (Australia) Pty Ltd
Jandra Quarry
Independent Environmental Compliance Audit

June 2016

Executive summary

GHD Pty Ltd (GHD) was commissioned by Holcim (Australia) Pty Ltd (Holcim) to conduct an audit of Holcim's compliance with the requirements of its Development Consent (DA 231-10-99) and Environment Protection Licence (EPL # 2796) for the Jandra Quarry (the project). The scope of this audit is set out by Condition 8 of Schedule 5 of the Development Consent. This report presents the audit findings.

The review of compliance with DA 231-10-99 identified four non-compliances and eleven administrative non-compliances as detailed in Section 3 of the Report. The environmental risk associated with all of the non-compliances was considered low as detailed in Section 3.2.1.

No non-compliances or administrative non-compliances were identified in relation to compliance with the Environment Protection Licence (EPL) 2796.

Detailed findings of compliance for the Development Consent and EPL are provided in Appendix A and B of this report.

A number of recommendations were made during the audit relating to the Conditions of Approval and EPL, which are detailed in Section 4 of the report.

Rehabilitation of disturbed areas of the quarry is ongoing as was evident during the site visit. This is supported by the 2015 Annual Review noting progressive rehabilitation of the southern benches (RL 62 and RL 74) being undertaken during the 2015 reporting period.

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- Appendix A – Compliance with Conditions of Approval
- Appendix B – Compliance with EPL requirements
- Appendix C – Agency correspondence for the audit

1. Introduction

1.1 Introduction and purpose of this report

Holcim (Australia) Pty Ltd (Holcim) is one of Australia's leading producers and suppliers of construction materials such as concrete and quarry products, with over 88 quarry operations supplying rail ballast, aggregates, gravels, road pavement materials, and manufactured and natural sands.

The Jandra Quarry is a hard rock quarry located on the Pacific Highway at Possum Brush, approximately 17 kilometres south of Taree in the Greater Taree Local Government Area (LGA). Jandra Quarry has been operating since 1986, with the current Development Consent (DA 231-10-99) for operations granted by the NSW Minister for Planning on 30 March 2000 (with five subsequent modifications).

Holcim commissioned GHD to conduct an independent environmental audit of its Jandra Quarry (the site). The audit was conducted in accordance with Condition 8 of Schedule 5 of the Development Consent. The audit assessed the compliance status of the Jandra Quarry against the Development Consent and other relevant environmental approvals and licences, for operations since approval of Modification 5 (13 March 2015) in which the condition requiring this audit was included in the Development Consent.

The site component of the environmental audit was conducted on 20 May 2016. This report provides an outline of the audit methodology and results, and provides recommended actions for achieving full compliance with environmental approvals.

The audit was led by Ashley Robinson, Principal Environmental Scientist with the assistance of Elliot Holland, Environmental Scientist.

Condition 8 of Schedule 5 of the Development Consent for the project requires an Independent Environmental Audit (the audit) to be commissioned by 31 March 2016. Specifically, Condition 8 requires:

“By 31 March 2016, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:

(a) be conducted by 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 and/or Water License (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; and

(e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals.

As required by Condition 8(a) of Schedule 5 of the Development Consent, the audit team was approved by the Department of Planning and Environment (DP&E) to undertake the audit on 31 March 2016.

1.2 Scope of the audit

The audit took the following form:

- An initial start-up teleconference with held with relevant Holcim representatives to discuss the audit methodology, identify relevant personnel involved in the project, key activities and systems occurring on the site, documentation for review and to schedule a date for the site inspection
- Relevant agencies, including the Office of Environment and Heritage (OEH), Department of Primary Industries (DPI) Water, Environment Protection Authority (EPA) and Greater Taree City Council (GTCC) were requested to provide comment on the performance and/or compliance of the project with relevant requirements and/or approvals
- A review of available key documentation including the Environmental Assessment (EA), Development Consent, Environment Protection Licence (EPL) and other relevant site and environmental information (such as correspondence with relevant agencies and management plans and/or monitoring results) was undertaken prior to interviews with Holcim representatives and the site inspection. Additional documents were reviewed during and following the interviews with Holcim representatives and the site inspection
- A one-day site inspection to assess the general environmental performance of Jandra Quarry and discuss Development Consent and EPL compliance with key site-based personnel
- Preparation of a draft audit report for Holcim to review
- Finalisation of the audit report and submission to DP&E on behalf of Holcim.

1.3 Audit participants

The following personnel were involved over the course of the audit Table 1.

Table 1 Audit team members

Audit team members	Organisation	Role
Maurice Pignatelli	GHD	Technical review
Ashley Robinson	GHD	Lead Auditor
Elliot Holland	GHD	Support Auditor
Daniel Lidbetter	Holcim	NSW/ACT Planning & Environment Coordinator
Matt Neil	Holcim	Quarry Manager

1.4 Limitations

This report has been prepared by GHD for Holcim and may only be used and relied on by Holcim for the purpose agreed between GHD and the Holcim as set out in section 1.1 and 1.2 of this report.

GHD otherwise disclaims responsibility to any person other than Holcim arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

GHD has prepared this report on the basis of information provided by Holcim, which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

2. Methodology

The audit process involved the interview of personnel, a review of documentation and samples of records provided by Holcim and a site inspection of the quarry operations to determine the level of environmental performance and compliance of the development with the Development Consent and the EPL. The audit process is described in more detail in Sections 2.1 to 2.5.

2.1 Audit inception

An initial start-up teleconference for the audit was held in April 2016 with relevant Holcim representatives to discuss the audit methodology, identify relevant personnel involved in the project, key activities and systems occurring on site, documentation for review and to schedule a date for the site inspection;

2.2 Document review

Environmental documentation associated with the Jandra Quarry was reviewed by the auditors prior to site visit. Holcim personnel provided a number of documents for review including:

- Noise and Vibration Management Plan (NVMP)
- Biodiversity and Rehabilitation Management Plan (BRMP)
- Soil and Water Management Plan (SWMP)
- Air Quality Management Plan (AQMP)
- Aboriginal Cultural Heritage Management Plan (ACHMP)
- Environmental Management Strategy (EMS)
- Development Consent
- EPL
- Environmental Assessment
- Correspondence to/from agencies.

Additional documents were provided during and following the audit as evidence of compliance with the Development Consent and EPL.

2.3 Agency consultation

As part of the audit process, the following agencies were invited to provide comment in regard to Development Consent conditions requiring specific consultation with the particular agencies.

- Department of Primary Industries – Water (DPI Water)
- Environment Protection Authority (EPA)
- Greater Taree City Council (GTCC)
- Office of environment and Heritage (OEH)

Letters requesting comment from the agencies were emailed between 6 and 10 May 2016.

Comments were received from DPI Water, EPA, GTCC and OEH. Copies of this correspondence are provided in Appendix C, with a response to these matters provided in Section 3.4.

2.4 Site inspection and interviews

2.4.1 Opening and closing meeting

GHD undertook a site visit of the Jandra Quarry on 20 May 2016. The auditor used the site inspection to review compliance with various environmental requirements of the project.

The opening and closing meetings were held at the Jandra Quarry main office. The list of participants is provided in Table 2.

Table 2 Opening meeting attendees

Audit team members	Organisation	Role
Ashley Robinson	GHD	Lead Auditor
Elliot Holland	GHD	Support Auditor
Holcim Representatives	Organisation	Role
Daniel Lidbetter	Holcim	NSW/ACT Planning & Environment Coordinator
Matt Neil	Holcim	Quarry Manager

Following the opening meeting, a site inspection was undertaken to familiarise the audit team with the site and operations.

The objectives of the closing meeting were to discuss any outstanding matters, present preliminary findings and outline the process for finalising the audit report.

2.4.2 Audit interviews

During the on-site component of the audit, interviews were conducted with the Holcim staff identified in Table 2.

2.4.3 Data collection and verification

Where possible, documents and data collected during the audit process were reviewed whilst on-site. A number of documents were provided to the audit team prior to the on-site component of the audit. Several documents that were not available during the on-site component were provided following the audit.

All information obtained during the audit process was verified by the audit team where possible. For example, statements made by site personnel were verified by viewing documentation and/or site inspections. Where suitable verification was unable to be obtained, this has been identified.

2.4.4 Site inspection

A detailed site inspection of Jandra Quarry was undertaken on 20 May 2016. The following locations were inspected:

- Active quarry pit
- Pug mill and maintenance area
- Processing area and stockpiles
- Weighbridge, access road and wheel wash
- Main dam

- Haul road
- Accessible rehabilitation areas

2.5 Reporting

This report presents the finding of the Jandra Quarry independent environmental audit required by Condition 8 of Schedule 5 of the Development Consent (DA 231-10-99) for the reporting period of 31 March 2015 to 31 March 2016.

This report summarises the findings of Holcim's compliance of the requirements of the Development Consent and EPL in Section 3. The findings are supported by Appendices detailing:

- Compliance against the Development Consent (Appendix B)
- Compliance against the EPL (Appendix C).

2.6 Definitions

Reporting results from the Independent Environmental Audit was determined based on the following definitions.

Compliant

Where sufficient verifiable evidence has been gathered to demonstrate compliance with the explicit requirements of the condition.

Non-Compliant

Where sufficient verifiable evidence has been gathered to demonstrate non-compliance with the explicit requirements of the condition.

Administrative non-compliance

A technical non-compliance with a requirement that would not impact on performance and that is considered minor in nature (e.g. report submitted but not on the due date).

Not verified

The inability to obtain sufficient verifiable evidence to assess compliance with the explicit requirements of the condition.

Not triggered

A requirement has an activation or timing trigger that had not been met at the time of the audit inspection, therefore a determination of compliance could not be made.

Observation

A finding which is not likely to significantly affect the operations, does not strictly relate to the scope of the audit of compliance and/or could lead to performance improvement.

Note

A statement or fact, where no assessment of compliance is required.

3. Audit findings

3.1 Summary of Compliance

Table 3 presents a summary of compliance with the requirements of the Development Consent and the EPL.

Table 3 Compliance with Development Consent and EPL

Compliance	Development Consent (number)	Percentage	EPL (number)	Percentage
Compliant	96	71	30	60
Non-compliant	4	3	0	0
Administrative Non-compliance	11	8	0	0
Not verified	4	3	2	4
Not triggered	19	14	13	26
Observation	0	0	0	0
Note	1	1	5	10
Total number of requirements	135	100	50	100

3.1.1 General Environmental Performance and Compliance

Holcim demonstrated a high level of environmental performance during the audit, as demonstrated by the comments and photos below.

A site inspection was undertaken of Jandra Quarry on 20 May 2016. While the approval of Modification 5 was obtained on 13 March 2015, at the time of the audit production had not increased to the production capacity approved by this modification and Jandra Quarry has not yet undertaken extraction, processing and transport operations to the approved time of 10.00 pm Monday to Friday.

Production for the 2015 reporting period was 232,028 tonnes, which is well below the approved limit of 475,000 tonnes. It was noted during the site interviews that the mobile asphalt plant was decommissioned during the 2015 reporting period and is no longer on site. The asphalt plant was used specifically for the Bulahdelah Bypass, which is now complete and operational.

In the current active quarry area, rehabilitation was observed along the southern and eastern quarry bench areas (refer to photo below). It is noted that some of this this rehabilitation pre-dates the approval of Modification 5 and was undertaken in accordance with the previous site Landscape and Rehabilitation Management Plan. However, the 2015 Annual Review notes progressive rehabilitation of the southern benches (RL 62 and RL 74) was undertaken during the reporting period.

During the site inspection dust controls were observed in the form of watering down of the crushing and screening plant, operation of a water cart along the haul roads and a sprinkler operating atop a product stockpile in the stockpiling area.

3.1.2 Site inspection observations

A selection of photographs from the site inspection is provided below.



The Main Dam (Stormwater Basin), with a total volume of approximately 10 ML.



Pump used to transfer water between the Main Dam and in-pit dam



The Main Dam (Stormwater Basin) discharge point, in the dam.



The Main Dam (Stormwater Basin) discharge point, out of the dam.



Wheel wash system at the site exit, with water cycled through via a pump before draining to the Main Dam for reuse.



Shaker system at the site exit, which trucks pass over following the wheel wash. Excess water is drained and cycled through the wheel wash, while material is collected for disposal



A sign prior to the wheel wash noting all vehicles exiting the site must use the wheel wash.



A water cart observed to be in operation while on-site.



Liquid storage facilities, located within bunding.



On-site pug mill.



Waste oil storage container. Waste oils are collected by Australian Waste Oils.



Waste oil filter and oily rags storage containers, waste oils are collected by Australian Waste Oils.



Dangerous goods storage containers.



One of two on-site OSSM Systems, discussed in Section 3.6.2.



Product stockpiles, with a sprinkler system operating on the stockpile in the back, right.



Crushing and screening plant, with wash down occurring to minimise dust issues.



Settling ponds (one being active and the other dewatering at any one time)



In-pit Dam, with a total volume of approximately 13 ML.



Rehabilitation along the southern quarry benches.



In-pit solar lighting.



Active quarry pit.



Waste tyres, stored for reuse in road barriers



Overburden stockpiles, within the approved overburden emplacement area.



Boundary marker in the southeast of the Active Quarry Pit area.



RL 50 marker indicating the current level of the Active Quarry Pit (approval allows to RL 20).



Truck leaving sight, with the front load covered. The driver was sighted covering the back load prior to leaving the site.

3.2 Compliance with Development Consent DA 231-10-99

3.2.1 Context to Compliance Assessment

Holcim were granted Modification 5 on 13 March 2016 permitting an increase in production from 250,000 tonnes to 475,000 tonnes per annum. Holcim advised that whilst the approved production limit has increased, site operations have not increased to reflect the new production limit. As such, there has not been an increase in the potential environmental impacts associated with an increase in production.

The quarry operations are located in a heavily forested area and are reasonably isolated with three properties located within approximately 500 m of the quarry operations and less than 10 properties located within one kilometre of the operations. Of the three closest properties, two are located on Holcim owned land (one is leased and the other is occupied by Holcim staff) and the other is a private property for which Holcim has a noise agreement in place. Due to the distance to sensitive receivers, the potential for adverse impacts associated with environmental issues including noise, vibration and air quality is considered by the auditor to be low.

Further details relating to risks associated with non-conformances are provided in the detailed findings in Appendices A and B.

3.2.2 Summary of Non-Compliance

The review of compliance with the Development Consent (DA 231-10-99) identified four non-compliances and eleven administrative non-compliances.

All non-compliances were deemed to represent a low risk. Details of the reasons for the risk rating are provided in the detailed tables presented in Appendix A and B.

A summary of non-compliances and administrative non-compliances is detailed in Tables 4 and 5 below.

Table 4 Summary of Non-Compliances

Condition	Reason for Non-Compliance	Risk Rating
Condition 3 of Schedule 3	Noise monitoring is not undertaken at the quarry. Holcim advised they were awaiting final approval of the EMS following this audit prior to commencing monitoring.	Low
Condition 10 of Schedule 3	Particulate matter monitoring is not undertaken for the quarry operations. Holcim advised they were awaiting final approval of the EMS following this audit prior to commencing monitoring.	Low
Condition 12 (b) of Schedule 3	See Condition 10	Low
Condition 15 of Schedule 3	Jandra Quarry does not operate a meteorological station on site or have access to one in the nearby vicinity	Low

Table 5 Summary of Administrative Non-Compliances

Condition	Reason for Non-Compliance	Risk Rating
Condition 2 of Schedule 2	Holcim was generally carrying out operations in accordance with the Conditions of Approval and EPL, however non-compliances and administrative non-compliances were identified during the audit	Low
Condition 16 of Schedule 2	Survey Plan was submitted after 31 August 2015	Low
Condition 18 of Schedule 2	Annual quarry production data is provided to DP&E but not the Department of Industry Division of Resources and Energy (DRE)	Low
Condition 9 (d) of Schedule 3	NBMP does not include a Blast Fume Management Protocol.	Low
Condition 13 (a) of Schedule 3	Formal correspondence has not been provided to the tenant in relation to potential health risks as required by Condition 13 (a)	Low
Condition 19 (b) of Schedule 3	The SWMP does not include requirements for the investigation and reporting of exceedance of performance criteria or incidents relating to exceedances.	Low
Condition 25 (b) of Schedule 3	Although a Stage 1 of the BRMP was submitted to DP&E in August 2015, OEH advised that consultation was not requested until December 2015.	Low

Condition	Reason for Non-Compliance	Risk Rating
Condition 36 of Schedule 3	Holcim accepts concrete waste, which it reprocesses and adds to road base material as a recycled product. Holcim advised that during consultation, EPA advised a condition was not required for the EPL for reprocessing the concrete waste. This however does not negate the planning condition requirement and an administrative modification to the Planning Approval is recommended.	Low
Condition 3 (e) of Schedule 5	ACHMP does not identify measures to be undertaken in the event of unpredicted impact on known Aboriginal cultural heritage items	Low
Condition 3 (g) of Schedule 5	SWMP and ACHMP do not include a protocol for managing incidents, complaints, non-compliances and exceedances	Low
Condition 10 of Schedule 5	A summary of dust depositional results are not included on the Jandra Quarry website.	Low

3.3 Compliance with EPL 2796

The review of compliance with EPL 2796 did not identify any non-compliances or administrative non-compliances. The audit identified a high degree of compliance with the conditions of the EPL, with a number of conditions not triggered at the time of the audit.

It was noted during the site interviews that Jandra Quarry accepts concrete waste, which it reprocesses and adds to road base material however the EPL does not explicitly permit the treatment of concrete waste products received from off-site sources. Holcim advised that during consultation with the EPA, the EPA advised an EPL amendment was not required to include the reprocessing of the concrete waste.

It is noted that a general resource recovery exemption under Part 9, Clause 91 and 92 of the *Protection of the Environment Operations (Waste) Regulation 2014* applies to the recovery of aggregate material. Recovered aggregate (including concrete) is exempted from classification as a scheduled activity under Section 49 of the *Protection of the Environment Operations Act 1997*.

It is recommended that Holcim consult with DP&E concerning Condition 36 of Schedule 3 of the Conditions of Approval and seek an administrative modification to permit the reprocessing of concrete waste on site.

Condition A1.2 of EPL 2796 currently restricts Jandra Quarry to producing no more than 250,000 tonnes of quarry products in a calendar year. Modification 5 of DA 231-10-99 permits annual production to 475,000 tonnes in a calendar year.

It is noted that an EPL amendment request was provided to the EPA on 23 October 2015 to reflect the increased annual production approved by Modification 5 of DA 231-10-99. At the time of the audit the EPA has not responded to the request for an EPL amendment.

3.4 Adequacy of any Strategies/Plan and Programs

No material environmental issues were identified during the audit. Holcim advised that no complaints have been received in relation to the operation of the quarry and no significant incidents occurred during the audit period.

A number of recommendations are raised in the audit report as detailed in Section 4.

It was noted during the audit that specific monitoring requirements associated with the project's Environmental Management Strategy (EMS) and associated sub-plans required by Modification 5 have not commenced. Holcim advised that they are awaiting final approval of the EMS by DP&E.

Upon approval of the plans, Holcim advised relevant monitoring would commence.

Table 6 provides a summary of the key monitoring and management practices on site and areas recommended for improvement.

Table 6 Status of key monitoring and management

Environmental aspect	Reference	Implementation	Recommendations
Blasting: overpressure and ground vibration	Noise and Vibration Management Plan (NBMP)	<p>Blast monitoring results are reported in the 2015 Annual Review and are publically available on the Holcim website. No exceedances were recorded during the 2015 reporting period.</p> <p>Correspondence from the DP&E dated 14 March 2016 indicates the Secretary was satisfied the NBMP generally meets the requirements of the Project Approval.</p> <p>In accordance with Condition 9(e) of Schedule 3 of DA 231-10-99, Jandra Quarry provides verbal notification to neighbouring properties prior to undertaking blasting, with a message left and a follow-up call made if unable to be reached.</p> <p>It was noted that, while the NBMP includes a Blast Management Procedure as Appendix A to the NBMP, it does not include a Blast Fume Management Protocol. However, it was noted during site interviews that the site has a Blast Fume Code of Practice, which is available on-site via USAFE.</p>	<p>Recommendation 03: Advise neighbours of blasting via a group email or text message, in addition to a phone call.</p> <p>Recommendation 04: Update the NBMP to include a reference to the Blast Fume Code of Practice (available on site via USAFE), or this be included as an appendix to the NBMP</p>
Noise	NBMP	<p>Noise monitoring was not undertaken at the quarry.</p> <p>Holcim has an agreement in place with the nearest landowner in regard to noise, with the agreement dated 31 January 2015.</p> <p>During the site interview it was noted that quarterly</p>	<p>Recommendation 02: Commence noise monitoring as soon as practicable to enable effective management of exceedances that may occur.</p>

Environmental aspect	Reference	Implementation	Recommendations
		<p>15-minute attended monitoring would commence once final approval of the EMS is provided by DP&E.</p> <p>Without noise monitoring being undertaken there is no means of identifying exceedances and thereby ensuring effective management of operations if an exceedance has occurred.</p>	
Air Quality	Air Quality Management Plan (AQMP)	<p>PM10 monitoring was not undertaken at the quarry. Holcim intent to install a monitor by the end of June 2016</p> <p>During the site interviews it was noted that dust depositional monitoring was undertaken in accordance with the requirements of EPL 2796. Report number 2718 pertaining to 4 March 2016 - 9 March 2016 was sighted during the site visit.</p>	<p>Recommendation 05: Confirm DP&E's approval of proposed PM10 monitoring locations and commence monitoring as soon as practicable to ensure effective management should any exceedance occur.</p> <p>Recommendation 06: Advise DP&E in writing of the installation and location of the PM10 monitor following installation</p>
Cultural Heritage	Aboriginal Cultural Heritage Management Plan (ACHMP)	<p>Section 7.0 of the ACHMP details management measures for known Aboriginal objects/ sites and the procedure for the discovery of unexpected Aboriginal objects (including consultation / engagement with a qualified archaeologist and implementation of the Environmental Incident Classification and Reporting Procedure).</p> <p>During the site interviews, it was noted that the process for excavating previously undisturbed areas is to strip topsoil down to the overburden, and then use the topsoil for bench rehabilitation; with</p>	<p>Recommendation 13: Update the ACHMP to include monitoring of all new surface disturbances on site and include an unexpected finds procedure for Aboriginal objects and submit to DP&E for approval.</p>

Environmental aspect	Reference	Implementation	Recommendations
		the overburden then stripped (average depth being 1.0 – 1.5 metres).	
Water	Soil and Water Management Plan (SWMP)	<p>Review of historical monitoring data indicates discharge monitoring is undertaken.</p> <p>Table 8 of the SWMP refers to documentation which is not currently included in the SWMP, specifically Attachment 4.1H – Environmental Monitoring Worksheet.</p>	<p>Recommendation 09: Update the SWMP to include details of documentation referred to in Table 8 of the SWMP, or include Attachment 4.1H as an Appendix to the SWMP.</p>
		<p>The SWMP includes management and mitigation measures to mitigate adverse surface water impact of the Project. However, no reference is made to the investigation and reporting of exceedance of performance criteria detailed in the plan. In addition, no reference is made to incident reporting (e.g. exceedance of criteria).</p>	<p>Recommendation 10: Update the SWMP to include requirements for the investigation and reporting of exceedances of water quality performance criteria in accordance with Condition 6 of Schedule 5 of DA 213-10-99.</p>
Rehabilitation	Biodiversity and Rehabilitation Management Plan (BRMP)	The 2015 Annual Review notes progressive rehabilitation was undertaken on the southern benches (RL 62 and RL 74) during the 2015 reporting period. As discussed in Section 3.1.1, rehabilitation was sighted during the site inspection; with observations included in Section 3.1.2.	Not applicable.

Note: the recommendation numbering is from the detailed findings provided in Appendix A.

3.5 Auditor's response to matters raised by government agencies

3.5.1 Office of Environment and Heritage

In their email dated 11 May 2016, OEH noted the following:

1. *On 31 March 2016 Holcim & OEH discussed the offset strategies and the possibility of retiring appropriate biodiversity credits from a registered BioBanking site. At present OEH supports the latter approach, though if either one of the proposed methods in the condition (Condition 23) be achieved we would support these.*
2. *With respect to the Biodiversity and Rehabilitation Management Plan (Condition 25), Holcim requested comment in December 2015 (well after the August 2015 deadline in Condition 25) and OEH provided a written response on 10 December 2015 acknowledging consultation. In this correspondence we stated: 'The Office of Environment and Heritage (OEH) encourages the development of such plans to ensure that proponents have determined how they will meet their statutory obligations and designated environmental objectives. However, OEH does not approve or endorse these documents as our role is to set environmental objectives for environmental/conservation management, not to be directly involved in the development of strategies to achieve those objectives. OEH acknowledges Holcim's requirement to consult with relevant government agencies and considers that you have consulted with OEH through providing this document'.*

The BRMP was initially provided to DP&E in a staged submission in August 2016, however the plan was yet to be approved by DP&E.

In a letter to DP&E dated 31 March 2016, Holcim advised a section 88B Covenant was implemented to satisfy the requirements of Condition 23. The implementation of the Biodiversity Offset Strategy commenced on 31 March 2016.

Holcim noted in the letter to DP&E that OEH did not support the creation of the Section 88B Covenant. OEH were in favour of a biobanking agreement, however following a Holcim review of the likely credit price and the desire of Holcim to utilise and conserve their own land, a biobanking agreement was not pursued. It is understood that DP&E approved the creation of the Covenant on 31 March 2016.

3.5.2 Greater Taree City Council

In their email dated 17 May 2016, GTCC noted the following in relation to the completion of the audit:

1. *2 applications for approval to operate an existing OSSM System for the owner Holcim (Australia) Pty Ltd as follows:*

Property 15286 lot 14 DP 7900516 Pacific Hwy Possum Brush(PIN 19477) is the location of Jandra Quarry now in the name of Holcim.

A council officer carried out an OSSM Enforcement inspection in 2004. The inspection revealed that a Domestic Aerated wastewater treatment system is installed to service the Amenities block. The system has and continues to be serviced by R & G Dobbs Wastewater Treatment and Service repairs. Council has not issued an Approval to operate the system. It is therefore recommended that an Audit review is carried out on the system by a suitably qualified wastewater Consultant to determine that the existing system is adequately designed and posing no risk to the environment and public health.

A copy of the report should be submitted to Council for review along with an application under section 68 of the Local Government Act 1993 for Approval to operate the Onsite Sewage Management System. Property 15312 lot 15 DP 790056 Pacific Hwy Possum Brush (PIN19451) is the adjoining property also owned by Holcim. No Council inspection on the existing OSSM has been carried out. It is also recommended that an audit review of the existing system is carried out by a suitably qualified wastewater consultant. A copy of the report shall be submitted to Council along with and an application under section 68 of the Local Government Act 1993 for an approval to operate the OSSM System.

It was noted during the audit that the approval of the OSSM systems preceded Holcim's acquisition of the Jandra Quarry. As detailed in Recommendation 11, it is recommended that Holcim liaise with Council to resolve the approval of the OSSM systems on site.

2. *Review of the Biodiversity & Rehabilitation Management Plan, comments and one recommendation provided to Arnna, which noted the fauna protection methods during tree felling were outdated and could be updated. See attached comments with recommendation, which was attached to Arnna's email to Ian Shenton.*

Ian Shenton replied to Arnna "Thanks for the response Arnna. The proposed inspection methods look interesting (and effective!). I'll have a chat to our Quarry Manager about the feasibility of an activity like this. Keep you posted. Regards, Ian"

Since then ...

No further information has been provided other than letter to Arnna on 7/5/16.

No updated/amended Biodiversity & Rehabilitation Management Plan has been received for review and comment.

As detailed in Recommendation 13, it is recommended that Holcim confirm with Council that their comments on the BRMP have been incorporated and provide Council with an updated copy of the DP&E approved BRMP.

3.5.3 Department of Primary Industries – Water

In their letter dated 11 May 2016, DPI Water noted the following in relation to the completion of the audit:

1. *Do the relevant management plans adequately describe the water licensing requirements under the Water Management Act 2000/Water Act 1912, and compliance with these requirements?*

A controlled activity approval is not required for the Jandra Quarry.

2. *Are adequate records kept to enable determination of the volume and source of surface and groundwater taken?*

During site interviews, it was noted that a Holcim directive in 2015 required each site to understand the requirement for a site water balance, in regard to withdrawal, discharge and consumption as part of Soil and Water Management Plan (SWMP) preparation. This required the site to have a total withdrawal number, which comes from the main dam. Water management on site is undertaken via recycled process water which comes from the wash plant, which is then pumped to one of two settling ponds (one being active and the other dewatering at any one time), and then to the main dam where it can be pumped back to the wash plant for use as necessary. Groundwater and surface water extraction is not required for the site operations. All process water to date is sourced from rainwater and recycled through the on-site dams.

3. *Is the operation capturing and/or harvesting any clean water?*

It was noted during the site interviews that Jandra Quarry does not use town water, instead harvesting rainfall from the in-pit pond (13 ML capacity) with a network of connected syphon hoses, and the main dam (10 ML capacity). This allows for 23 ML of available water. The site also has a rainwater tank off the shed with a 5,000 litre capacity, which is used for the ablutions and main office.

An additional dam is located at the north of the site access road but is not used for any site purposes.

4. *Has the proponent calculated its maximum harvestable right under the Water Management Act 2000?*

The Main Dam and In-pit Dam provide for a maximum storage capacity of 23 ML as detailed in the SWMP. The SWMP indicates that the maximum harvestable right has been calculated for the site operations although details of this were not sighted during the audit and a review of harvestable rights was not part of the scope of this audit.

DPI Water noted in correspondence dated 21 September 2015 that the maximum sediment dam requirements detailed in the Environmental Assessment were 20.3ML providing excess capacity of 2.7ML which is to be included in the water storage calculation for Harvestable Rights. The dam on the north of the access road also provides a 4 ML capacity. DPI noted in its 21 September 2015 correspondence that the clean water dams detailed in the SWMP are within the quarry's harvestable right and as such no additional licences are required.

5. *Is the capture of water in excess of the harvestable right?*

Holcim advised that they monitor storage capacity within the dams and move water between the dams depending on process requirements. The dams observed during the site inspection were not at maximum capacity. There was no evidence to suggest that water captured on site is in excess of the harvestable right.

6. *Do any exemptions under the Water Management (General) Regulation 2011 or Harvestable Rights Order (gazetted 31 March 2006) apply to the capture of water?*

DPI Water indicated in correspondence dated 21 September 2015 that the clean water dams capacity for the quarry is within the properties harvestable rights and as such, additional licences or exemptions are not required.

7. *If necessary, does the proponent hold water access licenses in the correct water sources under the relevant water sharing plan (for the take of surface water or alluvial groundwater), or licences under part 5 of the Water Act 1912 (for the take of groundwater from non-alluvial aquifers), and do they hold sufficient quantity of entitlement under these licenses?*

As detailed for Item 6, DPI Water indicated no additional licences are required.

3.5.4 Environment Protection Authority

No comments were received from EPA for the audit.

4. Recommendations

The following recommendations are based on the findings of the audit.

Table 7 Recommendations

Approval / EPL condition	Recommendation No.	Recommendation
Condition 18 of Schedule 2	1	Ensure annual quarry production data is provided to DRE using the standard form.
Condition 1 of Schedule 3	2	Commence monitoring as soon as practicable following approval of the EMS and sub-plans to ensure effective management should any exceedance occur.
Condition 8 (b) of Schedule 3	3	Advise neighbours of blasting via a group email, in addition to a phone call.
Condition 9 (d) of Schedule 3	4	Update the NBMP to include a reference to the Blast Fume Code of Practice (available on site via USAFE), or this be included as an appendix to the NBMP.
Condition 10 of Schedule 3	5	Confirm DP&E's approval of proposed PM10 monitoring locations and commence monitoring as soon as practicable to ensure effective management should any exceedance occur.
	6	Advise DP&E in writing of the installation and location of the PM10 monitor following installation
Condition 13(a) of Schedule 3	7	Notify the tenant of potential health risks associated with exceedances of particulate matter criteria in accordance with Condition 13(a).
Condition 15 of Schedule 3	8	Following installation of the meteorological station, provide written notification to DP&E.
Condition 19 of Schedule 3	9	Update the SWMP to include details of documentation referred to in Table 8 of the SWMP, or include Attachment 4.1H as an Appendix to the SWMP.
	10	Update the SWMP to include requirements for the investigation and reporting of exceedances of water quality performance criteria in accordance with Condition 6 of Schedule 5 of DA 213-10-99.
Condition 20 of Schedule 3	11	Liaise with GTCC to resolve the issue of on-site OSSM systems.
Condition 25 (b) of Schedule 3	12	Provide Council with an updated copy of the DP&E approved BRMP.

Condition 29 (c) of Schedule 3	13	Update the ACHMP to include monitoring of all new surface disturbances on site and include an unexpected finds procedure for unidentified Aboriginal objects and submit to DP&E for approval.
Condition 36 of Schedule 3	14	Consult with DP&E and seek an administrative modification to permit the reprocessing of concrete waste on site.
Condition 3 (g) of Schedule 5	15	Update the SWMP and ACHMP to include a procedure for addressing non-compliances.
Condition 10 of Schedule 5	16	Upload depositional dust monitoring results and the DP&E approved management plans (when approved) to the Holcim website
Condition P1.2 of EPL	17	Install a sign at the licenced discharge point from the Main Dam to notify that this location is the discharge point.
Condition M1.3 of EPL	18	Prepare a field record sheet for environmental monitoring rather than use the chain of custody and include the field sheet as an Appendix to the SWMP.

Appendices

Appendix A – Compliance with Conditions of Approval



Appendix A

Table 1 Compliance with the Development Approval requirements

Number	Condition	Compliance	Evidence	Comments
	SCHEDULE 2 - ADMINISTRATIVE CONTROLS			
	<i>OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT</i>			
1	In addition to meeting the specific criteria in this consent, the Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.	Compliant	Site observations	Holcim has demonstrated a high degree of compliance against the conditions of this development consent, as described below. There was no evidence to suggest that Holcim has not implemented all reasonable and feasible measures to prevent and/or minimise material harm to the environment as a result of the project. The controls specified in the Operational Environmental Management Plans and associated sub-plans were implemented and effective. At the time of the audit, production has not increased to the production capacity approved by Modification 5.
	<i>TERMS OF CONSENT</i>			
2	The Applicant shall carry out the development generally in accordance with the a) previous approvals; b) EA (Mod 5); and c) conditions of this consent. <i>Note: The general layout and stages of the development are shown on the plans in Appendix 1.</i>	Administrative Non-Compliance	Conditions of Consent and EA sighted.	Holcim has demonstrated a high degree of compliance against the conditions of this development consent, as described below. Holcim was generally carrying out operations in accordance with previous approvals, the EA (Modification 5) and the Conditions of Consent, however a number of non-compliances and administrative non-compliances are detailed in the audit as detailed below. These non-compliances were considered minor in nature as described in this table. At the time of the audit, production had not increased to the production capacity approved by Modification 5.
3	If there is any inconsistency between the documents identified in condition 2, the more recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail over all other documents to the extent of any inconsistency.	Not Triggered	N/A	Not applicable.
4	The Applicant shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of: a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent; b) any reviews, reports or audits, commissioned by the Department regarding compliance with this consent; and c) the implementation of any actions or measures contained in these documents.	Compliant	Letter of submission (31 August 2015), DP&E response on management plans including Holcim's response.	A letter of submission of management plans and the EMS to DP&E was sighted (dated 31 August 2015). Further direction from DP&E included a word document detailing requested updates, this document was sighted and included Holcim's response to the requested changes. DP&E provided a letter dated 14 March 2016, indicating general satisfaction with the EMS, NBMP, AQMP and SWMP; requesting minor edits to the EMS, SWMP and BRMP.
	<i>LIMITS OF CONSENT</i>			

Number	Condition	Compliance	Evidence	Comments
5	The Applicant may carry out quarrying operations on the site until 31 March 2045. <i>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.</i>	Not Triggered	N/A	Not applicable.
6	The Applicant shall not carry out quarrying operations below a level of RL 20 m AHD.	Compliant	Site observations, development plan	During the site visit/interviews, it was stated that a flyover is completed twice a year, providing the depth of the quarry floor and bench heights. If it appears that there are any issues, a ground surveyor is engaged to have a look. The site is currently at RL 50, with markers sighted during the site visit. It was also noted that the development plan for the quarry is staged in 50,000 tonne segments and is currently at Stage 5 of 14. The development plan was sighted, dated 14 October 2014 and prepared by Australian Mine and Development Pty Ltd.
7	The Applicant shall not extract more than 16.5 million tonnes of quarry products from the site under this consent.	Compliant	Documentation – Annual Review and Project Environmental Assessment Site interviews	Review of the <i>Jandra Quarry Intensification in Production Environmental Assessment</i> (Element Environment, 2014) indicates that at the time of exhibition (August 2014) Holcim had extracted and processed approximately 3 Mt, with an additional 232,028 produced in the 2015 Reporting Period. To track extraction and production Jandra Quarry makes use of the SAP database, Holcim's national database for tracking production and stock, maintenance and inventory. Production is tracked on a monthly (as part of business review) and annual basis. Current production to date is around 3.3 – 3.4 million tonnes (Mt).
8	The Applicant shall not extract more than 490,000 tonnes of quarry products from the site in any calendar year	Compliant	Documentation – Annual Review Site interviews	The production volume for the 2015 Reporting Period was 232,028 tonnes. To track extraction and production Jandra Quarry makes use of the SAP database, Holcim's national database for tracking production and stock, maintenance and inventory. Production is tracked on a monthly (as part of business review) and annual basis. It was noted during site interviews that the plant is only capable of producing 350,000 tonnes per year and a mobile crusher would be required to expand extraction and production volume.
9	The Applicant shall not transport more than 475,000 tonnes of quarry products from the site in any calendar year.	Compliant	Documentation – Annual Review Site interviews Quarry runsheet	The production volume for the 2015 Reporting Period was 232,028 tonnes. To track extraction and production Jandra Quarry makes use of the SAP database, Holcim's national database for tracking production and stock, maintenance and inventory. Production is tracked on a monthly (as part of business review) and annual basis. Transportation of material is managed through a system called Command that connects to SAP, providing a report at the end of each day detailing the total number of truck movements. The daily quarry runsheet was sighted during the site visit, detailing the locations of where deliveries are being made.
	HOURS OF OPERATION			

Number	Condition	Compliance	Evidence	Comments																
10	<p>The Applicant shall comply with the operating hours in Table 1.</p> <table border="1"> <thead> <tr> <th>Day</th> <th>Extraction and processing operations</th> <th>Transport operations</th> <th>Asphalt Plant and associated transport (on a campaign basis)</th> </tr> </thead> <tbody> <tr> <td>Monday – Friday</td> <td>6 am to 10 pm</td> <td>6 am to 10 pm</td> <td>24 hours a day</td> </tr> <tr> <td>Saturday</td> <td>6 to 6 pm</td> <td>6 am to 10 pm</td> <td>24 hours a day</td> </tr> <tr> <td>Sundays and Public Holidays</td> <td>None</td> <td>None</td> <td>24 hours a day</td> </tr> </tbody> </table> <p>The following activities may be carried out on the site outside the hours specified in Table 1</p> <p>a) return of trucks to the site prior to 12 midnight Monday to Saturday;</p> <p>b) delivery or dispatch of materials as requested by Police, Fire Brigade or other similar authorities; and</p> <p>c) emergency work to avoid the loss of lives, property and/or to prevent environmental harm.</p> <p>In circumstances outlined in (b) and (c), the Applicant shall notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.</p>	Day	Extraction and processing operations	Transport operations	Asphalt Plant and associated transport (on a campaign basis)	Monday – Friday	6 am to 10 pm	6 am to 10 pm	24 hours a day	Saturday	6 to 6 pm	6 am to 10 pm	24 hours a day	Sundays and Public Holidays	None	None	24 hours a day	Compliant	Documentation – Annual Review Site interviews	<p>Review of 2015 Annual Review indicates no activities were undertaken outside of approved operating hours. Operating hours are addressed in Table 2 of the EMS.</p> <p>It was noted during the site interview that extraction and processing do not commence until after 7.00 am, with toolbox talks undertaken prior. It was also noted that the mobile asphalt plant was decommissioned this year and is no longer on-site. It was only used for the Bulahdelah Bypass which is now complete.</p>
Day	Extraction and processing operations	Transport operations	Asphalt Plant and associated transport (on a campaign basis)																	
Monday – Friday	6 am to 10 pm	6 am to 10 pm	24 hours a day																	
Saturday	6 to 6 pm	6 am to 10 pm	24 hours a day																	
Sundays and Public Holidays	None	None	24 hours a day																	
	<i>STRUCTURAL ADEQUACY</i>																			
11	The Applicant shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.	Not Triggered	N/A	Not applicable. No new buildings since DA.																
	<i>DEMOLITION</i>																			
12	The Applicant shall ensure that all demolition work is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version	Not Triggered	N/A	Not applicable. No demolition since DA.																
	<i>PROTECTION OF PUBLIC INFRASTRUCTURE</i>																			
13	<p>The Applicant shall:</p> <p>(a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and</p> <p>(b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.</p> <p>Note: This condition does not apply to damage to roads caused as a result of general road usage.</p>	Compliant	Site interviews. Site inspection	Holcim advised that there has not been any damage to public infrastructure or utilities to date associated with the quarry operations.																
	<i>OPERATION OF PLANT AND EQUIPMENT</i>																			

Number	Condition	Compliance	Evidence	Comments
14	The Applicant shall ensure that all the plant and equipment used at the site is maintained and operated in a proper and efficient manner.	Compliant	Maintenance Plan Plant maintenance record sample Site interviews Pre-start checklists	<p>During the site interviews, it was stated that daily, weekly and monthly inspections of plant and equipment are undertaken with checklists for each. A maintenance plan was sighted in the main office detailing "who, what, when and where". From the monthly inspections, tasks are allocated and necessary parts ordered. The maintenance day a form is signed off by the Quarry Manager and the Site Supervisor and goes into a spreadsheet to track history.</p> <p>A plant maintenance record was sighted during the site visit.</p> <p>It was noted during site interviews that hours for equipment are tracked on a weekly basis for annual servicing requirements, which are completed on-site by a qualified diesel mechanic on-site. Further, it was noted to minimise the risk of hydraulic hose failures, there is a maintenance program for hydraulic hoses, with inspections completed on a weekly basis.</p> <p>During the site visit, copy of pre-start checklists for machines were sighted which detailed the start date, operating hours, what machine it was, and provided a checklist of requirements and a comments section from the operator.</p> <p>In regard to training, it was noted that initial inductions include a level 1 environmental induction. Environmental awareness/training was also noted to be undertaken during toolbox talks, spill kit response training sessions.</p> <p>The Quarry Manager noted the PIRMP is tested each year. The Annual Return for 1 May 2014 to 30 April 2015 indicated the PIRMP was tested in September 2014.</p>
	<i>STAGED SUBMISSION OF ANY STRATEGY, PLAN OR PROGRAM</i>			
15	<p>With the approval of the Secretary, the Applicant may:</p> <p>(a) submit any strategy, plan or program required by this consent on a progressive basis; and</p> <p>(b) combine any strategy, plan or program required by this consent with any similar strategy, plan or program required for the development.</p> <p>To ensure these strategies, plans or programs are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval.</p> <p>Notes:</p> <ul style="list-style-type: none"> • While any strategy, plan or program may be submitted on a progressive basis, the Applicant will need to 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. 	Compliant	Documentation – Letter of submission	All management plans required by the Project Approval were submitted on or before the due date for submission.
	<i>IDENTIFICATION OF APPROVED LIMITS OF EXTRACTION</i>			

Number	Condition	Compliance	Evidence	Comments
16	Prior to 31 August 2015, the Applicant shall: (a) engage a registered surveyor to mark out the boundaries of the approved area of extraction and the boundaries of the approved infrastructure area; and (b) submit a survey plan of these boundaries to the Secretary.	Administrative Non-Compliance	Documentation – Annual Review Site interviews	The 2015 Annual Review notes that a survey of the extraction limit was completed in 2010, with a survey plan from registered surveyors McGlashan & Crisp provided. It was noted that the 2015 modification did not change the extraction limit. The survey was submitted to DP&E as part of the 2015 Annual Review, outside the 31 August 2015 due date. During the site interviews, it was noted that no issues were raised by DP&E and that the plan had previously been supplied to DP&E.
17	The Applicant shall ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify the location of these boundaries and that quarrying operations are contained within the approved areas.	Compliant	Site interviews Site inspection	During the site interview it was noted that Jandra Quarry is marked out to the Holcim boundary marking standard (required for every site). Markers indicating the site boundary were observed during the site visit.
	<i>PRODUCTION DATA</i>			
18	The Applicant shall provide annual quarry production data to DRE using the standard form for that purpose; and report these data in the Annual Review (see condition 4 of Schedule 5).	Administrative Non-Compliance	Site interviews	It was noted during the site interview that, while data is reported in Annual Review, the production data has not been reported to Department of Industry Division of Resources and Energy (DRE) and that this would be followed-up. Recommendation 01: Ensure annual quarry production data is provided to DRE using the standard form.
	SCHEDULE 3 – ENVIRONMENTAL PERFORMANCE CONDITIONS			
	<i>NOISE – Noise Criteria</i>			

Number	Condition	Compliance	Evidence	Comments																																				
1	<p>The Applicant shall ensure that the noise generated by the development does not exceed the criteria in Table 2 or Table 3 at any residence on privately-owned land.</p> <p>Table 2 – Noise criteria – quarrying operations only dB(A)</p> <table border="1"> <thead> <tr> <th>Location</th> <th>6 am – 10 pm (L_{Aeq(15 min)})</th> </tr> </thead> <tbody> <tr> <td>R1</td> <td>46</td> </tr> <tr> <td>R5</td> <td>40</td> </tr> <tr> <td>R2, R4, R6</td> <td>36</td> </tr> <tr> <td>R7</td> <td>35</td> </tr> </tbody> </table> <p>Table 3 – Noise criteria – quarrying operations & asphalt plant production combined dB(A)</p> <table border="1"> <thead> <tr> <th rowspan="2">Location</th> <th rowspan="2">6 am – 10 pm (L_{Aeq(15 min)})</th> <th colspan="2">10 pm – 6 am</th> </tr> <tr> <th>(L_{Aeq(15 min)})</th> <th>(L_{A1(1 min)})</th> </tr> </thead> <tbody> <tr> <td>R1</td> <td>48</td> <td>46</td> <td>51</td> </tr> <tr> <td>R5</td> <td>41</td> <td>39</td> <td>51</td> </tr> <tr> <td>R4</td> <td>40</td> <td>39</td> <td>51</td> </tr> <tr> <td>R2, R6</td> <td>40</td> <td>35</td> <td>48</td> </tr> <tr> <td>R7</td> <td>36</td> <td>35</td> <td>48</td> </tr> </tbody> </table> <p>Notes:</p> <ul style="list-style-type: none"> Receiver locations are shown on the figure in Appendix 2. Condition 10 of Schedule 2 prohibits quarrying operations during the hours 10 pm – 6 am. <p>Noise generated by the development is to be measured in accordance with the relevant requirements of the NSW Industrial Noise Policy (as may be updated from time-to-time). Appendix 3 details the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.</p> <p>However, these criteria do not apply if the Applicant has a negotiated agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.</p>	Location	6 am – 10 pm (L _{Aeq(15 min)})	R1	46	R5	40	R2, R4, R6	36	R7	35	Location	6 am – 10 pm (L _{Aeq(15 min)})	10 pm – 6 am		(L _{Aeq(15 min)})	(L _{A1(1 min)})	R1	48	46	51	R5	41	39	51	R4	40	39	51	R2, R6	40	35	48	R7	36	35	48	Not verified	Documentation – Annual Review, Signed Noise Agreement	<p>Holcim advised that noise monitoring is not currently undertaken at the quarry as they are awaiting final approval of the EMS following this audit.</p> <p>It was noted during the site inspection that the site has an agreement with the nearest landowner in regard to noise, with the agreement dated 31 January 2015.</p> <p>Recommendation 02: Commence noise monitoring as soon as practicable to enable effective management of exceedances that may occur.</p>
Location	6 am – 10 pm (L _{Aeq(15 min)})																																							
R1	46																																							
R5	40																																							
R2, R4, R6	36																																							
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R7	36	35	48																																					
	<i>NOISE – Additional Noise Mitigation Upon Request</i>																																							
2	<p>Upon receiving a written request from the owner of any residence on property R1 the Applicant shall implement additional noise mitigation measures (such as double glazing, insulation, or air conditioning) at the residence in consultation with the owner. These measures must be reasonable and feasible and directed towards reducing the noise impacts of the project on the residence.</p> <p>If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.</p> <p>However, the obligation to implement noise mitigation measures does not apply if the Applicant has a negotiated agreement with the owner/s of the relevant residence or land that sets aside noise mitigation measures under the terms of this consent, and the Applicant has advised the Department in writing of the terms of this agreement.</p>	Not Triggered	N/A	Not applicable, no request has been received.																																				

Number	Condition	Compliance	Evidence	Comments
	<i>NOISE – Operating Conditions</i>			
3	<p>The Applicant shall:</p> <p>(a) implement best practice management to minimise the construction, operational and transportation noise of the development;</p> <p>(b) minimise the noise impacts of the development during meteorological conditions when the noise limits in this consent do not apply (see Appendix 3);</p> <p>(c) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent; and</p> <p>(d) regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent, to the satisfaction of the Secretary.</p>	Non-Compliant (Low Risk)	Documentation – NBMP Site interviews	<p>Holcim have not complied with this condition as noise monitoring is not undertaken for the quarry operations. Holcim advised they were awaiting final approval of the EMS following this audit prior to commencing monitoring.</p> <p>The risk level associated with this non-compliance is considered low for the following reasons:</p> <ul style="list-style-type: none"> There is one sensitive receiver located within close proximity to the quarry operations and the receiver has signed a noise agreement relating to the quarry operations. Holcim advised that there have been no noise complaints associated with the operations. <p>It is noted however that:</p> <ul style="list-style-type: none"> Noise management and mitigation measures are detailed in the NBMP. Correspondence from the DP&E dated 14 March 2016 indicates the Secretary was satisfied the NBMP generally meets the requirements of the Project Approval. The Quarry Manager advised that noise impacts are reviewed during adverse meteorological conditions <p>It was noted during the site interviews that:</p> <ul style="list-style-type: none"> all machines run with residential mufflers. Meteorological conditions are reviewed prior to blasting Boundary ‘audible noise’ checks are undertaken to check if noise is audible Holcim has received no noise complaints to date
4	<p>The Applicant shall prepare and implement a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be submitted to the Secretary for approval by 31 August 2015;</p>	Compliant	Documentation – Letter of Submission	<p>Sighted letter of submission to the Secretary of DP&E dated 31 August 2015.</p> <p>Correspondence from the DP&E dated 14 March 2016 indicates the Secretary was satisfied the NBMP generally meets the requirements of the Project Approval.</p>
	<p>(b) describe the measures that would be implemented to ensure:</p> <ul style="list-style-type: none"> compliance with the noise criteria in this consent; best management noise minimisation practice is employed on site; noise emissions from trucks on the site after 10 pm do not annoy neighbouring residents; and the noise impacts of the development are minimised during any meteorological conditions when the noise limits in this consent do not apply; and 	Compliant	Documentation – NBMP	Noise control measures were detailed in Section 7.0 of the NBMP.

Number	Condition	Compliance	Evidence	Comments											
	<p>(c) detail a monitoring program that will be put in place to measure noise from the development against the noise criteria in Table 2 and 3, and which:</p> <ul style="list-style-type: none"> includes quarterly attended monitoring for the first two years of each of the three Stages of the development, as shown in the three figures in Appendix 1 (this monitoring must take place within a 24 hour asphalt campaign, if any such campaign is conducted during the quarter), and thereafter annually unless the Secretary agrees otherwise; and evaluates and reports on the effectiveness of the noise management system on site. 	Compliant	Documentation – NBMP	Noise monitoring program was detailed in Section 8.1.1 of the NBMP.											
	<i>BLASTING – Blasting Impact Assessment Criteria</i>														
5	<p>The Applicant shall ensure that blasting on site does not cause any exceedance of the criteria in Table 4.</p> <p>Table 4: Blasting criteria</p> <table border="1"> <thead> <tr> <th>Location</th> <th>Airblast overpressure (dB(Lin Peak))</th> <th>Ground vibration (mm/s)</th> <th>Allowable exceedance</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Any residence on privately owned land, or any public infrastructure</td> <td>120</td> <td>10</td> <td>0%</td> </tr> <tr> <td>115</td> <td>5</td> <td>5% of the total number of blasts over a period of 12 months</td> </tr> </tbody> </table> <p>However, these criteria do not apply if the Applicant has a written agreement with the relevant owner to exceed the limits in Table 4, and the Applicant has advised the Department in writing of the terms of this agreement.</p>	Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance	Any residence on privately owned land, or any public infrastructure	120	10	0%	115	5	5% of the total number of blasts over a period of 12 months	Compliant	<p>Documentation – Monitoring Data.</p> <p>Site interviews.</p>	<p>Blast monitoring results were reported in the 2015 Annual Review and are publically available on the Holcim website (http://www.holcim.com.au/sustainability/environment/pollution-monitoring-data.html). No exceedances were recorded during the 2015 reporting period.</p> <p>It was noted during the site interviews that the blast monitoring location was at the nearest resident. Historical monitoring results indicate there will be no issue in relation to exceedances from blasting.</p>
Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance												
Any residence on privately owned land, or any public infrastructure	120	10	0%												
	115	5	5% of the total number of blasts over a period of 12 months												
	<i>BLASTING – Blasting Hours</i>														
6	<p>The Applicant shall only carry out blasting on site between 9 am and 5 pm Monday to Friday and 9 am to 3 pm Saturday. No blasting is allowed on Sundays or public holidays, or at any other time without the written approval of the Secretary</p>	Compliant	<p>Site interviews.</p> <p>Documentation – Daily blasting checklist, monitoring data.</p>	<p>It was noted during the site interview that blasting was in compliance with this condition, with review of monitoring records supporting this.</p> <p>Sighted daily blasting checklist detailing: time of blast, day, shotfirer, shot number, weather conditions and checklist for shotfirer to sign off on, space for comments by shotfirer, details shotfirer's licence number and signed off by the Quarry Manager.</p> <p>It was noted during the site interview that the shotfirer brings equipment to site when blasting and no explosives are stored on site.</p>											
	<i>BLASTING – Blasting Frequency</i>														
7	<p>The Applicant may carry out a maximum of 2 blasts per month on site. This condition does not apply to blasts required to ensure the safety of the quarry or workers on site.</p> <p><i>Note: For the purposes of this condition a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the quarry.</i></p>	Compliant	Documentation – Monitoring Data	<p>Review of blast monitoring results on the Holcim website (http://www.holcim.com.au/sustainability/environment/pollution-monitoring-data.html) indicates compliance with this condition.</p>											
	<i>BLASTING – Operating Conditions</i>														
8	The Applicant shall:														

Number	Condition	Compliance	Evidence	Comments
	(a) implement best management practice to: <ul style="list-style-type: none"> protect the safety of people and livestock in the areas surrounding blasting operations, protect public or private infrastructure/property in the surrounding area from damage from blasting operations; protect the Pacific Highway from flyrock from blasting operations; and minimise the dust and fume emissions of any blasting; 	Compliant	Documentation – NBMP	Controls to minimise impacts of blasting were detailed in Section 7.0 and Appendix A of the NBMP. Holcim advised that there have been no complaints with regard to blasting. This could not be confirmed by site observations as no blasting was being undertaken at the time of the audit.
	(b) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site; and	Compliant	Documentation – NBMP Site interviews	The Blast Management Procedure (Appendix A of the NBMP) includes the requirement that, prior to loading a shot, verbal notification will be given to neighbours advising them of the approximate time of the blast with Appendix 4 of the Blast Management Procedure providing their contact details. During the site interviews it was noted that, should a neighbour be unable to be contacted, a message is left and a follow-up call made. Recommendation 03: Advise neighbours of blasting via a group email or text message, in addition to a phone call.
	(c) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent,	Compliant	Documentation – NBMP	Monitoring is undertaken in accordance with the Blast Management Procedure in the NBMP. Blast monitoring results were reported in the 2015 Annual Review and are publically available on the Holcim website (http://www.holcim.com.au/sustainability/environment/pollution-monitoring-data.html). No exceedances were recorded during the 2015 reporting period.
	to the satisfaction of the Secretary.	Compliant	Documentation – Letter from DP&E	Correspondence from the DP&E dated 14 March 2016 indicates the Secretary was satisfied the NBMP generally meets the requirements of the Project Approval.
	<i>BLASTING – Blast Management Plan</i>			
9	The Applicant shall prepare and implement a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must:	Compliant	Documentation – Letter from DP&E	Correspondence from the DP&E dated 14 March 2016 indicates the Secretary was satisfied the NBMP generally meets the requirements of the Project Approval.
	(a) be submitted to the Secretary for approval by 31 August 2015;	Compliant	Documentation – Letter of Submission	Sighted letter of submission to the Secretary of DP&E dated 31 August 2015.
	(b) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent;	Compliant	Documentation – NBMP	Blast control measures were detailed in Section 7 of the NBMP.
	(c) include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this consent;	Compliant	Documentation – NBMP	Blast monitoring program was detailed on Section 8.1.2 of NBMP.
	(d) include a blast fume management protocol to demonstrate how emissions will be minimised including risk management strategies if blast fumes are generated;	Administrative Non-Compliance	Documentation – NBMP, Blast Fume Code of Practice Site interviews	While the NBMP includes a Blast Management Procedure as Appendix A to the NBMP, it does not include a Blast Fume Management Protocol. However, it was noted during site interviews that the site has a Blast Fume Code of Practice which is available on-site via USAFE. The blast fume code of practice was sighted during the audit Recommendation 04: Update the NBMP to include a reference to the Blast Fume Code of Practice (available on site via USAFE), or this be included as an appendix to the NBMP.

Number	Condition	Compliance	Evidence	Comments																							
	(e) include public notification procedures on the blasting schedule; and	Compliant	Documentation – NBMP	The Blast Management Procedure (Appendix A of the NBMP) includes the requirement that, prior to loading a shot, verbal notification will be given to neighbours advising them of the approximate time of the blast with Appendix 4 of the Blast Management Procedure providing their contact details. During the site interviews it was noted that, should a neighbour be unable to be contact, a message is left and a follow-up call made. Refer to Recommendation 03.																							
	(f) include a protocol for investigating and responding to complaints.	Compliant	Documentation – NBMP	Section 8.4 of the NBMP.																							
	AIR QUALITY – Air Quality Impact Assessment Criteria																										
10	<p>The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables 5, 6 and 7 at any residence on privately-owned land.</p> <p>Table 5: Long-term impact assessment criteria for particulate matter</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>^dCriterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) Matter</td> <td>Annual</td> <td>^a 90 µg/m³</td> </tr> <tr> <td>Particulate Matter < 10µm (PM₁₀)</td> <td>Annual</td> <td>^a 30 µg/m³</td> </tr> </tbody> </table> <p>Table 6: Short-term impact assessment criteria for particulate matter</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>^dCriterion</th> </tr> </thead> <tbody> <tr> <td>Particulate Matter < 10µm (PM₁₀)</td> <td>24 hour</td> <td>^a 50 µg/m³</td> </tr> </tbody> </table> <p>Table 7: Long-term impact assessment criteria for deposited dust</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>Maximum increase in deposited dust level</th> <th>Maximum total deposited dust level</th> </tr> </thead> <tbody> <tr> <td>^cDeposited dust</td> <td>Annual</td> <td>^b 2 gm/m²/month</td> <td>^a 4 gm/m²/month</td> </tr> </tbody> </table> <p>Notes for Tables 5 to 7</p> <p>a. Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources);</p> <p>b incremental impact (i.e. incremental increase in concentrations due to the development on its own);</p> <p>c. Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580 10 1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and</p> <p>d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog fire incidents, illegal activities or any other activity agreed to by the Secretary in consultation with the EPA</p>	Pollutant	Averaging Period	^d Criterion	Total suspended particulate (TSP) Matter	Annual	^a 90 µg/m ³	Particulate Matter < 10µm (PM ₁₀)	Annual	^a 30 µg/m ³	Pollutant	Averaging Period	^d Criterion	Particulate Matter < 10µm (PM ₁₀)	24 hour	^a 50 µg/m ³	Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level	^c Deposited dust	Annual	^b 2 gm/m ² /month	^a 4 gm/m ² /month	Non-Compliant (Low Risk)	Documentation- AQMP and Annual Review, monthly boundary check (19 April 2016)	<p>Holcim have not complied with this condition as particulate matter monitoring is not undertaken for the quarry operations. Holcim advised they were awaiting final approval of the EMS following this audit prior to commencing monitoring.</p> <p>The risk level associated with this non-compliance is considered low for the following reasons:</p> <ul style="list-style-type: none"> • There is only one sensitive receiver located within close proximity to the quarry operations. • Depositional dust monitoring is undertaken and is within the assessment criteria. • Holcim advised that a PM10 monitor was planned to be installed in the next month (June 2016). • Holcim advised that there have been no air quality complaints associated with the operations. <p>Holcim advised that :</p> <ul style="list-style-type: none"> • boundary checks were undertaken on a monthly basis to verify if dust is visible from site. The monthly boundary check for April, dated 19 April 2016, was sighted during the site visit. • VGT is contracted to undertake dust depositional gauge monitoring and provide data monthly; with a review completed by the Quarry Manager. <p>Recommendation 05: Confirm DP&E's approval of proposed PM10 monitoring locations and commence monitoring as soon as practicable to ensure effective management should any exceedance occur.</p> <p>Recommendation 06: Advise DP&E in writing of the installation and location of the PM10 monitor following installation</p>
Pollutant	Averaging Period	^d Criterion																									
Total suspended particulate (TSP) Matter	Annual	^a 90 µg/m ³																									
Particulate Matter < 10µm (PM ₁₀)	Annual	^a 30 µg/m ³																									
Pollutant	Averaging Period	^d Criterion																									
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Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level																								
^c Deposited dust	Annual	^b 2 gm/m ² /month	^a 4 gm/m ² /month																								
	AIR QUALITY - Odour																										

Number	Condition	Compliance	Evidence	Comments
11	The Applicant shall not cause or permit the emission of offensive odour beyond the boundaries of the site.	Compliant	Documentation- AQMP and Annual Review	The 2015 Annual Review did not identify any odour related issues or complaints for the reporting period. Section 7.0 of the Air Quality Management Plan (AQMP) includes monitoring and mitigation measures in regard to odour.
	AIR QUALITY – Operating Conditions			
12	The Applicant shall: (a) implement best practice management to minimise the odour and dust emissions of the development;	Compliant	Documentation- AQMP	Section 7.0 of the AQMP.
	(b) carry out regular air quality monitoring to determine whether the development is complying with the relevant conditions of this consent;	Non-compliant (Low Risk)	Documentation- AQMP, Annual Review, Dust Deposition monitoring data Site interviews	Refer to Condition 10.
	(c) regularly assess air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this consent;	Compliant	Documentation- AQMP and Annual Review Site interviews	Air quality monitoring data is currently limited to data from dust depositional gauges. The data is reviewed by VGT who undertake the monitoring and the Quarry Manager. Holcim advised that there have been no exceedances of the air quality criteria for dust to date. The Quarry Manager advised that during high wind days dust management measures including wetting down rock, watering down the plant and suppression on the dry side of the plant are implemented to reduce dust generation. The Quarry Manager advised that quarry operations have not been stopped to date due to concerns relating to dust generation.
	(d) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see noted under Table 7); and	Compliant	Documentation- AQMP and Annual Review	Section 7.0 of the AQMP details the restriction of drilling and blasting during unsuitable meteorological conditions (e.g. high winds) and watering of haul roads and stockpiles. Refer to Condition 15 below.
	(e) minimise the area of surface disturbance and maximise progressive rehabilitation of the site,	Compliant	Documentation- AQMP and Annual Review	Section 7.0 of the AQMP includes requirements to undertake rehabilitation of disturbed areas as soon as practicable in accordance with the BRMP and maintaining the active pit and overburden emplacement area to the minimum size during all stages of the Project. The 2015 Annual Review notes progressive rehabilitation of the southern benches (RL 62 and RL 74) was undertaken during the reporting period. Evidence of progressive rehabilitation was sighted during the site visit (19 May 2016).
	AIR QUALITY – Quarry-owned Land			

Number	Condition	Compliance	Evidence	Comments
13	<p>The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria in Tables 5, 6, and 7 at any occupied residence on quarry-owned land unless:</p> <p>(a) the tenant has been notified of any health risks associated with such exceedances in accordance with the notification requirements under Schedule 4 of this consent;</p> <p>(b) the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice;</p> <p>(c) air quality monitoring is regularly undertaken to inform the tenant of the actual particulate emissions at the residence; and</p> <p>(d) data from this monitoring is presented to the tenant in an appropriate format for a medical practitioner to assist the tenant in making informed decisions on health risks associated with occupying the property,</p> <p>to the satisfaction of the Secretary.</p>	Administrative Non-Compliance	<p>Documentation – Checklist of Preventative Maintenance.</p> <p>Site interviews</p>	<p>Holcim advised that on warm weather days the rock material is wet down and three dust collectors installed within the plant are operated. Holcim advised the dust collectors are serviced every 6 months..</p> <p>Sighted checklist for preventative maintenance dated 18/03/2016, which notes whether items are operating as they should.</p> <p>Holcim advised that there is one tenant occupying a property within the site boundary in addition to the Quarry Manager who occupies a second property. Holcim advised that formal correspondence has not been provided to the tenant in relation to potential health risks as required by Condition 13 (a).</p> <p>Recommendation 07: Notify the tenant of potential health risks associated with exceedances of particulate matter criteria in accordance with Condition 13(a).</p>
	<i>AIR QUALITY – Air Quality Management Plan</i>			
14	The Applicant shall prepare and implement an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:	Compliant	Documentation – Letter from DP&E	Correspondence from the DP&E dated 14 March 2016 indicates the Secretary was satisfied the AQMP generally meets the requirements of the Project Approval.
	(a) be submitted to the Secretary for approval by 31 August 2015;	Compliant	Documentation – Letter of Submission	Sighted letter of submission to the Secretary of DP&E dated 31 August 2015.
	<p>(b) describe the measures that would be implemented to ensure:</p> <ul style="list-style-type: none"> compliance with the relevant conditions of this consent; best practice management is employed; and the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events; 	Compliant	Documentation – AQMP	<p>Air quality management and mitigation measures are detailed in Section 7.0 of the AQMP, while Section 8.0 details compliance management in regard to inspections monitoring, training, greenhouse gas production, management of complaints and enquiries, and completion of internal audits.</p> <p>The air quality monitoring program has been developed in consideration of the Australian Standard (AS/NZS 3580.10.1:2003: <i>Methods for Sampling and Analysis of Ambient Air – Determination of Particulate Matter - Deposited Matter - Gravimetric Method</i>) and DEC (2007) guideline <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i></p> <p>Section 7.0 details the restriction of drilling and blasting during unsuitable meteorological conditions (e.g. high winds) and watering of haul roads and stockpiles.</p>
	(c) describe the proposed air quality management system; and	Compliant	Documentation – AQMP	Air quality management and mitigation measures are detailed in Section 7.0 of the AQMP.
	<p>(d) include an air quality monitoring program that:</p> <ul style="list-style-type: none"> is capable of evaluating the performance of the development; includes a protocol for determining any exceedances of the relevant conditions of consent; effectively supports the air quality management system; and evaluates and reports on the adequacy of the air quality management system. 	Compliant	Documentation – AQMP	Air quality monitoring and exceedance reporting is detailed in Section 8.2 of the AQMP, while the continuous improvement of the AQMP is detailed in Section 9.1.
	<i>AIR QUALITY – Meteorological Monitoring</i>			

Number	Condition	Compliance	Evidence	Comments
15	For the life of the development, the Applicant shall 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.	Non-Compliant (Low Risk)	Documentation – Annual Review Site interviews	Holcim have not complied with this Condition as the Jandra Quarry does not operate a meteorological station on site or have access to one in the nearby vicinity. Holcim proposed the use of the Taree Airport meteorological station, but this was not supported by the DP&E. The non-compliance is considered low risk as: <ul style="list-style-type: none"> • Meteorological data from Taree Airport is utilised to implement appropriate controls. • There is one sensitive receiver within close proximity to the quarry. • Air and noise impacts were being managed as detailed in Condition 3, 10 and 12 above. Holcim advised that a weather station is proposed to be installed at the Main Dam and quotes for the installation of the station have been received. Recommendation 08: Following installation of the meteorological station, provide written notification to DP&E.
	AIR QUALITY – Greenhouse Gas Emissions			
16	The Applicant shall implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site.	Not verified	Documentation – 2013/2014 NPI Report Site interviews	It was noted during the site interviews that NPI data is reported annually (sighted the 2013/2014 NPI report completed by Enviro Risk) and completion of NGERs (also completed by Enviro Risk).
	SOIL AND WATER – Water Supply			
17	The Applicant shall ensure it has sufficient water for all stages of the development, and if necessary, adjust the scale of quarrying operations to match the available water supply.	Not Triggered	N/A	Not applicable – milestone not reached.
	SOIL AND WATER – Surface water Discharges			
18	The Applicant shall ensure that all surface water discharges from the site comply with the discharge limits in any EPL which regulates water discharges from the site, or with section 120 of the POEO Act.	Compliant		Review of the 2015 Annual Review indicates discharge was undertaken once in 2015 on 1 April 2015, in accordance with the EPL requirements. No exceedance was recorded.
	SOIL AND WATER – Soil and Water Management Plan			

Number	Condition	Compliance	Evidence	Comments
19	<p>The Applicant shall prepare and implement a Soil and Water Management Plan for the development to the satisfaction of the Secretary. This plan must be prepared in consultation with the Council and NOW, by suitably qualified and experience person/s whose appointment has been approved by the Secretary, and be submitted to the Secretary for approval by 31 August 2015.</p> <p>In addition to the standard requirements for management plans (see condition 3 of Schedule 5) this plan must include a:</p>	Compliant	Documentation – Letters of Submission	<p>Holcim prepared a SWMP in consultation with NSW Office of Water (NOW) (now DPI Water) and Greater Taree City Council (TCC). Sighted letters to the DPI Water and GTCC requesting review and comment on the draft Surface Water Management Plan (SWMP) dated 1 September 2015.</p> <p>Response emails/letter from TCC and DPI Water were sighted, dated 15 and 21 September 2015, respectively. It is noted this is after the required due date of submission to the Secretary of DP&E. Comments from DPI Water and TCC are included in Section 4.0 of the SWMP.</p> <p>Sighted letter of submission to the Secretary of DP&E dated 31 August 2015.</p> <p>Correspondence from the DP&E dated 14 March 2016 indicates the Secretary was satisfied the SWMP generally meets the requirements of the Project Approval, however minor amendments were requested. It was not clear at the time of the audit what the status of the final SWMP was or whether the DP&E comments have been addressed.</p>
	<p>(a) Site Water Balance that:</p> <ul style="list-style-type: none"> • includes details of: <ul style="list-style-type: none"> - sources and security of water supply including contingency planning to ensure demand will be met under all climatic conditions. - the site water storage capacity and licensing requirements for all stages of the development, - water use and management on site; 	Compliant	Documentation – SWMP	<p>Site Water Balance details are addressed as follows:</p> <ul style="list-style-type: none"> • sources and security of water supply addressed in Section 6.2 of the SWMP. • site water storage capacity addressed in Section 6.3 of the SWMP. • water use and management addressed in Section 6.1 of the SWMP.
	<p>(b) Surface Water Management Plan that includes:</p> <ul style="list-style-type: none"> • a detailed description of the surface water management system for the development, including the: <ul style="list-style-type: none"> - clean water diversion system; - erosion and sediment controls; and - the water storages required for each stage of the development; 	Compliant	Documentation – SWMP	<p>Surface water management (including clean water diversion and erosion and sediment controls) and onsite water storage for each stage of development are detailed in Sections 5.1 and 6.2.5 of the SWMP respectively.</p>
	<ul style="list-style-type: none"> • identification of all reasonable and feasible measures to improve the quality of surface water on the site, particularly those measures required to improve the water quality in the main dam, and a timeframe for the implementation of any identified improvements; 	Compliant	Documentation – SWMP	<p>Environmental control measures for improving the quality of surface water (including in the main dam) and the timeframe for implementation were detailed in Section 8.0 of the SWMP.</p>
	<ul style="list-style-type: none"> • the measures that would be implemented to minimise water use on site; 	Compliant	Documentation – SWMP	<p>Measures that would be implemented to minimise water use on site were address in Section 8.0 of the SWMP.</p>
	<ul style="list-style-type: none"> • surface water impact assessment criteria, 	Compliant	Documentation – SWMP	<p>Environmental impacts associated with the Project were detailed in Section 7.2 of the SWMP, while Table 9 of the SWMP details the discharge water quality criteria.</p>

Number	Condition	Compliance	Evidence	Comments
	<ul style="list-style-type: none"> a program to monitor surface water quality, and 	Compliant	Documentation – SWMP	<p>Table 9 of the SWMP details the discharge water quality criteria, monitoring frequency, and the sampling and analytical methods. While management measures are detailed in Section 10 to ensure compliance with water quality objectives.</p> <p>Table 8 – Environmental Control & Mitigation Measures refers to other documentation not included in the SWMP in relation to water quality monitoring (e.g. Attachment 4.1H – Environmental Monitoring Worksheet).</p> <p>Recommendation 09: Update the SWMP to include details of documentation referred to in Table 8 of the SWMP, or include Attachment 4.1H as an Appendix to the SWMP.</p>
	<ul style="list-style-type: none"> a plan to respond to any exceedances of the performance criteria, and mitigate any adverse surface water impacts of the development; and 	Administrative Non-Compliance	Documentation – SWMP, Letter from DP&E	<p>The SWMP does not include requirements, or a plan, in relation to the investigation and reporting of exceedance of performance criteria.</p> <p>Recommendation 10: Update the SWMP to include requirements for the investigation and reporting of exceedances of water quality performance criteria in accordance with Condition 6 of Schedule 5 of DA 213-10-99.</p>
	<ul style="list-style-type: none"> reporting procedures. 	Administrative Non-Compliance	Documentation – SWMP, Letter from DP&E	<p>The SWMP does not include requirements relating to incident reporting associated with exceedances of monitoring criteria</p> <p>Refer to Recommendation 10.</p>
	<i>SOIL AND WATER – On-site Sewage Management</i>			
20	The Applicant shall manage on-site sewage to the satisfaction of Council and the EPA.	Not verified		<p>GTCC advised through correspondence for the audit that the historic On-Site Sewer Management (OSSM) Systems may not be approved by Council. Holcim advised that an application for approval of the OSSM was provided to GTCC but had not yet been approved.</p> <p>Holcim advised that the EPA has not raised any issues with regard to on-site sewage management.</p> <p>Recommendation 11: Liaise with GTCC to resolve the issue of on-site OSSM systems.</p>
	<i>BIODIVERSITY AND REHABILITATION – Biodiversity and Rehabilitation Objectives</i>			

Number	Condition	Compliance	Evidence	Comments												
21	<p>The Applicant shall implement a biodiversity offset strategy and rehabilitate the site to the satisfaction of the Secretary, in accordance with the rehabilitation strategy in the documents listed in condition 2 of Schedule 2 and the objectives in Table 8.</p> <p>Table 8: Biodiversity and Rehabilitation Objectives</p> <table border="1"> <thead> <tr> <th>Feature</th> <th>Objective</th> </tr> </thead> <tbody> <tr> <td>Site (as a whole)</td> <td> <ul style="list-style-type: none"> Safe, stable and non-polluting Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and has minimal visual impact when viewed from surrounding land. </td> </tr> <tr> <td>Land identified in the biodiversity offset strategy and other vegetated land</td> <td> <ul style="list-style-type: none"> Conserved and enhanced with native, endemic vegetation. Containing self-sustaining ecosystems. </td> </tr> <tr> <td>Surface infrastructure</td> <td> <ul style="list-style-type: none"> Decommissioned and removed, unless the Secretary agrees otherwise. </td> </tr> <tr> <td>Quarry benches</td> <td> <ul style="list-style-type: none"> Landscaped and vegetated using native tree and understorey species, to minimise the visual impact of the quarry. </td> </tr> <tr> <td>Quarry pity floor</td> <td> <ul style="list-style-type: none"> Landscaped and revegetated using native tree and understorey species. </td> </tr> </tbody> </table>	Feature	Objective	Site (as a whole)	<ul style="list-style-type: none"> Safe, stable and non-polluting Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and has minimal visual impact when viewed from surrounding land. 	Land identified in the biodiversity offset strategy and other vegetated land	<ul style="list-style-type: none"> Conserved and enhanced with native, endemic vegetation. Containing self-sustaining ecosystems. 	Surface infrastructure	<ul style="list-style-type: none"> Decommissioned and removed, unless the Secretary agrees otherwise. 	Quarry benches	<ul style="list-style-type: none"> Landscaped and vegetated using native tree and understorey species, to minimise the visual impact of the quarry. 	Quarry pity floor	<ul style="list-style-type: none"> Landscaped and revegetated using native tree and understorey species. 	Compliant	<p>Documentation – BRMP, Agency correspondence</p> <p>Letter to DP&E dated 31 March 2016</p> <p>Site interviews.</p>	<p>Correspondence provided by Holcim to the DP&E on 31 March 2016 indicates a Section 88B Covenant was implemented to satisfy the requirements of this condition.</p> <p>A Biodiversity and Rehabilitation Management Plan has also been developed for the quarry.</p> <p>It is noted that:</p> <ul style="list-style-type: none"> Table 4.1 in Section 4.0 of the BRMP identifies the features and objectives identified in Table 8 of the Project Approval. Table 4.1 includes a range of short, medium and long term measures to meet these objectives. Section 3.2 of the BRMP notes that a Biodiversity Offset Area for the Project has not been specifically identified, though Section 3.2.1 identifies a potential biodiversity offset area.
Feature	Objective															
Site (as a whole)	<ul style="list-style-type: none"> Safe, stable and non-polluting Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and has minimal visual impact when viewed from surrounding land. 															
Land identified in the biodiversity offset strategy and other vegetated land	<ul style="list-style-type: none"> Conserved and enhanced with native, endemic vegetation. Containing self-sustaining ecosystems. 															
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Quarry pity floor	<ul style="list-style-type: none"> Landscaped and revegetated using native tree and understorey species. 															
<i>BIODIVERSITY AND REHABILITATION – Progressive Rehabilitation</i>																
22	<p>The Applicant shall 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.</p> <p><i>Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to disturbance in the future.</i></p>	Compliant		<p>The 2015 Annual Review notes progressive rehabilitation of the southern benches (RL 62 and RL 74) was undertaken during the reporting period.</p> <p>Evidence of progressive rehabilitation was sighted during the site visit (19 May 2016).</p>												
<i>BIODIVERSITY AND REHABILITATION – Biodiversity Offset Strategy</i>																
23	<p>By 31 March 2016, the Applicant shall implement a strategy to offset the impacts of clearing 1.28 ha of Small-fruited Grey Gum - Tallowood shrubby open forest on coastal foothills of the southern North Coast vegetation community by either:</p>	Compliant	<p>Documentation – BRMP, Agency correspondence</p> <p>Letter to DP&E dated 31 March 2016</p> <p>Site interviews.</p>	<p>In a letter to DP&E dated 31 March 2016, Holcim advised a section 88B Covenant was implemented to satisfy the requirements of Condition 23. The implementation of the Biodiversity Offset Strategy commenced on 31 March 2016.</p> <p>Holcim noted in the letter to DP&E that OEH did not support the creation of the Section 88B Covenant. OEH were in favour of a biobanking agreement, however following a Holcim review of the likely credit price and the desire of Holcim to utilise and conserve their own land, a biobanking agreement was not pursued. It is understood that DP&E approved the creation of the Covenant on 31 March 2016.</p>												
	<p>(a) entering into a Biobanking agreement under the Threatened Species Conservation Act 1995 to retire at least the number of Ecosystem Credits assessed using the Biobanking Credit Calculator; or</p>	Not Triggered	<p>Letter to DP&E dated 31 March 2016</p> <p>Site interviews.</p>	<p>Holcim advised that an Offset Strategy has been pursued.</p>												

Number	Condition	Compliance	Evidence	Comments
	(b) implementing a strategy to provide a Biodiversity Offset Area of at least 7 ha of Small-fruited Grey Gum - Tallowood shrubby open forest on coastal foothills of the southern North Coast vegetation community;	Compliant	Documentation – BRMP, Agency correspondence Letter to DP&E dated 31 March 2016 Site interviews.	Refer to comments above for Condition 23.
	in consultation with OEH and to the satisfaction of the Secretary.	Compliant	Documentation – Agency correspondence	As above. Correspondence regarding the audit from OEH noted Holcim had consulted with OEH in regard to offset strategies on 31 March 2016.
<i>BIODIVERSITY AND REHABILITATION – Long Term Security of Offset</i>				
24	By 30 September 2016, the Applicant shall make suitable arrangements to protect in perpetuity any Biodiversity Offset Area established under condition 23 above to the satisfaction of the Secretary. <i>Note: For the purposes of this consent, suitable arrangements may include the use of Public Positive Covenants in combination with Restrictions on Use of Land on the land title/s of the Biodiversity Offset Area. Other arrangements such as the use of Biobanking Agreements or transfer of lands to the national parks for their suitability.</i>	Not Triggered	N/A	Not applicable at the time of this audit.
<i>BIODIVERSITY AND REHABILITATION – Biodiversity and Rehabilitation Management Plan</i>				
25	The Applicant shall prepare and implement a Biodiversity and Rehabilitation Management Plan for the site to the satisfaction of the Secretary. This plan must:	Compliant	Documentation – Letter from DP&E	Correspondence from the DP&E dated 14 March 2016 indicates the Secretary was satisfied the BRMP generally meets the requirements of the Project Approval, however minor amendments were requested. It was not clear at the time of the audit what the status of the final BRMP was or whether the DP&E comments have been addressed.
	(a) be prepared by suitably qualified person(s) whose appointment has been approved by the Secretary;	Compliant	Documentation – Letter of Approval	The appointment of suitably qualified person(s) was approved by the Secretary. Letter of approval dated 1 July 2015, was sighted.
	(b) be prepared in consultation with OEH and Council, and submitted to the Secretary for approval by 31 August 2015;	Administrative Non-Compliance	Documentation – Letter of Submission. Correspondence – OEH	Holcim have not complied with this condition as although a Stage 1 of the BRMP was submitted to DP&E in August 2015, OEH advised that consultation was not requested until December 2015. Holcim's assertion that consultation commenced prior to 31 August 2015 could not be confirmed by sighted correspondence. OEH did not provide comment on the BRMP, but did acknowledge the requirement for consultation had been achieved. DP&E provided Holcim with an extension for its submission in December 2015 to allow incorporation of Holcim's Biodiversity Direction into the BRMP. GTCC provided comment on the BRMP however it was not clear at the time of the audit whether the comments were incorporated into the final BRMP. Recommendation 12: Provide Council with an updated copy of the DP&E approved BRMP.

Number	Condition	Compliance	Evidence	Comments
	(c) describe the short, medium and long-term measures that would be implemented to: <ul style="list-style-type: none"> manage the native vegetation and fauna habitat on the site; implement the biodiversity offset strategy; and ensure compliance with the biodiversity and rehabilitation objectives in Table 8, and progressive rehabilitation obligations in this consent; 	Compliant	Documentation – BRMP	Short, medium and long-term measures were detailed in Section 5.0 of the BRMP.
	(d) include detailed performance and completion criteria for evaluating the performance biodiversity offset strategy and the rehabilitation of the site, including triggers for any necessary remedial action;	Compliant	Documentation – BRMP	Detailed performance and completion criteria were detailed in Tables 4.2 and 4.3 of the BRMP.
	(e) include a detailed description of the measures that would be implemented to: <ul style="list-style-type: none"> minimise impacts on threatened species, populations and habitats as a result of the quarrying activities on the site; enhance the quality of native vegetation and fauna habitat across the site and in the biodiversity offset area; landscape the site to minimise visual and lighting impacts; minimise the impact of clearing on native fauna; maximise the salvage of environmental resources from any area approved to be cleared including tree hollows, vegetative and soil resources - for beneficial reuse; provide two nest boxes for each tree-hollow destroyed by vegetation clearing; control weeds and feral pests; control erosion; control access, and bushfire management; 	Compliant	Documentation – BRMP	Detailed description of the measures were detailed in Section 5.0 of the BRMP.
	(f) include a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria;	Compliant	Documentation – BRMP	Program to monitor the effectiveness of measures were detailed in Section 6.0 of the BRMP.
	(g) identify the potential risks to rehabilitation of the site and the implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate these risks; and	Compliant	Documentation – BRMP	Potential risks to rehabilitation of the site were detailed in Section 7.0 of the BRMP.
	(h) include details of who would be responsible for monitoring, reviewing, and implementing the plan.	Compliant	Documentation – BRMP	Responsibilities for monitoring, reviewing, and implementing the plan were detailed in Section 10.0 of the BRMP.
	<i>BIODIVERSITY AND REHABILITATION – Habitat for Threatened Fauna Species</i>			
26	The Applicant shall ensure that the Biodiversity Offset Area provides suitable habitat for all threatened fauna species that have potential habitat within the 1.28 ha of land proposed to be cleared under EA (Mod 5).	Compliant	Documentation – BRMP Site interviews	Refer to Condition 23.
	<i>BIODIVERSITY AND REHABILITATION – Rehabilitation and Conservation Bond</i>			

Number	Condition	Compliance	Evidence	Comments
27	<p>Within 12 months of the approval of the Biodiversity and Rehabilitation Management Plan, the Applicant shall lodge a Rehabilitation and Conservation Bond with the Department to ensure that the biodiversity offset strategy and the rehabilitation of the site is implemented in accordance with the performance and completion Criteria set out in the Biodiversity and Rehabilitation Management Plan. The sum of the bond shall be determined by:</p> <p>(a) calculating the cost of implementing the biodiversity offset strategy and rehabilitating the site, and</p> <p>(b) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary.</p> <p><i>Note: If the rehabilitation of the site and the implementation of the biodiversity offset strategy is completed to the satisfaction of the Secretary, then the Secretary will release the bond. If the rehabilitation of the site and the implementation of the biodiversity strategy is not completed to the satisfaction of the Secretary, then the Secretary will call in all or part of the bond, and arrange for the completion of the relevant works.</i></p>	Not Triggered	N/A	Not applicable – 12 months has not been reached.
28	<p>Within 3 months of each independent Environmental Audit (see condition 8 of Schedule 5), the Applicant shall review, and if necessary revise, the sum of the Rehabilitation and Conservation Bond to the satisfaction of the Secretary. This review must consider the:</p> <p>(a) effects of inflation;</p> <p>(b) likely cost of rehabilitating the site (taking into account the likely surface disturbance over the next 3 years of the development and implementing the biodiversity offset strategy; and</p> <p>(c) performance of the implementation of the rehabilitation of the site performance to date</p>	Not Triggered	N/A	Not applicable – To be undertaken within 3 months of this audit.
	ABORIGINAL CULTURAL HERITAGE			
29	The Applicant shall prepare and implement an Aboriginal Cultural Heritage Management Plan for the Project to the satisfaction of the Secretary. This plan must:	Compliant	Documentation – Letter from DP&E	Correspondence from the DP&E dated 14 March 2016 indicates the Secretary was satisfied the ACHMP generally meets the requirements of the Project Approval.
	(a) be prepared in consultation with Aboriginal stakeholders;	Compliant	Documentation – Letter	Letters requesting comment on the ACHMP from the Purfleet/Taree Local Area Land Council (LALC) and the Forster LALC was sighted during the audit.
	(b) be submitted to the Secretary for approval by 31 August 2015;	Compliant	Documentation – Letter	The ACHMP was submitted to the Secretary for approval by 31 August 2015. Sighted letter submitting the ACHMP to the DP&E dated 31 August 2015.

Number	Condition	Compliance	Evidence	Comments
	(c) describe the measures that would be implemented to: <ul style="list-style-type: none"> manage known Aboriginal objects and sites; monitor all new surface disturbance on site for unidentified Aboriginal objects; manage the discovery of any human remains or previously unidentified Aboriginal objects on site; and 	Compliant	Documentation – ACHMP Site interviews	<p>Section 7.0 of the ACHMP details management measures for known Aboriginal objects and sites, the procedure for the discovery of unexpected Aboriginal objects (including consultation / engagement with a qualified archaeologist and implementation of the Environmental Incident Classification and Reporting Procedure).</p> <p>During the site interviews, it was noted that the process for going into previously undisturbed areas is to strip topsoil down to the overburden, and then use the topsoil for bench rehabilitation; with the overburden then stripped (average depth being 1.0 – 1.5 metres).</p> <p>Detail of monitoring of all new surface disturbances in Section 7.0 of the ACHMP is only in relation to known archaeological sites and does not mention monitoring for unidentified Aboriginal objects.</p> <p>Recommendation 13: Update the ACHMP to include monitoring of all new surface disturbances on site and include an unexpected finds procedure for unidentified Aboriginal objects and submit to DP&E for approval.</p>
	(d) ensure ongoing consultation with Aboriginal stakeholders in the management of any Aboriginal cultural heritage values on site.	Compliant	Documentation – ACHMP	<p>Review of Section 4.2 the ACHMP indicates instances for consultation with Aboriginal stakeholders includes, but is not limited to:</p> <ul style="list-style-type: none"> Discovery of unexpected Aboriginal objects or sites during ground disturbance works. Notification and opportunity to participate in monitoring during ground disturbance works with potential to impact known archaeological sites which are not approved for disturbance. Amendments of the ACHMP
	TRANSPORT – Operating Conditions			
30	The Applicant shall ensure that: <p>(a) all vehicles entering or leaving the site carrying material that is capable of generating wind-borne dust have their loads covered or suitably contained within the truck; and</p> <p>(b) all laden vehicles leaving the site are cleaned of materials that may fall on the road, before leaving the site</p>	Compliant	Site interviews Site visit observations	<p>During site interviews, it was noted that the requirement to cover loads and ensure materials do not leave site and fall on the road is part of the induction and a requirement for drivers.</p> <p>Vehicles accessing the site are required to travel through the wheel wash prior to leaving the site. During the site inspection, vehicles were sighted using the wheel wash.</p> <p>During the site inspection, laden vehicles were sighted covering their load prior to leaving the site and accessing the site with covered trays.</p>
	TRANSPORT – Pacific Highway Intersection			
31	The Applicant shall maintain the intersection of the Pacific Highway and the Jandra Quarry Access Road, for the duration of product transport from the site, to the satisfaction of the RMS.	Compliant	Site interviews Site visit observations	<p>Vehicles accessing the site are required to travel through the wheel wash prior to leaving the site. During the site inspection, vehicles were sighted using the wheel wash.</p> <p>During the site inspection, laden vehicles were sighted covering their load prior to leaving the site and accessing the site with covered trays.</p> <p>It was noted during site interviews that a street sweeper is hired from nearby (Nabiac) to keep the site intersection clean.</p>

Number	Condition	Compliance	Evidence	Comments
32	The Applicant shall install and subsequently maintain street lighting at the intersection of the Pacific Highway and the Jandra Quarry Access Road, to the satisfaction of the RMS, prior to transporting quarry products from the site outside of the hours 7 am to 6 pm. Any works affecting the Pacific Highway must not take place without the prior approval of the RMS.	Not Triggered	N/A	Not applicable at the time of the audit, with operations not being undertaken outside 7.00 am to 6.00 pm.
	<i>TRANSPORT – Monitoring of Product Transport</i>			
33	The Applicant shall keep accurate records of: (a) the amount of quarry products, including asphalt, transported from the site (calendar month and Year);	Compliant	Site interviews Documentation – Daily Quarry Runsheet	To track extraction and production Jandra Quarry makes use of the SAP database, Holcim's national database for tracking production and stock, maintenance and inventory. Production is tracked on a monthly (as part of business review) and annual basis. Transportation of material is managed through a system called Command that connect to SAP, providing a report at the end of each day detailing the total number of truck movements. The daily quarry runsheet was sighted during the site visit, detailing the locations of where deliveries are being made.
	(b) the number of laden vehicle movements to and from the site (day, calendar month and year); and	Compliant	Site interviews Documentation – Daily Quarry Runsheet	To track extraction and production Jandra Quarry makes use of the SAP database, Holcim's national database for tracking production and stock, maintenance and inventory. Production is tracked on a monthly (as part of business review) and annual basis. Transportation of material is managed through a system called Command that connect to SAP, providing a report at the end of each day detailing the total number of truck movements. The daily quarry runsheet was sighted during the site visit, detailing the locations of where deliveries are being made.
	(c) publish these records on its website at the end of each calendar quarter.	Compliant	Documentation – Annual Review	Truck movement data for March 2015 to April 2016 is available on the Holcim Jandra Quarry website.
	VISUAL IMPACTS			
34	The Applicant shall: (a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development; (b) ensure that all external lighting associated with the development complies with Australian Standard A54282 (INT) 1997 - Control of Obtrusive Effects of Outdoor Lighting, or its latest version; and (c) take all practical measures to shield views of quarrying operations from users of public roads and privately-owned residences, to the satisfaction of the Secretary	Not Triggered	N/A	Not applicable, with no lighting as yet and the only lighting on site being security lighting at the front office and truck transport parking, which are not visible off-site.
	WASTE			
35	The Applicant shall: (a) implement all reasonable and feasible measures to minimise the waste generated by the development; (b) ensure that the waste generated by the development is appropriately stored, handled and disposed of; and (c) monitor and report on effectiveness of the waste minimisation and management measures each calendar year, to the satisfaction of the Secretary.	Compliant	Site interviews	During the site inspection, it was noted that: <ul style="list-style-type: none"> waste oils are serviced by Australian Waste Oils, general waste is picked up by JR Richards and delivered to Tuncurry Waste Depot. Sediment traps in servicing areas are pumped out by JR Richards (1 in 5 year occurrence). The effectiveness of waste minimisation and management measures are detailed in the Annual Review.

Number	Condition	Compliance	Evidence	Comments
36	Except as expressly permitted in an EPL, the Applicant must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.	Administrative Non-Compliance (Low Risk)	Site interviews	Holcim are non-compliant with this Condition as it accepts concrete waste which it reprocesses and adds to road base material as a recycled product. The non-compliance is considered low risk as: <ul style="list-style-type: none"> Recycling of concrete waste is considered a beneficial reuse and positive environmental outcome. Holcim advised that during consultation the EPA advised an EPL amendment was not required to include the reprocessing of the concrete waste. Recommendation 14: Consult with DP&E and seek an administrative modification to permit the reprocessing of concrete waste on site.
	LIQUID STORAGE			
37	The Applicant shall ensure that all liquid storage facilities are protected by appropriate bunding, which must exceed 110% of the stored volume of the liquid.	Compliant	Site visit	During the site visit liquid storage facilities were sighted and located within appropriately bunded areas.
	DANGEROUS GOODS			
38	The Applicant shall 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.	Compliant	Site visit	During the site visit containers containing dangerous goods were noted to be on-site and appropriately stored.
	BUSHFIRE			
39	The Applicant shall: (a) ensure that the development is suitably equipped to respond to any fires on site; and (b) assist the Rural Fire Service, emergency services and National Parks and Wildlife Service as much as possible if there is a fire in the surrounding area.	Compliant	Site interviews	During the site interviews, it was noted that the site has a verbal agreement with the fire service for use of water on-site in the event of bushfires if needed.
	SCHEDULE 4 – Additional Procedures			
	NOTIFICATION OF LANDOWNERS			
1	As soon as practicable after obtaining monitoring results showing an exceedance of any relevant criteria in Schedule 3, the Applicant shall notify affected landowners in writing of the exceedance, except where a negotiated agreement has been entered into in relation to that impact, and provide regular monitoring results to each affected landowner until the development is complying with the relevant criteria.	Not Triggered	Documentation – Annual Review, Blast Monitoring, Depositional Dust Monitoring Site interviews	With the exception of blast and depositional dust monitoring, no other environmental monitoring has been completed on site to date. Of the monitoring data recorded there have been no exceedances of the relevant criteria and therefore landowners have not required notification.
	INDEPENDENT REVIEW			
2	If an owner of privately-owned land considers the development to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.	Not Triggered	N/A	Not applicable, no requests received.

Number	Condition	Compliance	Evidence	Comments
3	If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant shall: (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to: <ul style="list-style-type: none"> consult with the landowner to determine his/her concerns; determine whether the development is complying with the relevant criteria in Schedule 3; and if the development is not complying with these criteria then identify measures that could be implemented to ensure compliance with the relevant criteria; and (b) give the Secretary and landowner a copy of the independent review.	Not Triggered	N/A	Not applicable, no requests received.
4	If the independent review determines that the development is complying with the relevant criteria in Schedule 3, then the Applicant may discontinue the independent review with the approval of the Secretary.	Not Triggered	N/A	Not applicable, no requests received.
5	If the independent review determines that the development is not complying with the relevant criteria in Schedule 3, then the Applicant shall: (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring to determine whether these measures ensure compliance; or (b) secure a written agreement with the landowner to allow exceedances of the relevant criteria, to the satisfaction of the Secretary.	Not Triggered	N/A	Not applicable, no requests received.
	SCHEDULE 5 – ENVIRONMENTAL MANAGEMENT CONDITIONS			
	Environmental Management Strategy			
1	The Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:	Compliant	Documentation – Correspondence from DP&E	Correspondence from the DP&E dated 14 March 2016 indicates the Secretary was satisfied the EMS generally meets the requirements of the Project Approval, but requested some revisions. However, it is noted that DP&E has indicated they would like the EMS to be resubmitted following the completion of this audit report.
	(a) be submitted to the Secretary for approval by 31 August 2015;	Compliant		Sighted letter submitting the Environmental Management Strategy (EMS) to the DP&E dated 31 August 2015.
	(b) provide the strategic framework for the environmental management of the development;	Compliant		Section 3.0 of the EMS details the environmental management framework for the Project.
	(c) identify the statutory approvals that apply to the development;	Compliant		Detailed in Section 4.0 and Appendix A1 of the EMS.
	(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development,	Compliant		Detailed in Section 5.2 of the EMS.
	(e) describe the procedures that would be implemented to: <ul style="list-style-type: none"> 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; and respond to emergencies; and 	Compliant		Stakeholder (community and agency) communication and consultation, complaints and enquiries, and dispute resolution are detailed in Section 7.0 of the EMS, while incident and emergency response procedures are detailed in Section 8.0 of the EMS.

Number	Condition	Compliance	Evidence	Comments
	(f) include: <ul style="list-style-type: none"> copies of any strategies, plans and programs approved under the conditions of this development consent; and a clear plan depicting all the monitoring required to be carried out under the conditions of this consent 	Compliant		Environmental monitoring locations are shown on a figure in Section 9.0 of the EMS, while the BRMP, NBMP, SWMP, ACHMP and AQMP are appendices of the EMS.
	Adaptive Management			
2	<p>The Applicant shall assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.</p> <p>Where any exceedance of these criteria and/or performance measures has occurred, the Applicant shall, at the earliest opportunity:</p> <p>(a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur,</p> <p>(b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and</p> <p>(c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.</p>	Not verified	Documentation – Annual Review, Blast Monitoring, Depositional Dust Monitoring Site interviews	With the exception of blast and depositional dust monitoring, no other environmental monitoring has been completed on site to date. Of the monitoring data recorded there have been no exceedances of the relevant criteria and therefore landowners have not required notification.
	Management Plan Requirements			
3	<p>The Applicant shall ensure that the Management Plans required under this consent are prepared in accordance with any relevant guidelines, and include</p> <p>(a) detailed baseline data;</p>	Compliant	Documentation – Review of Management Plans	BRMP - Section 3.0 ACHMP - Section 6.0 AQMP - Section 6.0 NBMP - Section 4.0 SWMP - Sections 5.0-7.0 .
	<p>(b) a description of:</p> <ul style="list-style-type: none"> the relevant statutory requirements (including any relevant approval, licence or lease conditions); any relevant limits or performance measures/criteria; and the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; 	Compliant	Documentation – Review of Management Plans	Section 2.0 of the BRMP, and Section 3.0 of the ACHMP, NBMP, SWMP and AQMP. Section 5.0 of the AQMP and NBMP, Section 4.0 of BRMP, Section 6.0 of the SWMP and ACHMP. Section 4.2.1 and 4.3.1 of BRMP, Section 8.0 of ACHMP, AQMP and NBMP, and Section 9.0 of SWMP.
	(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;	Compliant	Documentation – Review of Management Plans	Section 5.0 of BRMP, Section 8.0 of SWMP, and Section 7.0 of ACHMP, AQMP and NBMP.
	<p>(d) a program to monitor and report on the:</p> <ul style="list-style-type: none"> impacts and environmental performance of the development; and effectiveness of any management measures (see (c) above); 	Compliant	Documentation – Review of Management Plans	Section 8.1 of NBMP, Section 8.2 of AQMP, Section 6.0 of BRMP, and Table 9 & Section 10.0 of SWMP.

Number	Condition	Compliance	Evidence	Comments
	(e) a contingency plan to manage any unpredicted impacts and their consequences;	Administrative Non-Compliance	Documentation – Review of Management Plans	BRMP - Section 7.0 – Compliant. ACHMP - While Section 7.0 includes measures in the event of an unexpected Aboriginal cultural heritage item being found, it does not identify measures to be undertaken in the event of unpredicted impact on known Aboriginal cultural heritage items – Non-compliant. AQMP - Section 8.2.3 – Compliant. NBMP - Section 8.1 – Compliant. SWMP - Table 8 includes measures to be undertaken in the event of exceedances of discharge criteria – Compliant. Refer to Recommendation 13.
	(f) a program to investigate and implement ways to improve the environmental performance of the development over time;	Compliant	Documentation – Review of Management Plans	Section 10.0 of SWMP, and Section 9.0 of the BRMP, NBMP, AQMP and ACHMP.
	(g) a protocol for managing and reporting any: <ul style="list-style-type: none"> incidents; complaints; non-compliances with statutory requirements; and exceedances of the impact assessment criteria and/or performance criteria; and 	Administrative Non-Compliance	Documentation – Review of Management Plans	NBMP - Section 8.0 – Compliant. SWMP – Does not include reference to protocol for managing incidents, complaints, non-compliances and exceedances. It is noted Section 10.1 discusses a Continuous Improvement, but does not address measures to be undertaken in the event of unforeseen impacts. BRMP - Section 8.4 (Incidents), Section 8.5 (Complaints), Section 7.2 (non-compliances) – Compliant. AQMP Section 8.0 – Compliant. ACHMP – Does not include reference to protocol for managing incidents, complaints and non-compliances. It is noted Section 9.1 discusses a Continuous Improvement, but does not address measures to be undertaken in the event of unforeseen impacts on known and/or unknown Aboriginal cultural heritage. Recommendation 15: Update the SWMP and ACHMP to include a procedure for addressing non-compliances.
	(h) a protocol for periodic review of the plan.	Compliant		Section 10.0 of SWMP, and Section 9.0 of the BRMP, NBMP, AQMP and ACHMP.
	Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans	Noted		
	Annual Review			
4	By the end of March each year, the Applicant shall review the environmental performance of the development to the satisfaction of the Secretary. This review must:	Compliant	Documentation – Annual Review	Correspondence from the DP&E verifying submission of 2015 Annual Review on 31 March 2016.
	(a) describe the development (including rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;	Compliant	Documentation – Annual Review	Addressed in the 2015 Annual Review in the section titled 'Description of Development'.

Number	Condition	Compliance	Evidence	Comments
	(b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against: <ul style="list-style-type: none"> the relevant statutory requirements, limits or performance measures/criteria; the monitoring results of previous years, and the relevant predictions in the documents listed in condition 2 of Schedule 2; 	Compliant	Documentation – Annual Review	Blast and depositional dust monitoring are undertaken at the quarry and the Annual Review includes a review of the monitoring results noting no exceedances have been recorded for activities associated with the quarry. The 2015 Annual Review notes that final approval of site management plans is pending and therefore no noise and PM10 monitoring has been undertaken for the 2015 reporting period. No complaints were received for the site during the 2015 reporting period.
	(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;	Compliant	Documentation – Annual Review	Detailed in the section ‘Non-Compliance Items in 2015’ of the 2015 Annual Review.
	(d) identify any trends in the monitoring data over the life of the development;	Compliant	Documentation – Annual Review	Detailed in the section ‘Trends in Monitoring Data in 2015’ of the 2015 Annual Review.
	(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and	Compliant	Documentation – Annual Review	Detailed in the section ‘Predicted and Actual Impacts in 2015’ of the 2015 Annual Review.
	(f) describe what measures will be implemented over the current calendar year to improve the environmental performance of the development	Compliant	Documentation – Annual Review	Detailed in the section ‘Environmental Improvement Measures 2016’ of the 2015 Annual Review.
	Revision of Strategies, Plans & Programs			
5	Within 3 months of the submission of an: <ul style="list-style-type: none"> (a) annual review under condition 4 above; (b) incident report under condition 6 below; (c) audit report under condition 8 below; and (d) any modifications to this consent, the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary. <i>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</i>	Compliant		Not triggered: <ul style="list-style-type: none"> Annual Review completed March 31 2016. No incidents during the 2015 Reporting Period. This audit represents the first audit required by 31 March 2016. No applicable modifications.
	REPORTING			
	Incident Reporting			
6	The Applicant shall notify, at the earliest opportunity, the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the development, the Applicant shall notify the Secretary and any other relevant agencies as soon as practicable after the Applicant becomes aware of the incident. Within 7 days of the date of the incident, the Applicant shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Not Triggered	N/A	Not applicable, no incidents have occurred during the audit period.
	Regular Reporting			

Number	Condition	Compliance	Evidence	Comments
7	The Applicant shall 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.	Compliant		While EPL blast monitoring data is available via the public website (http://www.holcim.com.au/sustainability/environment/pollution-monitoring-data.html), publication of other monitoring data is not publically available on the Holcim website. No discharges from the Main Dam (EPL monitoring point) were undertaken during the audit period.
	INDEPENDENT ENVIRONMENTAL AUDIT			
8	By 31 March 2016, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an independent Environmental Audit of the development. This audit must: (a) be conducted by 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 and/or Water License (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; and (e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals. <i>Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary</i>	Compliant	Documentation – Letter to DP&E	This audit represents the 31 March 2016 audit, with Holcim requesting DP&E approval of the audit team on 30 March 2016 and subsequent approval provided 31 March 2016.
9	Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report	Not Triggered	N/A	Not applicable at this time.

Number	Condition	Compliance	Evidence	Comments
10	<p>By 31 August 2015, the Applicant shall:</p> <p>(a) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> • the documents listed in condition 2 of Schedule 2; • current statutory approvals for the development; • approved strategies, plans or programs; • a summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent; • a complaints register, which is to be updated on a quarterly basis; • the annual reviews (over the last 5 years); • any independent environmental audit, and the Applicant's response to the recommendations in any audit; and • any other matter required by the Secretary; and <p>(b) keep this information up-to-date, to the satisfaction of the Secretary.</p>	Administrative Non-Compliance		<p>Holcim has maintained the following information on its website:</p> <ul style="list-style-type: none"> • Documents listed in condition 2 of Schedule 2 including the Environmental Assessment • Current statutory approvals for the development (EPL and Modification) • Annual review 2015 • Truck movement data • Blast monitoring data <p>The following information was not available on its web-site:</p> <ul style="list-style-type: none"> • Summary of monitoring results for dust depositional gauges • DP&E approved environmental management plans <p>It is noted that:</p> <ul style="list-style-type: none"> • Noise and PM10 monitoring has not commenced on-site and is therefore unavailable to be published. <p>No complaints have been made to date thus a complaint register is not provided on the website.</p> <p>Recommendation 16: Upload depositional dust monitoring results and the DP&E approved management plans (when approved) to the Holcim website</p>

Appendix B – Compliance with EPL requirements



Appendix B

Table 1 Compliance with the EPL requirements

Number	Condition	Compliance	Evidence	Comments									
1	ADMINISTRATIVE CONDITIONS												
A1	What the licence authorises and regulates												
A1.1	<p>This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.</p> <table border="1"> <thead> <tr> <th>Scheduled Activity</th> <th>Fee Based Activity</th> <th>Scale</th> </tr> </thead> <tbody> <tr> <td>Crushing, grinding or separating</td> <td>Crushing, grinding or separating</td> <td>> 100000 - 500000 T processed</td> </tr> <tr> <td>Extractive Activities</td> <td>Land-based extractive activity</td> <td>> 100000 - 500000 T extracted, processed or stored</td> </tr> </tbody> </table>	Scheduled Activity	Fee Based Activity	Scale	Crushing, grinding or separating	Crushing, grinding or separating	> 100000 - 500000 T processed	Extractive Activities	Land-based extractive activity	> 100000 - 500000 T extracted, processed or stored	Compliant	<p>Site interviews</p> <p>Site visit</p>	It was verified during site interviews and the site visit that these activities are being undertaken.
Scheduled Activity	Fee Based Activity	Scale											
Crushing, grinding or separating	Crushing, grinding or separating	> 100000 - 500000 T processed											
Extractive Activities	Land-based extractive activity	> 100000 - 500000 T extracted, processed or stored											
A1.2	<p>Notwithstanding the fee scales noted above, the licensee must not produce more than 250,000 tonnes of finished quarry products per calendar year.</p> <p><i>Note: This condition has been added to be consistent with development consent DA231-10-99 MOD 4.</i></p>	Compliant	Documentation – Annual Review	<p>The production volume for the 2015 Reporting Period was 232,028 tonnes and therefore compliant with this clause.</p> <p>It is noted however that Condition 8 of Modification 5 of DA 231-10-99 permits extraction of up to 490,000 tonnes and the EPL should be amended to reflect the approved production rates under Modification 5.</p> <p>It is noted that an EPL amendment request was provided to the EPA on 23 October 2015 to reflect the increased annual production approved by Modification 5 of DA 231-10-99.</p>									
A2	Premises or plant to which this licence applies												
A2.1	<p>The licence applies to the following premises:</p> <p>Jandra Quarry – Pacific Highway Possum Brush NSW 2430</p> <p>LOT 2 DP 255621, LOT 11 DP 790056, LOT 12 DP 790056, LOT 13 DP 790056, LOT 14 DP 790056, LOT 15 DP 79005</p>	Compliant	SIX Maps	Review of aerial photography with cadastral overlay indicates activities are within the area described.									
A3	Information supplied to the EPA												
A3.1	<p>Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.</p> <p>In this condition the reference to "the licence application" includes a reference to: a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</p>	Compliant	<p>Site interviews</p> <p>Site visit</p>	It was verified during site interviews and the site visit that the works and activities are being carried out in accordance with the Jandra Quarry proposal.									

Number	Condition	Compliance	Evidence	Comments																		
	<i>DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND</i>																					
P1	Location of monitoring/discharge points and areas																					
P1.1	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.	Compliant	Site visit	Soil and Water Management Plan (SWMP) – Figure 1 and Section 8.0. This discharge point was sighted during the site visit, with a photograph taken.																		
P1.2	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.	Compliant	Site visit Documentation – SWMP	Soil and Water Management Plan (SWMP) – Figure 1 and Section 8.0. This discharge point was sighted during the site visit, with a photograph taken. Recommendation 17: Install a sign at the licenced discharge point from the Main Dam to notify that this location is the discharge point.																		
	<table border="1"> <thead> <tr> <th>EPA Identification No</th> <th>Type of Monitoring Point</th> <th>Type of Discharge Point</th> <th>Location Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Discharge quality monitoring</td> <td>Discharge quality monitoring</td> <td>Discharge from final sediment dam as shown in the CSR Readymix Site Photo - Jandra Quarry Water Monitoring Location Figure 1 provided to the EPA 13 May</td> </tr> </tbody> </table>	EPA Identification No	Type of Monitoring Point	Type of Discharge Point	Location Description	1	Discharge quality monitoring	Discharge quality monitoring	Discharge from final sediment dam as shown in the CSR Readymix Site Photo - Jandra Quarry Water Monitoring Location Figure 1 provided to the EPA 13 May													
EPA Identification No	Type of Monitoring Point	Type of Discharge Point	Location Description																			
1	Discharge quality monitoring	Discharge quality monitoring	Discharge from final sediment dam as shown in the CSR Readymix Site Photo - Jandra Quarry Water Monitoring Location Figure 1 provided to the EPA 13 May																			
3	<i>LIMIT CONDITIONS</i>																					
L1	Pollution of waters																					
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.	Compliant	Site visit Site interviews Documentation – Annual Review	No offsite discharge undertaken for the operation period. The site visit indicated there was no evidence of pollution of waters occurring as a result of operations.																		
L2	Concentration Limits																					
L2.1	For each monitoring/discharge point or utilisation area specified in the table 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.	Noted																				
L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges	Noted																				
L2.3	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table.	Noted																				
L2.4	Water and/or Land Concentration Limit Point 1	Compliant	Documentation – Annual Review	Review of monitoring results in the 2015 Annual Review indicated discharge water quality did not exceed the 100 percentile concentration limit.																		
	<table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>50 percentile concentration limit</th> <th>90 percentile concentration limit</th> <th>3DGM concentration limit</th> <th>100 percentile concentration limit</th> </tr> </thead> <tbody> <tr> <td>pH</td> <td>pH</td> <td></td> <td></td> <td></td> <td>6.5 – 8.5</td> </tr> <tr> <td>Total Suspended Solids</td> <td>Milligrams per litre</td> <td></td> <td></td> <td></td> <td>50</td> </tr> </tbody> </table>	Pollutant	Units of measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit	pH	pH				6.5 – 8.5	Total Suspended Solids	Milligrams per litre				50			
Pollutant	Units of measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit																	
pH	pH				6.5 – 8.5																	
Total Suspended Solids	Milligrams per litre				50																	

Number	Condition	Compliance	Evidence	Comments
L3	Blasting			
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. At any point within 1 metre of any affected residential boundary or other noise sensitive location such as a school or hospital.	Compliant	Documentation – Monitoring Data	Blast monitoring results were reported in the 2015 Annual Review and are publically available on the Holcim website (http://www.holcim.com.au/sustainability/environment/pollution-monitoring-data.html). No exceedances were recorded during the 2015 reporting period.
L3.2	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 within 1 metre of any affected residential boundary or other noise sensitive location such as a school or hospital.	Compliant	Documentation – Monitoring Data	Blast monitoring results were reported in the 2015 Annual Review and are publically available on the Holcim website (http://www.holcim.com.au/sustainability/environment/pollution-monitoring-data.html). No exceedances were recorded during the 2015 reporting period.
L3.3	To determine compliance with condition(s) L3.1 and L3.2: a) Airblast overpressure and ground vibration levels must be measured at any point within 1 metre of any affected residential boundary or other noise sensitive location such as a school or hospital - for all blasts carried out in or on the premises; and b) Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard 2187.2 of 1993	Compliant	Site interviews	Noted during on-site interviews that the blast monitoring location is located at the closest resident.
4	OPERATING CONDITIONS			
O1	Activities must be carried out in a competent manner			
O1.1	Licensed activities must be carried out in a competent manner. This includes: a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	Compliant	Site interviews	During the site inspection, it was noted that waste oils are serviced by Australian Waste Oils, while general waste is picked up by JR Richards and delivered to Tuncurry Waste Depot. Sediment traps in servicing areas and pumped out by JR Richards (1 in 5 year occurrence). During the site visit liquid storage facilities were sighted and located within appropriately bunded areas. During the site visit containers containing dangerous goods were noted to be on-site and appropriately stored.
O2	Maintenance 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.	Compliant	Maintenance Plan. Plant maintenance record sample. Site interviews. Pre-start checklists Documentation – Annual Return	Refer to approval Condition 14 of the Conditions of Approval provided in Appendix A.
O3	Dust			

Number	Condition	Compliance	Evidence	Comments
O3.1	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	Compliant	Site visit	Measures including use of a water cart, sprinklers on top of aggregate and hoses on the plant were sighted during the site visit to minimise/prevent the emission of dust from the premises. Refer to Condition 10 of the Conditions of Approval provided in Appendix A.
O4	Processes and management			
O4.1	The licensee must take all reasonable measures to prevent the tracking of mud and debris onto the Pacific Highway including, but not limited to, ensuring all vehicles leaving the premises pass through the vehicular wheel wash.	Compliant	Documentation – SWMP Site visit Site interviews.	Section 5.1.5 of the SWMP notes that a weighbridge and wheel wash system is located on the main access road, with the wheel wash system activated by a sensor and cycling for 15 seconds each time a truck travels over the weighbridge; thereby ensuring all truck wheels are cleaned and free of sediment and dust before leaving the site. Sighted wheel wash system during site visit and it was noted during site interviews that a street sweeper from Nabiac is used on the quarry intersection.
5	<i>MONITORING AND RECORDING CONDITIONS</i>			
M1	Monitoring records			
M1.1	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.	Noted		
M1.2	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.	Compliant	Site visit Site inspections Documentation – Blasting and Dust Deposition Monitoring	VGT conduct water quality monitoring where discharge is required from the Main Dam licenced discharge point. Water quality monitoring records were sighted and were legible.
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	Compliant	Site visit Site inspections Documentation – Blasting and Dust Deposition Monitoring	VGT conduct water quality monitoring where discharge is required from the Main Dam licenced discharge point. Holcim rely on a chain of custody sheet as evidence of sampling records. An example of a VGT chain of custody sheet was sighted for 15/04/2016 for dust monitoring data. Recommendation 18: Prepare a field record sheet for environmental monitoring rather than use the chain of custody and include the field sheet as an Appendix to the SWMP.
M2	Requirement to monitor concentration of pollutants discharged			

Number	Condition	Compliance	Evidence	Comments																
M2.1	<p>For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:</p> <p>M2.2 - Water and/ or Land Monitoring Requirements</p> <p>Point 1</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>pH</td> <td>pH</td> <td>Each overflow event</td> <td>Grab sample</td> </tr> <tr> <td>Total suspended solids</td> <td>Milligrams per litre</td> <td>2 times daily during discharge</td> <td>Grab sample</td> </tr> <tr> <td>Turbidity</td> <td>Nephelometric turbidity units</td> <td>2 times daily during discharge</td> <td>Grab sample</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	pH	pH	Each overflow event	Grab sample	Total suspended solids	Milligrams per litre	2 times daily during discharge	Grab sample	Turbidity	Nephelometric turbidity units	2 times daily during discharge	Grab sample	Compliant	Documentation – Monitoring Results	Review of monitoring results for the one discharge undertaken during the 2015 Reporting Period indicates compliance (http://www.holcim.com.au/sustainability/environment/pollution-monitoring-data.html).
Pollutant	Units of measure	Frequency	Sampling Method																	
pH	pH	Each overflow event	Grab sample																	
Total suspended solids	Milligrams per litre	2 times daily during discharge	Grab sample																	
Turbidity	Nephelometric turbidity units	2 times daily during discharge	Grab sample																	
M3	Testing methods – concentration limits																			
M3.1	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.	Not verified	Documentation – SWMP	The monitoring method for water quality monitoring was not reviewed as part of the audit.																
M4	Weather monitoring																			
M4.1	<p>Rainfall at the premises must be measured and recorded in millimetres per 24 hour period, at the same time each day.</p> <p>Note: The rainfall monitoring data collected in compliance with the above condition will assist in interpreting the effectiveness of stormwater management at the quarry.</p>	Compliant	Site visit Documentation – Rainfall register	Rain gauge sighted during the site inspection. Holcim maintain a rainfall register.																
M5	Recording of pollution complaints																			
M5.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	Not Triggered	N/A	Not applicable, no complaints were received during the 2015 Reporting Period.																
M5.2	<p>The record must include details of the following:</p> <ol style="list-style-type: none"> the date and time of the complaint; the method by which the complaint was made; any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; the nature of the complaint; 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. 	Not Triggered	N/A	Not applicable, no complaints were received during the 2015 Reporting Period.																
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Not Triggered	N/A	Holcim advised that no complaints have been received.																
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.	Noted	N/A																	
M6	Telephone complaints line																			
M6.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	Compliant	Documentation – EMS	<p>Section 7.3.2 of the EMS notes:</p> <p>“All community inquiries and complaints related to the Quarry’s activities will be referred to the Jandra Quarry Manager (0429 790 627). A postal address (Level 8, 799 Pacific HWY, Chatswood, NSW) and on the Holcim website (www.holcim.com.au) that provides for receipt of complaints and enquiries.”</p>																

Number	Condition	Compliance	Evidence	Comments
M6.2	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.	Compliant	Documentation – Holcim website	Environmental or community enquiries line details sighted on Jandra/Holcim website.
M6.3	The preceding two conditions do not apply until 3 months after: a) the date of the issue of this licence or b) b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.	Not Triggered	N/A	Not applicable.
6	REPORTING CONDITIONS			
R1	Annual return documents			
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: a) a Statement of Compliance; and b) a Monitoring and Complaints Summary. 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.	Compliant	Documentation – Annual Return Site interviews	Annual Returns held centrally by the environment team for NSW. Anniversary date being end of start of April. Annual Return for 1 May 2014 to 30 April 2015 sighted.
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below. 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.	Compliant	Documentation – Annual Return Site interviews	Annual Return for 1 May 2014 to 30 April 2015 sighted.
R1.3	Where this licence is transferred from the licensee to a new licensee: 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 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.	Not Triggered	N/A	Not applicable.
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: a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or b) b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.	Not Triggered	N/A	Not applicable.
R1.5	The Annual Return for the reporting period must be supplied to the EPA 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').	Compliant	Documentation – Annual Return	Annual Return for 1 May 2014 to 30 April 2015 sighted, with the Annual Return submitted 23 June 2015; within the 60 day period required.
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.	Not Verified	Documentation – Annual Return	Annual Return for 1 May 2014 to 30 April 2015 sighted; however, copies for the last 4 years have not been sighted.
R1.7	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	Compliant	Documentation – Annual Return	Annual Return for 1 May 2014 to 30 April 2015 sighted, signed by Director and Company Secretary.
R1.8	A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence	Compliant	Documentation – Annual Return	Annual Return for 1 May 2014 to 30 April 2015 sighted, signed by Director and Company Secretary.
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.	Not Triggered	N/A	Not applicable, 2015 Annual Review indicates there were no incidents during the audit period.

Number	Condition	Compliance	Evidence	Comments
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	Not Triggered	N/A	Not applicable, 2015 Annual Review indicates there were no incidents during the audit period.
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.	Not Triggered	N/A	Not applicable, 2015 Annual Review indicates there were no incidents during the audit period.
R3	Written report			
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: <ul style="list-style-type: none"> 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.	Not Triggered	N/A	Not applicable, not request for a written report received.
R3.2	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.	Not Triggered	N/A	Not applicable, not request for a written report received.
R3.3	The request may require a report which includes any or all of the following information: <ul style="list-style-type: none"> 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. 	Not Triggered	N/A	Not applicable, not request for a written report received.
R3.4	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.	Not Triggered	N/A	Not applicable, not request for a written report received.
7	GENERAL CONDITIONS			
G1	Copy of licence kept at the premises or plant			
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	Compliant	Site visit Documentation – EPL	Kept in hard copy in a permit compliance folder on-site. Sighted during the site inspection.
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Compliant	Site interview	EPA visited for a visual walk around in regard to the risk based auditing fees on 15/03/2016. Licence was available for inspection
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Compliant	Site visit Documentation – EPL	Kept in hard copy in a permit compliance folder on-site. Sighted during the site inspection.
G2	Other general conditions			

Number	Condition			Compliance	Evidence	Comments
G2.1	Completed Pollution Studies and Reduction Programs (PRPs)			Compliant		Noted. Sighted the wheel wash during the site inspection.
	PRP	Description	Completed			
PRP 1: Installation and Use of a Wheel Wash at the Premises	Construction and Utilisation of a vehicular wheel wash for all vehicles exiting the premises.	28 October 2011				

Appendix C – Agency correspondence for the audit



Ashley Robinson
Lead Environmental Auditor
GHD Pty Ltd
By email: Ashley.Robinson@ghd.com

Contact Hannah Grogan
Phone (02) 4904 2616
Email hannah.grogan@dpi.nsw.gov.au
Our ref ER21809

Dear Ms Robinson

Jandra Quarry Independent Environmental Compliance Audit

Thank you for the opportunity to comment on the planned independent environmental compliance audit of Jandra Quarry.

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

- Compliance with conditions of consent;
- Compliance with the statements of commitments as appended to the consent;
- Compliance with any reporting or management requirements within any relevant management plans prepared under the consent.

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

- Assessment as to whether the project holds the required water entitlements, approvals and licenses under the *Water Management Act 2000* or *Water Act 1912* (as applicable);
- Compliance with the conditions of any water licenses/approvals held.

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

- Do the relevant management plans adequately describe the water licensing requirements under the *Water Management Act 2000/Water Act 1912*, and compliance with these requirements?
- Are adequate records kept to enable determination of the volume and source of surface and groundwater taken?
- Is the operation capturing and/or harvesting any clean water?
- Has the proponent calculated its maximum harvestable right under the *Water Management Act 2000*?
- Is the capture of water in excess of the harvestable right?
- Do any exemptions under the *Water Management (General) Regulation 2011* or Harvestable Rights Order (gazetted 31 March 2006) apply to the capture of water?
- If necessary, does the proponent hold water access licenses in the correct water sources under the relevant water sharing plan (for the take of surface water or alluvial groundwater),

or licences under part 5 of the *Water Act 1912* (for the take of groundwater from non-alluvial aquifers), and do they hold sufficient quantity of entitlement under these licenses?

I trust this information is of assistance. If you wish to provide any feedback on the style, detail, or utility of this advice, I would be pleased to receive it via the contact details specified above.

Yours sincerely



Hemantha De Silva
Senior Water Regulation Officer (Projects)
11 May 2016

Ashley Robinson

From: Ashley Robinson
Sent: Tuesday, 17 May 2016 8:10 PM
To: Lidbetter, Daniel (daniel.lidbetter@lafargeholcim.com)
Cc: matt.neil@lafargeholcim.com; david.saville@lafargeholcim.com; Elliot Holland
Subject: FW: Jandra Quarry Audit

Hi Dan,

Please see comments from Greater Taree City Council. We will discuss these comments during the audit.

Regards

Ashley Robinson
Principal Environmental Scientist

GHD

T: +61 2 9239 7089 | V: 217089 | M: 0405 480 070 | E: ashley.robinson@ghd.com
Level 15 133 Castlereagh Street Sydney NSW 2000 Australia | www.ghd.com

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From: Arna Fotheringham [<mailto:Arna.Fotheringham@gtcc.nsw.gov.au>]
Sent: Tuesday, 17 May 2016 5:20 PM
To: Ashley Robinson
Subject: Jandra Quarry Audit

Ashley

In addition to the comments submitted to your by Council's Development Engineer regarding the SWMP and condition 19, I provide further comments from relevant Officers

Senior Health and Building Surveyor Georgina Martin – Condition 20

I have located 2 applications for approval to operate an existing OSSM System for the owner Holcim (Australia) Pty Ltd as follows:

1. *Property 15286 lot 14 DP 7900516 Pacific Hwy Possum Brush(PIN 19477) is the location of Jandra Quarry now in the name of Holcim. A council officer carried out an OSSM Enforcement inspection in 2004. The inspection revealed that a Domestic Aerated wastewater treatment system is installed to service the Amenities block. The system has and continues to be serviced by R & G Dobbs Wastewater Treatment and Service repairs. Council has not issued an Approval to operate the system. It is therefore recommended that an Audit review is carried out on the system by a suitably qualified wastewater Consultant to determine that the existing system is adequately designed and posing no risk to the environment and public health. A copy of the report should be submitted to Council for review along with an application under section 68 of the Local Government Act 1993 for Approval to operate the Onsite Sewage Management System.*
2. *Property 15312 lot 15 DP 790056 Pacific Hwy Possum Brush(PIN19451) is the adjoining property also owned by Holcim. No Council inspection on the existing OSSM has been carried out. It is also recommended that an audit review of the existing system is carried out by a suitably qualified wastewater consultant. A copy of the report shall be submitted to Council along with and an application under section 68 of the Local Government Act 1993 for an approval to operate the OSSM System.*

Environmental Officer Sharon Rose – Condition 25

Previously ...

8/1/16 – review of the Biodiversity & Rehabilitation Management Plan, comments and one recommendation provided to Arnna, which noted the fauna protection methods during tree felling were outdated and could be updated. See attached comments with recommendation, which was attached to Arnna's email to Ian Shenton.

12/1/16 – Arnna forwarded comments and recommendation to Ian Shenton

12/1/16 – Ian Shenton replied to Arnna "Thanks for the response Arnna. The proposed inspection methods look interesting (and effective!). I'll have a chat to our Quarry Manager about the feasibility of an activity like this. Keep you posted. Regards, Ian"

Since then ...

No further information has been provided other than letter to Arnna on 7/5/16.

No updated/amended Biodiversity & Rehabilitation Management Plan has been received for review and comment.

Suggestion ...

The independent consultant could ask Ian Shenton if the recommendation provided by Arnna via email on 12/1/16 has been/will be incorporated into the Plan, or another action taken. Then advise Council accordingly. If the Plan has been amended we are happy to review. If the Plan hasn't been updated, we would like to know why not and how they are going to protect fauna from harm during tree felling.

If you require anything further please contact me to discuss.

Regards

Arnna Fotheringham
Development Planner | Regulatory Services

t: 02 6592 5247 | m: 0428 293 416

e: arnna.fotheringham@gtcc.nsw.gov.au | w: www.gtcc.nsw.gov.au

MidCoast Council

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Ashley Robinson

From: Ashley Robinson
Sent: Wednesday, 11 May 2016 6:46 PM
To: Lidbetter, Daniel (daniel.lidbetter@lafargeholcim.com)
Cc: matt.neil@lafargeholcim.com; Elliot Holland
Subject: FW: Jandra Independent Environmental Audit - request for Comment

Dan,

Please see email from OEH below in regards to our request for comment. No further action is required.

Regards

Ashley Robinson
Principal Environmental Scientist

GHD

T: +61 2 9239 7089 | V: 217089 | M: 0405 480 070 | E: ashley.robinson@ghd.com
Level 15 133 Castlereagh Street Sydney NSW 2000 Australia | www.ghd.com

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From: Steve Lewer [mailto:Steve.Lewer@environment.nsw.gov.au]
Sent: Wednesday, 11 May 2016 11:03 AM
To: Ashley Robinson
Cc: Richard Bath
Subject: RE: Jandra Independent Environmental Audit - request for Comment

Dear Ashley

OEH is unable to provide a detailed reply in the time-frame provided, nor is it necessary. OEH can confirm that Holcim has been in consultation with OEH on both the two conditions, albeit after the specified deadlines noted in the approval conditions.

- On 31 March 2016 Holcim & OEH discussed the offset strategies and the possibility of retiring appropriate biodiversity credits from a registered BioBanking site. At present OEH supports the latter approach, though if either one of the proposed methods in the condition (Condition 23) be achieved we would support these.

- With respect to the *Biodiversity and Rehabilitation Management Plan* (Condition 25), Holcim requested comment in December 2015 (well after the August 2015 deadline in Condition 25) and OEH provided a written response on 10 December 2015 acknowledging consultation. In this correspondence we stated: '*The Office of Environment and Heritage (OEH) encourages the development of such plans to ensure that proponents have determined how they will meet their statutory obligations and designated environmental objectives. However, OEH does not approve or endorse these documents as our role is to set environmental objectives for environmental/conservation management, not to be directly involved in the development of strategies to achieve those objectives. OEH acknowledges Holcim's requirement to consult with relevant government agencies and considers that you have consulted with OEH through providing this document*'.

If you require any further information or require clarification of the above points please call or email me.

Regards Steve

Steve Lewer
Regional Biodiversity Conservation Officer – Hunter / Central Coast Region
Hunter Central Coast Region
Regional Operations Group
Office of Environment and Heritage
Level 4, 26 Honeysuckle Drive
NEWCASTLE
Locked Bag 1002 Dangar NSW 2309

T: 4927 3158
M: 0459 082 162
Email: steve.lewer@environment.nsw.gov.au
W: www.environment.nsw.gov.au

From: Ashley Robinson [<mailto:Ashley.Robinson@ghd.com>]
Sent: Tuesday, 10 May 2016 7:33 PM
To: Steve Lewer
Cc: Richard Bath; Lidbetter, Daniel (daniel.lidbetter@lafargeholcim.com)
Subject: Jandra Independent Environmental Audit - request for Comment

Hi Steve,

GHD has been engaged by Holcim (Australia) Pty Ltd to undertake an independent audit of the Jandra Quarry operations. The audit requires consultation with relevant agencies and as such we are requesting comment from OEH with regard to those conditions relevant to Council.

I have attached a letter requesting comment by 18 May 2016. If I don't hear from OEH prior to this date we will assume that you have no comments.

If you have any queries, please give me a call.

Regards

Ashley Robinson
Principal Environmental Scientist

GHD

T: +61 2 9239 7089 | V: 217089 | M: 0405 480 070 | E: ashley.robinson@ghd.com
Level 15 133 Castlereagh Street Sydney NSW 2000 Australia | www.ghd.com

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Document Status

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
A	E Holland, A Robinson	M Pignatelli	MP*	A Robinson	AR*	21/6/16
B	E Holland, A Robinson	D Lidbetter (Holcim)		A Robinson	AR*	27/6/16
0	E Holland, A Robinson	M Pignatelli	MP*	A Robinson	AR*	28/6/16

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