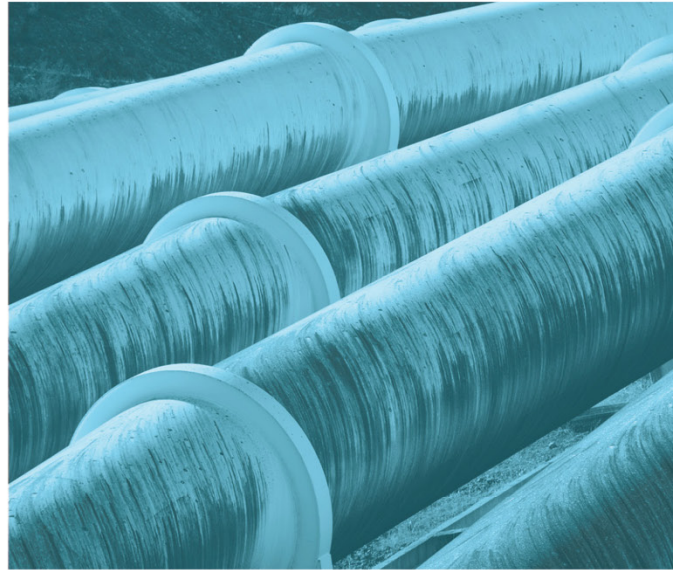




Lynwood Quarry

Independent Environmental Audit

Prepared for Holcim (Australia) Pty Ltd
March 2019





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Lynwood Quarry

Independent Environmental Audit

Prepared for Holcim (Australia) Pty Ltd | 19 March 2019

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Lynwood Quarry

Final Report

Report J17138RP1 | Prepared for Holcim (Australia) Pty Ltd | 19 March 2019

Approved by **Dr Philip Towler**

Position Associate Director

Signature



Date 19 March 2019

This report has been prepared in accordance with the brief provided by the client and has relied upon the information collected at the time and under the conditions specified in the report. All findings, conclusions or recommendations contained in the report are based on the aforementioned circumstances. The report is for the use of the client and no responsibility will be taken for its use by other parties. The client may, at its discretion, use the report to inform regulators and the public.

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Document Control

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V1	28/11/2018	P. Towler T. Amanovic	P. Towler
V2	19/3/2019	P. Towler	P. Towler



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Independent Audit Declaration Form

Project name	Lynwood Quarry
Consent number	DA 128-5-2005
Description of project	Lynwood hard rock quarry and associated infrastructure
Project address	Unnamed Road, Marulan NSW 2579
Proponent	Holcim (Australia) Pty Ltd
Title of audit	Lynwood Quarry Independent Environmental Audit
Date	19 March 2019
<p>I declare that I have undertaken the Independent Audit and prepared the contents of the attached Independent Audit Report and to the best of my knowledge:</p> <ul style="list-style-type: none"> the audit has been undertaken in accordance with relevant approval condition(s) of consent and in accordance with the <i>Independent Audit Post Approval Requirements</i> (Department 2018); the findings of the audit are reported truthfully, accurately and completely; I have exercised due diligence and professional judgement in conducting the audit; I have acted professionally, objectively and in an unbiased manner; I am not related to any proponent, owner or operator of the project neither as employer, business partner, employee, or by sharing a common employer, having a contractual arrangement outside the audit, or by relationship as spouse, partner, sibling, parent or child; I do not have any pecuniary interest in the audited project, including where there is a reasonable likelihood or expectation of financial gain or loss to me or spouse, partner, sibling, parent or child; neither I nor my employer have provided consultancy services for the audited development that were subject to this audit except as otherwise declared to the Department prior to the audit; and I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from fair payment for auditing services) from any proponent, owner or operator of the project, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so. <p>Note:</p> <p>a) Under section 10.6 of the <i>Environmental Planning and Assessment Act 1979</i> a person must not include false or misleading information (or provide information for inclusion in) in a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is false or misleading in a material respect. The proponent of an approved project must not fail to include information in (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is materially relevant to the monitoring or audit. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000; and</p> <p>b) The <i>Crimes Act 1900</i> contains other offences relating to false and misleading information: section 307B (giving false or misleading information – maximum penalty 2 years imprisonment or 200 penalty units, or both).</p>	
Name of auditor	Dr Philip Towler
Signature	
Qualification	BSc (Hons), PhD
Company	EMM Consulting Pty Limited
Company address	Ground Floor, Suite 01, 20 Chandos Street, St Leonards NSW 2065

1 Introduction

EMM Consulting Pty Limited (EMM) has been commissioned to undertake an independent environmental audit (audit) of the Holcim (Australia) Pty Limited (Holcim) Lynwood Quarry (the quarry), located close to Marulan in the Southern Tablelands region of New South Wales (NSW).

This audit is required to fulfil the requirements of Condition 11, Schedule 5 of the Development Consent DA 128-5-2005 issued by the NSW Department of Planning and Environment (DPE) on 21 December 2005 (referred to as DA 128-5-2005).

The audit period is from 22 October 2014 to 9 January 2018. The audit comprised a desktop analysis and site audit components.

1.1 Overview of the quarry

The quarry was approved by the Minister for Planning on 21 December 2005, DA 128-5-2005 which includes the construction and operation of a 5 million tonne per annum (mtpa) hard rock quarry. Since the original development approval, five modifications have been made to the DA 128-5-2005, including reconfiguration of the rail load out and site facilities to optimise site infrastructure and layout.

The legal property description for the site is given in Table 1.1.

Table 1.1 Legal description of the site

Deposited plan (DP)	Lot number	Owner
750029	112	Holcim
750029	230	Holcim
750029	294	Holcim
700579	10	Holcim
1025603	7001	Crown land
1025604	7002	Crown land
1036993	3-4	Holcim
1074107	1 and 3	Holcim
1074819	1	Holcim
1107232	2	Holcim
1116876	1	Essential Energy
1116876	2	Holcim
1117910	1	Holcim
196132	2-15	Holcim
758653	2-4/Section 5	Holcim
758653	1/Section 5	Crown land
758653	Part 7 and Section 1	Holcim
758653	10/Section 10	Privately owned
111641	10-11	Holcim
214304	2	Holcim
797340	1-14	Holcim
1140546	1-6	Holcim

Table 1.1 **Legal description of the site**

Deposited plan (DP)	Lot number	Owner
1112296	8	Holcim
111640	3	Holcim
1111583	1–2	Holcim
1167866	103	Roads and Maritime Service
1167866	101	Crown
1140546	6	Privately owned
1117910	2	Goulburn Mulwaree Council
1155889	1–3	Crown
1160864	7308	Crown
		Part Joarimin Creek
		Part Main Southern Railway
		Part Hume Highway
		Part Marual South Road
		Part Stoney Creek Road
		Part Jerrara Road
		Crown Land and Crown Road reserves within the DA area

1.2 Quarry activities during the audit period

At the time of EMM’s site inspection on 9 January 2018, the quarry was in the operations phase. However, a number of site components were still to be constructed.

The Annual Environmental Review report for the period 1 July 2014 to 30 June 2015 notes the following construction and commissioning activities had been completed within this period:

- 95% completion of construction activities;
- completion of cold commissioning;
- 60% completion of hot commissioning;
- initiating performance testing of plant;
- completion of the pit construction;
- total permanent employed staff was greater than 40; and
- development and implementation of safety, environment and operational procedures, processes, policies and protocols.

In May 2016, the quarry was granted modification consent to start mining an alternative aggregate resource, which resulted in a number of construction activities on site that fall within the following Annual Environmental Review reporting period, 1 July 2015 to 30 June 2016:

- construction of a haul road to the new granite pit;

- development of the granite pit to the west of the site;
- reconstruction of south aggregate stockpile;
- retractable sock placed on manufactured conveyor to assist with decreasing dust emissions during production;
- light screen finalised and tested;
- switches installed across plant and walkway strips installed to reduce lighting;
- Aboriginal area fenced to south of administrative building;
- reconstruction of drainage around scalping building;
- a pre-coat plant was installed within the infrastructure area; and
- another train was commissioned on the Lynwood rail spur.

1.3 Audit of approved quarry operations

Table 1.2 provides an overview of audited quarry operations, as approved under Modification Application DA 128-5-2005 MOD 4 and the accompanying letter, *Proposed Modification to Development Consent – Lynwood Quarry*.

Modification Application DA 128-5-2005 MOD 5 and the accompanying DPE Assessment Report (29 May 2017) concerns the retirement of biodiversity credits in accordance with the *Framework for Biodiversity Assessment – NSW Biodiversity Offsets Policy for Major Projects* (FBA) and does not entail any changes of approved quarry operations.

Table 1.2 Approved quarry operations and site inspection findings (as on 9 January 2018)

Component	Approved development (Mod 4 2016)	Site inspection findings (9 January 2018)
Quarry life	To 2038	No change
Quarry production	5 mtpa	No change
Estimated resource	145 mt of quarry products	No change
Quarrying and extraction method	Excavation, drill and blast, load and haul	No change
Processing	Crushing and screening: 3-phase crushing and screening plant to produce a range of rock products from sizes of 0.3 m diameter rock to fine manufactured sand.	No change
Product transport	Rail and road transport, transportation of up to 5 mtpa with maximum of 1.5 million tonnes a year by road.	No change
Infrastructure	<p>Processing and handling plant, pre-coat plant, site workshop, laboratory, office and administration, and staff amenity buildings, rail infrastructure, truck loading infrastructure, dams, weighbridge, and other minor infrastructure.</p> <p>Construction of a grade separated interchange with the Hume Highway, Marulan South Road and Jerrara Road, quarry access road off the Hume Highway, rail loop off the Main Southern Rail Line, and truck and train loading facilities.</p> <p>Additional haul road to service new Granite Pit, amenity bund, water management structures and other minor ancillary additions.</p>	<ul style="list-style-type: none"> • Half of the processing and handling plant has been constructed • Pre-coat plant was fully completed within the last audit period • Site workshop is complete • Laboratory is complete • Office and administration building are complete • Staff amenity buildings are complete • Truck loading infrastructure is complete • Dams are complete • Weighbridge is complete • Additional haul road is still under construction
Hours of operation	<ul style="list-style-type: none"> • Quarrying/extraction 7 am to 10 pm Monday to Sunday; • topsoil/overburden removal/emplacement/drilling 7 am to 6 pm; • processing/loading/delivery/maintenance 24 hours, 7 days a week; and • product transport 24 hours, 7 days a week. 	No change
Blasting hours	<ul style="list-style-type: none"> • 9 am to 5 pm Monday to Saturday 	Quarry's Pit Manager D. Manning confirmed during EMM's site inspection interview that blasting

Table 1.2 Approved quarry operations and site inspection findings (as on 9 January 2018)

Component	Approved development (Mod 4 2016)	Site inspection findings (9 January 2018)
		generally occurs between the hours of 10 am and 3 pm while residents are at work/school.
Operational workforce	Approximately 115 full time employees including drivers	No change
Final landform/ rehabilitation	Rehabilitation of emplacement areas and quarry benches. Final use of the quarry pit could include water storage or recreational facility, or in-pit dumping of overburden and excess product storage should the life of the quarry be extended beyond Year 30.	The quarry has a Rehabilitation and Landscape Management Plan (RLMP) in place, dated September 2016. The RLMP is used to inform ongoing rehabilitation and land management practices during the life of the quarry, as well as a conceptual decommissioning plan.
Disturbance footprint	499 hectares (ha) including development of the Granite Pit to the west of the existing approved pit and reduction of the approved pit footprint by approximately 55 ha	Using the area tool to measure the site disturbance area in NSW Government Spatial Services Six Maps, shows that the disturbance footprint is well under the approved limit.
Overburden emplacement areas	Changed from: rail, eastern and western overburden emplacement areas To: Eastern and western overburden emplacement areas no longer required. Overburden from the Granite Pit would be used to backfill the approved pit with additional overburden to be placed in a new emplacement area adjacent to the Granite Pit.	Use of the Southern Emplacement area, south of the granite pit, has commenced.
Construction	Completed initial stages of construction. Crushing and screening plant to be constructed in a staged manner. Required construction of haul road to proposed extraction area, amenity bund and water management infrastructure.	Refer to Section 1.2, which outlines construction activities undertaken within the audit period. Only about half of the approved crushing and screening plant has been constructed. The construction of the haul road to proposed extraction area, amenity bund and water management is being completed.

Source: Lynwood Hard Rock Quarry Marulan DPE Assessment Report (2005), Lynwood Quarry Granite Pit Modification (MOD 4) DPE Environmental Assessment Report (2016).

1.4 Audit objectives

This independent environmental audit is required under Schedule 5, Condition 11 of DA 128-5-2005. The development consent was most recently updated in May 2017.

The objectives of the audit are to meet the requirements of Condition 11:

By 30 September 2017, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:

- (a) be conducted by a suitably qualified, experienced, and independent team of expert whose appointment has been endorsed by the Secretary;
- (b) include consultation with relevant agencies and the CCC;
- (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 Licence (including any assessment, plan or program required under these approvals);
- (d) review the adequacy of any approved strategy, plan or program required under these approvals;
- (e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals' and
- (f) be conducted and reported to the satisfaction of the Secretary.

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

This audit has been prepared in accordance with:

- the NSW Government's (June 2018) *Independent Audit: Post-Approval Requirements* (Independent Audit PAR); and
- AS/NZS ISO 19011:2014 Guidelines for Auditing Management Systems.

1.5 Audit criteria

Audit criteria are the policies, procedures or requirements against which an action will be compared. In this case, the audit criteria are the conditions, requirements and commitments in:

- Environmental Impact Statement (EIS) for the Proposed Lynwood Quarry Marulan, Volumes 1 to 4, May 2005 (Umwelt 2005);
- Modification Application DA-128-5-2005 MOD 1 and the accompanying *Statement of Environmental Effects: Proposed Minor Modifications to Lynwood Quarry, Marulan*, January 2009 (Umwelt 2009);
- Modification Application DA 128-5-2005 MOD 2 and the accompanying *Environmental Assessment for Proposed Modifications to Lynwood Quarry, Marulan*, October 2010, (Umwelt 2010) and the response to submissions January 2011 (Umwelt 2011);

- Modification Application DA 128-5-2005 MOD 3 and the accompanying letter, *Holcim Lynwood DA128-5-2005; DA128-5-2005 Modification 1 and DA128-5-2005 Modification 2*, 17 June 2011 (Holcim 2011);
- Modification Application DA 128-5-2005 MOD 4 and the accompanying letter, *Proposed Modification to Development Consent – Lynwood Quarry*;
- Modification Application DA 128-5-2005 MOD 5 and the accompanying Department of Planning and Environment (DPE) Assessment Report (29 May 2017);
- Environment Protection Licence (EPL) 12939 as varied on 21 December 2016 – Lynwood Quarry;
- Water Works Approval 10WA102709 (WWA), Water Access Licence 25575 10AL102708 (WAL) and Water Use Approval 10UA119159 (WUA); and
- environmental management plans and programs required under the approvals listed above.

1.6 Audit scope

As noted in the Independent Audit PAR 2018, the minimum requirements of the audit are:

- an independent audit program, including an audit schedule (refer to Section 1.7 and audit table in Appendices A and B);
- an independent audit methodology (refer to Section 2), including selection of the auditor and any technical specialists that may be required, scope development, interviews, inspections, consultation and an evaluation of compliance; and
- an independent audit report.

The audit scope was determined in accordance with Section 3.3 of the Independent Audit PAR 2018. It has been summarised in Table 1.3, which also references each section that the particular aspect has been addressed.

Table 1.3 Audit scope

Independent Audit PAR 2018 scope requirement	Addressed
1. An assessment of compliance with:	
(a) conditions of consent applicable to the phase of the development that is being audited;	Section 1.5 Appendix A
(b) all post approval documents prepared to satisfy the conditions of consent, including an assessment of the implementation of Environmental Management Plans and Sub-plans;	Section 2.2
(c) all environmental licences and approvals applicable to the development excluding environmental protection licences issued under the <i>Protection of the Environment Operations Act 1997</i> ;	Section 1.5 Section 2.2 Appendix A & B
2. an assessment of the environmental performance of the development, including but necessarily limited to, an assessment of:	

Table 1.3 Audit scope

Independent Audit PAR 2018 scope requirement	Addressed
(a) actual impacts compared to predicted impacts documented in the environmental impact assessment;	Table 1.2 Appendix A
(b) the physical extent of the development in comparison with the approved boundary, and any potential off-site impacts;	Table 1.1 Appendix A
(c) incidents, non-compliances and complaints that occurred or were made during the audit period;	Section 5 Appendix A & B
(d) the performance of the development having regard to agency policy and any particular environmental issues identified through consultation carried out when developing the scope of the audit;	Section 5.4
(e) feedback received from the Department, and other agencies and stakeholders, including the community or Community Consultative Committee, on the environmental performance of the project during the audit period;	Section 2.4 Section 5.4
3. the status of implementation of previous Independent Audit findings, recommendations and actions (if any);	Table 4.1 Table 4.2
4. a high-level review of the project’s environmental management systems (if any), including assessment of any third party certification of them, the type, nature and scope of the systems having regards to the nature and scale of the development, and the implementation of the systems. It is not expected that an Independent Audit compromises a management system audit, however any key deficiencies identified in the system should be discussed;	Section 3.1 Section 3.3
5. a high-level assessment of whether Environmental Management Plans and Sub-plans are adequate; and	Section 3.3 Appendix A
6. any other matters considered relevant by the auditor or the Department taking into account relevant regulatory requirements and legislation and knowledge of the development’s past performance.	There were no other matters that required consideration.

This audit covers the activities undertaken by Holcim and its contractors, relating to the quarries that are referred to in the regulatory approvals listed above.

1.7 Audit schedule

This is the third independent environmental audit for the quarry. Reports for the previous two audits are available on Holcim’s website.

This audit needed to be commissioned by 30 September 2017 as per Schedule 5, Condition 11 of DA 128-5-2005. An independent environmental audit is now required every 3 years, unless the Secretary directs otherwise.

This audit was commissioned prior to 30 September 2017, as required by Schedule 5, Condition 11 of DA 128-5-2005. The audit inspection could not be scheduled until 9 January 2018. This was three years and three months after the last independent audit site inspection (22 October 2014). A range of documents were collected during the audit but Holcim (Australia) needed to supply a range of further documents to allow the audit to be completed. These were provided in April 2018, October and November 2018. The delays were due to the personal circumstances of members of the auditing team that meant that they

were unable to assist with the audit for long periods. This was exacerbated by the departure of key personnel from Holcim which delayed the Holcim review of the draft audit report and the provision of the final audit evidence. The audit was finalised within one week of receiving this final information.

This resulted in the audit report being completed well after the 12-week requirement specified in Schedule 5, Condition 12 of DA 128-5-2005.

We understand that Holcim (Australia) liaised with DPE regarding some of these delays.

2 Audit methodology

2.1 Audit team roles, responsibilities and competence

The audit team was made up of representatives of Holcim and EMM.

2.1.1 Holcim audit team

Ms A. White is the senior environment and community liaison at the quarry. She was responsible for driving and monitoring the site's environmental performance, implementing management plans and providing advice on complying with the conditions of consent. Ms White was the key Holcim contact involved in the audit. Ms White reported Mr G. Sibenaler, Lynwood Quarry Manager. Ms White left Holcim in February 2019 prior to the completion of the audit. Mr R. Savage, Lynwood Quarry Works Manager, assisted with the review of the draft audit report and provision of final audit evidence.

2.1.2 EMM audit team

The lead auditor and audit report author was EMM Associate Director, Dr P. Towler. He has 20 years experience in managing environmental programs. He has expertise in the preparation of environmental and social impact assessments; conducting environmental audits and due diligence reviews; and preparing environmental management plans for resources projects around Australia and internationally. He has led independent environmental audits in NSW since 2012.

EMM Environmental Scientist, Ms T. Amanovic provided support to the lead auditor.

No technical specialists were required for the audit.

The EMM audit team was endorsed by the Department of Planning and Environment (DPE) to undertake the audit.

2.1.3 Independence of the audit team

Dr Towler and Ms Amanovic are independent of Holcim as defined by the criteria listed in Section 3.1.2 and Appendix C of the Independent Audit PAR 2018.

2.2 Approvals and documents audited

The approvals and documents audited were provided by Holcim from the commissioning of the audit through to finalisation, with some documentation updated throughout the year (2018). Given that the date on these documents falls outside of the audit period they have been marked with an asterisk (*) in this report and in the audit tables (Appendices A and B). Documents audited include, but are not limited to:

- DA-128-5-2005;
- Assessment Report (DP 2005);
- EIS for the Proposed Lynwood Quarry Marulan, Volumes 1 to 4, May 2005 (Umwelt 2005);

- Modification Application DA-128-5-2005 MOD 1 and the accompanying *Statement of Environmental Effects: Proposed Minor Modifications to Lynwood Quarry, Marulan*, January 2009 (Umwelt 2009);
- Modification Application DA 128-5-2005 MOD 2 and the accompanying *Environmental Assessment for Proposed Modifications to Lynwood Quarry, Marulan*, October 2010, (Umwelt 2010) and the response to submissions January 2011 (Umwelt 2011);
- Modification Application DA 128-5-2005 MOD 3 and the accompanying letter, *Holcim Lynwood DA128-5-2005; DA128-5-2005 Modification 1 and DA128-5-2005 Modification 2*, 17 June 2011 (Holcim 2011);
- Modification Application DA 128-5-2005 MOD 4 and the accompanying letter, *Proposed Modification to Development Consent – Lynwood Quarry*;
- Modification Application DA 128-5-2005 MOD 5 and the accompanying DPE Assessment Report (29 May 2017);
- EPL 12939 as varied on 21 December 2016 – Lynwood Quarry;
- environmental management plans for the quarry including:
 - Environmental Management Strategy (Rev 3 January 2013);
 - Air Quality Management Plan (October 2016);
 - Joarimin Creek Riparian Area Management Plan (June 2011);
 - Lockyersleigh Creek Riparian Area Management Plan (June 2011);
 - Marulan Creek Riparian Area Management Plan (June 2011, 2016));
 - Rehabilitation and Landscape Management Plan (September 2016, 2018*);
 - Blast Management Plan (November 2016);
 - Noise Management Plan (September 2016);
 - Marulan Aboriginal Heritage Management Plan (2011, 2018*);
 - Waste Management and Minimisation Strategy (2017);
 - Construction Traffic Management Plan (June 2011) and Marulan Traffic Management Plan (May 2018*); and
 - Water Management Plan (September 2016, 2018*);
 - Pollution Incident Response Management Plan (September 2018*) and Pollution Incident Response Test Checklist;
- Environmental monitoring programs for the quarry including:
 - Groundwater Monitoring Program (July 2016, 2018*);

- Surface Water Monitoring Program (July 2016, 2018*);
- quarterly noise monitoring assessment reports for Quarter (Q) 1 , Q2, Q3 and Q4 2017;
- fortnightly environmental monitoring data, as published online for the following dates: 1/10/17—15/10/17, 16/10/17—30/10/17, 11/1/17—15/11/17, 16/11/17—30/11/17, 1/12/2017—15/21/17, 16/12/2017—31/12/2017;
- Annual Environmental Review reports (AER) for the period 1 July 2014 to 30 June 2015 (published September 2015), for the period 1 July 2015 to 30 June 2016 (published September 2016), and an interim report covering 1 July 2016 to 31 December 2016 (published March 2017);
- Holcim’s internal INX reporting system results from the last audit period through to 9 January 2018 for environmental incidences, community complaints, breach of licence/permit reports and any other matters relating to this audit;
- Lynwood Quarry Organisational Chart;
- documentation relevant to Aboriginal and European heritage;
- documentation relevant to biodiversity credits, offsets and bonds;
- community newsletters;
- shift changeover reports;
- waste disposal evidence;
- gas pipeline protection documentation;
- agency consultation responses for this audit period; and
- relevant agency and community correspondence regarding quarry operations and above-listed documentation.

EMM would have also audited the water licences WWA 10WA102709, WAL 25575 10AL102708 and WUA 10UA119159. However, Ms White advised that the water licences are currently not in use. No further information was provided in regards to these water licences.

2.3 Inception meeting/teleconference

At Holcim’s request, the inception meeting/teleconference was held for this audit at the start of the site inspection.

2.4 Agency consultation

Schedule 5, Clause 11(b) of DA-128-5-2005 requires that the audit “include consultation with the relevant agencies and the Community Consultative Committee (CCC)”. In addition, Section 3.2 of the Independent Audit PAR 2018 requires that the auditor must consult with DPE and other agencies and stakeholders, including the CCC, to obtain their input into the scope of the audit.

Accordingly, letters were sent by email to government agencies and the Chair of the CCC between 17 and 21 November 2017 requesting comment on the compliance of the quarry with approval and conditions of consent. Letters were sent to the following agencies/stakeholders:

- DPE;
- NSW Environment Protection Authority (EPA);
- NSW Roads and Maritime Services (RMS);
- NSW Department of Primary Industries (DPI) – Crown Lands and Water (DPI Crown Lands and Water);
- DPI – Fisheries;
- NSW Office of Environment and Heritage (OEH);
- DPE – Division of Resources and Geoscience, Geological Survey of New South Wales (GSNSW);
- Heritage Council of NSW (Heritage Council);
- WaterNSW;
- Goulburn Mulwaree Council (Council); and
- Brendan Blakeley, Director, Elton Consulting – the quarry’s CCC Chair.

Eight agencies responded to agency consultation letters, with their comments and audit responses reported in Section 5.4 and provided in Appendix D. No comments were received from EPA, RMS and DPI Crown Lands and Water.

2.5 Site inspection

A full day site inspection was undertaken by Dr Towler and Ms Amanovic on 9 January 2018. They were escorted by Ms White and Mr J. Scott, Graduate. The site inspection included interviews with a number of site personnel (as listed below), a review of the environmental files (electronic hardcopies), requests for further documentation held on site and an inspection of the entire quarry site.

The following site personnel were interviewed during the audit:

- Mr D. Manning, Pit Manager;
- Mr S. Mossie, General Manager NSW Aggregates;
- Mr J. McKellar, Maintenance Manager; and
- Mr G. Rippon, Acting Quarry Manager.

2.6 Interviews

During the interviews with the above site personnel, the following items were discussed:

- their role;
- their environmental responsibilities;
- their environmental reporting responsibilities;
- their understanding of environmental issues at the site; and
- their understanding and responsibilities as relevant to the DA-128-5-2005.

2.7 Request for information

A request for information (RFI) was issued on 7 February 2018 seeking additional input from Holcim. The RFI included items not covered or provided during the site audit.

While a partial response was received on 24 April 2018, most documentation was received mid-October and early November 2018 (due to circumstances discussed in Section 1.7).

2.8 Draft report

The results of the audit were documented in a draft audit report. The draft audit report was provided to Holcim on 27 November 2018 for review and comments prior to finalisation.

2.9 Report finalisation

The report was finalised with consideration of comments received from Holcim on 12 March 2019.

2.10 Closing meeting

A closing meeting (teleconference) was held on 2 November 2018 following provision of the draft audit compliance tables on 24 October 2018. The meeting was attended by Ms White, Dr Towler and Ms Amanovic. The draft audit compliance table findings and recommendations were discussed.

2.11 Assessment criteria and method of reporting

The compliance assessment criteria adopted for this audit is in accordance with the compliance status descriptors provided within the Independent Audit PAR 2018. The compliance status descriptors are summarised in Table 2.1.

Table 2.1 **Compliance status descriptors**

Assessment	Criteria
Compliant	Where the auditor has collected sufficient verifiable evidence to demonstrate that all elements of the requirement have been complied with within the scope of the audit.
Non-compliant	The auditor has determined that one or more specific elements of the conditions or requirements have not been complied with within the scope of the audit.
Not triggered	A requirement has an activation or timing trigger that has not been met at the time when the audit is undertaken, therefore an assessment of compliance is not relevant.

The content of this audit report and the method of reporting is consistent with the Independent Audit PAR 2018.

3 Audit context

3.1 Holcim environmental systems

Holcim operates a national incident reporting system, referred to as INX, which is linked to Holcim's head office in Switzerland. Holcim advised that in the INX reporting system covers all aspects of Holcim's operations, including environmental incidences, community feedback and complaints, near exceedance events and any other matters relating to operations across all Holcim sites. Incidences are allocated a rating based on the level of severity, and tracked through the INX system from the date of the incident to the action taken to remedy the incident.

Emissions resulting from machinery and truck use are monitored online through a database named 'Visionlink', which provides reporting back to its manufacturer (eg Caterpillar).

A review of Holcim environmental systems indicates that internal processes are adequate for reporting purposes. The environmental management plans were also reviewed as part of this audit. They are generally high quality documents addressing all of the relevant matters. Recommendations have been made regarding the ongoing review and updating of these plans.

3.2 Site management

The Lynwood Quarry was in constructions and operations phases during the audit period. The major earthworks component of the construction was largely completed during the audit period. The majority of infrastructure, that is to be built during the current operational stage (ie prior to expansion to full approved capacity), was completed during the audit period. The site is generally well managed with the majority of the reported non-compliances relate to documentation or short-term incidents as opposed to systemic management issues.

3.3 Environmental management plans

The following environmental management plans for the site have been approved by the Secretary of DPE (the Secretary):

- Environmental Management Strategy (2013);
- Traffic Management Plan (2018);
- Noise Management Plan (2016);
- Blast Management Plan (2016);
- Air Quality Management Plan (2016);
- Waste Management and Minimisation Strategy (2017);
- Rehabilitation and Landscape Management Plan (2018);
- Riparian Area Management Plan Lockyersleigh Creek Catchment (2011);
- Riparian Area Management Plan Marulan Creek Catchment Area (2011);

- Riparian Area Management Plan Joarimin Creek Catchment (2011); and
- Pollution Incident Response Management Plan (2018).

The following environmental management plans and programs are currently in draft and awaiting final approval by the Secretary:

- Water Management Plan (2018), including the Groundwater Monitoring Program (2018) and Surface Water Monitoring Program (2018); and
- Aboriginal Heritage Management Plan, Caring for Country (2018).

A number of environmental management plans still need to be updated following the latest modification to DA 128-5-2005. A high-level assessment of the environmental management plans shows that they were prepared following legislative, DA 128-5-2005, and/or EPL 12939 requirements. Appendix A and Appendix B provide the audit tables, which also cover conditions relevant to each environmental management plan listed above.

3.4 Land use

The predominant land use surrounding the quarry is agriculture, primarily cattle grazing. There are residential and light industrial areas approximately 1 km north-east and one hard rock quarry approximately 2 km north of the site. Holcim's Johnniefields Quarry, which is also located approximately 2 km north of the site, was recently closed. The Hume Highway runs along the site's eastern boundary.

3.5 Environmental

The quarry area is characterised by undulating ridges and shallow valleys. Elevation ranges from 630 m near Joarimin Creek to 710 m in the north. Major waterways are Joarimin and Lockyersleigh creeks, which drain to the Wollondilly River, and Marulan Creek which drains to the Shoalhaven River.

The majority of the quarry area was cleared of native vegetation when it was used for grazing. However, there are some areas of remnant vegetation in the on the site.

3.6 Social

The site is about 2 km from the Marulan town centre. Marulan is the largest town in the 'rural north' census collection district of the Goulburn Mulwaree Local Government Area (LGA) (ABS 2011). The LGA has a population of 29,609 people (ABS 2016a). The population of Marulan is 1,178 people (ABS 2016b).

3.7 Approved quarry operations

The key aspects of the approved quarry operations are summarised in Table 1.2.

4 Previous audit findings

4.1 Previous audit findings

As per Independent Audit PAR 2018 requirements, the status of implementation of previous independent Audit findings, recommendations and actions are included in Table 4.1.

Table 4.1 Previous audit non-compliance summary and status update as per 2018 audit

Condition number	Condition description	Compliance status (as per 2014 audit)	Comments and recommendations	Status update (2018 audit)
1	<p>Schedule 2 General Administrative Conditions</p> <p>Obligations to Minimise Harm to the Environment</p> <p>The Applicant shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development</p>	NC2	<p>A wide range of measures to prevent and/or minimise any harm to the environment that may result from the construction have been implemented. Exceptions are noted as part of this audit.</p> <p>During the site inspection, the site was generally well maintained and tidy.</p> <p>Small amounts of litter were observed on site. This was largely within the processing area.</p> <p>Recommendation 1: All litter is removed from the site and additional measures are implemented within the processing area to ensure litter is not generated.</p>	<p>Compliant</p> <p>A wide range of measures to prevent and/or minimise any harm to the environment that may result from the operation have been implemented.</p> <p>During the audit inspection, the site was generally well maintained and tidy.</p>
4A	<p>Terms of approval</p> <p>Within 3 months of any modification of this consent, unless otherwise agreed to by the Director-General, the Applicant shall review and, if necessary, revise the strategies, plans and programs required under this consent to the satisfaction of the Director-General.</p>	NC2	<p>The Director-General (now Secretary) required amendments to Water Management Plan and Rehabilitation and Landscape Management Plan. These have been submitted but there is no evidence that they have been approved.</p> <p>Recommendation 3: The Water Management Plan and Rehabilitation and Landscape Management Plan are finalised in consultation with DPE.</p>	<p>This condition has been updated and reworded since the last audit.</p> <p>Refer to Section 3.3 regarding the status of environmental management plans on site.</p>
1	<p>Schedule 3 Specific Environmental Conditions</p> <p>Identification of boundaries</p> <p>Prior to carrying out any development, or as otherwise agreed by the Director-General, the Applicant shall:</p> <ul style="list-style-type: none"> • Submit a survey plan of these 	NC2	<p>Recommendation 4: Determine whether the survey was submitted to DPE. If not, the survey should be submitted.</p>	<p>Compliant</p> <p>Sighted Holcim’s letter re: DA 128-5-2005 Schedule 3, Condition 1a: Submission of surveyed extraction limit boundaries, addressed to Margaret Kirton, DPE dated October 2016.</p>

Table 4.1 Previous audit non-compliance summary and status update as per 2018 audit

Condition number	Condition description	Compliance status (as per 2014 audit)	Comments and recommendations	Status update (2018 audit)
	boundaries to the Department.			
5	<p>Noise limits</p> <p>Operating hours</p> <p>Monday – Saturday: 9 am to 5 pm</p> <p>Sunday and Public Holidays: None</p>	NC2	<p>Compliance cannot be verified from summary monitoring data. It is understood that the ‘Sampling Date’ in the monitoring summaries is when the information is entered as opposed to the date of the blast. Blast times are not provided in the publically available monitoring data.</p> <p>The blasting contractor (Maxam) provides blast reports for each blast. It is understood that these include blast monitoring results. However, these reports were not available to the auditor.</p> <p>There are no complaints regarding blasting outside of the specified hours and it is not believed that blasting occurred outside of the permitted hours but this could not be formally verified.</p> <p>Recommendation 5: Actual blast dates and times are provided with published blast monitoring records.</p>	<p>Operating hours that were audited are in Schedule 3, Condition 5 of the DA 128-5-2005.</p> <p>The proponent was Compliant against all requirements, as can be seen in Appendix A.</p> <p>Specific to blasting activities, two INX Community Complaint Records (entered into system 19 May 2016 and 21 September 2017, from two different residents) record complaints about blasting activities (with a focus on the level of noise/vibration rather than the blast time). In addition, one blasting complaint letter was sent by a community member to DPE. However, monitoring results do not indicate that criteria were exceeded.</p> <p>Pollution monitoring data provided on Holcim’s website shows that blasts mostly occur between 11am-2pm. However there were a number of entries listing “12.00am”. It is reasonable to conclude that this is a mistake as complaints would have been made if blasting occurred at midnight.</p> <p>Recommendation (REC2): all monitoring reports should be carefully checked before being issued.</p>
8	<p>Ground vibration impact assessment criteria</p> <p>Peak particle velocity (mm/s) of 25: Main Southern Railway Line Reservoir</p>	NC2	<p>With the exception of the monitoring data summary for 14/6/14 to 30/6/14, no blast monitoring data for the Main Southern Railway Reserve has been provided.</p> <p>Recommendation 7: Blast monitoring is undertaken at the Main Southern Railway Reservoir unless</p>	<p>Compliant</p> <p>Holcim have a system that tracks notification of neighbouring six properties prior to blasting activities (spreadsheet available – Neighbour blast notification register).</p> <p>No blast exceedances are reported in the AERs.</p>

Table 4.1 Previous audit non-compliance summary and status update as per 2018 audit

Condition number	Condition description	Compliance status (as per 2014 audit)	Comments and recommendations	Status update (2018 audit)
			written agreement with ARTC is reached (see Recommendation 8)	The fortnightly monitoring reports for the last three months of the audit period were examined as a sample of these reports. No exceedances were reported.
8	Peak particle velocity (mm/s) of 100: Gas Pipeline	NC2	With the exception of the monitoring data summary for 14/6/14 to 30/6/14, no blast monitoring data for the Gas Pipeline has been provided. Recommendation 8: Blast monitoring is undertaken at the Main Southern Railway Reservoir unless written agreement with ARTC is reached.	Compliant Holcim have a system that tracks notification of neighbouring six properties prior to blasting activities (spreadsheet available – Neighbour blast notification register). No blast exceedances are reported in the AERs. The fortnightly monitoring reports for the last three months of the audit period were examined as a sample of these reports. No exceedances were reported.
12	Table 6: Long term impact assessment criteria for particulate matter Total suspended particulate (TSP) matter	NC2	It is stated in the air quality monitoring program (Rev 2) that TSP will be calculated at $2.5 \times PM_{10}$ concentration but TSP is not presented in the Annual Environmental Management Review (AEMR). Recommendation 9: calculated TSP concentration are presented in future AEMRs.	Compliant Averaging annual TSP recorded in 2014/2015, 2015/2016 and 2016/2017 AERs. The annual average was below the $90 \mu\text{g}/\text{m}^3$ criterion in all recorded instances. The fortnightly monitoring reports for the last three months of the audit period were examined as a sample of these reports. No exceedances were reported. However, some data was incorrectly entered (eg results for 25/10/17). Recommendation: Refer to (REC2).
16	Pollution of waters Except as may be expressly provided by a License, the Applicant shall comply with section 120 of the <i>Protection of the</i>	NC1	Section 120 prohibition of pollution of waters: (1) A person who pollutes any waters is guilty of an offence. (2) In this section: pollute waters includes cause or	Non-compliant The 2015 AER section 7.0 (Water Management) notes that the Type C dam described in the EIS and water management plan would be

Table 4.1 Previous audit non-compliance summary and status update as per 2018 audit

Condition number	Condition description	Compliance status (as per 2014 audit)	Comments and recommendations	Status update (2018 audit)
	<i>Environment Operations Act 1997</i> during the carrying out of the development.		<p>permit any waters to be polluted.</p> <p>There was a dam overflow at Sedimentation Dams E and F starting on 16 August 2014 during a period of heavy rain. A Dam Overflow Report was prepared examining the dam discharge event. The report was provided to EPA and Sydney Water Catchment Authority and circulated with Holcim.</p> <p>The site’s Pollution Incident Response Management Plan (PIRMP) was implemented.</p> <p>The Dam Overflow report states that the dam design average return interval (ARI) was as per the Blue Book. However, the rainfall received was greater than ARI causing an overflow. The Dam Overflow report states that event monitoring started on 19 August 2014 and that water quality criteria were exceeded. The report concluded that no material harm came from dam overflow as the event was minor in nature, contributing to little water to drainage catchments. A number of mitigation measures are recommended within the report which have generally been implemented.</p> <p>Recommendation 10: given the additional measures to manage the dams (including freeboard) were implemented, no further actions are recommended.</p>	<p>insufficient to treat the fine sediments expected to run off the catchment area. An alternative dam construction was completed to meet compliance. In this reporting period, there were two overflow events. Investigation led to multiple corrective actions which were accepted the EPA.</p> <p>The 2016 AER section 7.0 (Water Management) provides surface water and groundwater data results for the reporting period. There was one dam spill resulting from above the 90th percentile rain event. Full compliance was met for freeboard requirements before the event occurred.</p> <p>The 2017 AER section 7.0 (Water Management) provides surface water and groundwater data results for the reporting period. Section 12.0 (Incidents and non-compliance) summarises a 1,500-2,000L diesel spill caused by train fuelling on site. All contamination was contained on site without any harm caused to the receiving environment. Due diligence reporting continued for 6 months.</p> <p>No further actions are recommended.</p>
21	The Water Balance shall: (b) describe measures to minimise water use by the development.		<p>The Water Management Plan (Rev 2) does not describe how to reduce water use, only describing how to recycle water.</p> <p>Recommendation 11: The next version of the Water Management Plan includes measures to minimise water use.</p>	<p>Compliant</p> <p>See:</p> <ul style="list-style-type: none"> • Water Management Plan (2011) Section 3.0 • Water Management Plan (2016) Section 3.0 • Water Management Plan (July 2018) Section 3.2 to 3.4.

Table 4.1 Previous audit non-compliance summary and status update as per 2018 audit

Condition number	Condition description	Compliance status (as per 2014 audit)	Comments and recommendations	Status update (2018 audit)
22	The Erosion and Sediment Control Plan shall: (b) identify activities that could cause soil erosion and generate sediment;		The Water Management Plan (Rev 2) does not describe activities which could cause erosion and sedimentation. Recommendation 12: The next version of the Water Management Plan identifies activities that could cause soil erosion and generate sediment.	Compliant See: <ul style="list-style-type: none"> Water Management Plan (2011) Section 4.0 Water Management Plan (2016) Section 4.0 Water Management Plan (July 2018) Section 4.0 Plans include activities that have the potential to cause erosion and generate sediment on site.
25	Review and reporting Each year from the date of this consent, the Applicant shall: (a) review, and if necessary update, the Water Management Plan; and	NC2	The Water Management Plan has not yet been updated to address minor recommendations in 2012 audit report (see Schedule 3, Conditions 21 and 22). Recommendation 13: The Water Management Plan is updated as part of the annual review specified in Section 9.0 of the plan to address audit comments.	This Condition has changed, refer to Schedule 3, Condition 20 of Appendix A for compliance status.
6	Schedule 4 Additional procedures Annual review (b) include a comprehensive review of the monitoring results and complaints records of the project over the past financial year, which includes a comparison of the results against the: <ul style="list-style-type: none"> relevant statutory requirements, limits or performance measures/criteria; monitoring results of previous financial years; and relevant predictions in the EIS.	NC2	Draft Annual Review 2013/2014 does not list results of previous financial years to compare against. Recommendation 15: Annual Review reports present the results of previous years' monitoring (eg as graphs showing all monitoring to date - or at least five years of data). Recommendation 16: Annual Review reports present the EIS predictions (eg PM₁₀ levels predicted at monitoring sites).	Compliant

Table 4.1 Previous audit non-compliance summary and status update as per 2018 audit

Condition number	Condition description	Compliance status (as per 2014 audit)	Comments and recommendations	Status update (2018 audit)
6	(d) identify any trends in the monitoring data over the life of the project;	NC2	Recommendation 17: Annual Review reports describe long-term trends (see recommendations 15 and 16).	Compliant Historical trend data generally present for air quality, surface water quality and groundwater quality presented in 2015 AER. Historical trend data generally presented for air quality in 2016 AER. No historical trend data presented in 2017 AER. However, this report only considered 6 months of data so annual trends were not provided.
6	(e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and	NC2	Considered bird droppings as potential cause of 3 dust deposition exceedances. Lists some monitoring (surface water and PM10 monitoring) not undertaken due to change of contractors in December 2013. However, comparison to EIS predictions not provided. See recommendations 15 and 16.	Compliant For example, notification of noise exceedances and missing blast information appended to 2016 AER
8A	Independent environmental audit Within 3 months of submitting a copy of the audit report to the Director-General, the Applicant shall review and if necessary revise any strategies/plan/programs required under this consent, to the satisfaction of the Director-General.	NC2	Management plans have not been updated to address all 2012 audit recommendations. Recommendation 18: The Water Management Plan (Rev 2) is updated to include measures to minimise water use and identifies activities that could cause soil erosion and generate sediment.	Refer to Section 3.3 regarding the status of environmental management plans on site.

Table 4.1 Previous audit non-compliance summary and status update as per 2018 audit

Condition number	Condition description	Compliance status (as per 2014 audit)	Comments and recommendations	Status update (2018 audit)
11	<p>Access to information</p> <p>Within 1 month of the approval of any plan/strategy/program required under this consent (or any subsequent revision of these plans/strategies/programs), the completion of the independent audits required under this consent, or the completion of the AEMR, the Applicant shall (to the satisfaction of the Director-General):</p> <p>(a) provide a copy of the relevant document/s to the Council, relevant agencies and the CCC;</p>	NC2	<p>No evidence was sighted to confirm that this has occurred. However, the CCC meeting notes for June and October 2011 are available on the website.</p> <p>Recommendation 19: Confirm that all plan/strategy/programs required under this consent have been provided to the Council and relevant agencies.</p>	This Condition is no longer a requirement of DA 128-5-2005.
11	<p>(c) put a copy of the relevant document/s on the Applicant’s website;</p>	NC2	<p>Several links to approval documents were broken. For example, the Modification 2 Response to Submissions report could not be downloaded from the website.</p> <p>Recommendation 21: That all links on the Lynwood Quarry website are fixed so that all required documents can be accessed from the website.</p>	<p>This Condition has changed to Schedule 4, Condition 13(a). While most of the condition requirements are compliant, one component is still outstanding: “ By 30 November 2016, unless otherwise agreed by the Secretary, until the completion of all works, including rehabilitation and remediation, the Applicant must make the following information publicly available on its website: a complaints register, which is to be updated on a quarterly basis.”</p> <p>Quarterly complaints registers are listed on the website for Quarter 3, 2016 to Quarter, 4 2017. However, with the exception of Quarter 4, 2017, the listings are not linked to any files. For example, there was a dust complaint on 21 September 2017 that is not provided.</p> <p>Complaints are summarised in AERs which are available on the Holcim website. This is updated</p>

Table 4.1 Previous audit non-compliance summary and status update as per 2018 audit

Condition number	Condition description	Compliance status (as per 2014 audit)	Comments and recommendations	Status update (2018 audit)
12	<p>The Applicant must ensure that an archaeological publication for the general public of Old Marulan Township incorporating the results of the archaeological programme at the site is prepared. Final design details of this publication are to be submitted to the Director of the NSW Heritage Office for approval within six months of the completion of the excavation programme. The publication is to be completed within one (1) year of the conclusion of the project unless an extension of time is approved by the Heritage Council of NSW.</p>	NC2	<p>It understood that the Heritage Office has granted an extension allowing the report to be submitted in 2015. However, written correspondence was not available.</p> <p>Recommendation 24: Holcim confirms that the Heritage Council of NSW has granted an extension of time for the submission of the heritage report detailing the results of the archaeological program and that this report is completed as soon as possible.</p>	<p>annually.</p> <p>Recommendation (REC21): The quarterly complaints register on the Holcim website is updated so that all registers are available.</p> <p>Non-compliant</p> <p>Section 6.0 of the final report is about 'Results of the Archaeological Survey and Excavation'. Section 5.0 is about 'Research Design'.</p> <p>The reporting requirements were not completed within the specified timeframes.</p> <p>The report has now been placed in the Holcim website.</p> <p>No further actions are recommended.</p>

Table 4.1 Previous audit additional recommendations and status update as per 2018 audit

Condition number	Condition description	Compliance status (as per 2014 audit)	Comments and recommendations	Status update (2018 audit)
2	<p>Schedule 2 General Administrative Conditions</p> <p>Terms of approval</p> <p>The Applicant shall carry out the development generally in accordance with the:</p> <p>(a) DA-128-5-2005;</p>	C	<p>Development is generally in accordance with DA. However, the intent to load trains at the site with material imported from Johnniefelds Quarry is ambiguous in the EIS.</p> <p>Holcim is currently loading trains on the completed rail Lynwood Quarry siding with material extracted from Johnniefelds Quarry (Photograph 5.1). Holcim reports that this material is entirely rail ballast.</p> <p>Section 3.5.2.2 of the original EIS (Umwelt 2005) states, “[t]he Lynwood Quarry rail loading facility will be able to load rail ballast via the automated train loading bins and therefore Readymix plans to cease loading of ballast at the Marulan rail siding once this facility becomes operational”. Section 2.3 of Appendix 10 of the EIS (Lynwood Quarry Noise and Blasting Impact Assessment) states “Readymix currently delivers rail ballast from its Johnniefelds quarry to a loading area in Marulan for use in rail line maintenance. This ballast loading operation is proposed to be transferred to the project areas as part of this development”. These appear to be the only mentions of the importation of material to the Lynwood site from Johnniefelds Quarry in the original EIS, subsequent modifications or the development consent.</p> <p>The intent to import ballast to the Lynwood site for loading to trains is ambiguous in the project description chapter of the original EIS</p>	Matter has been closed.

Table 4.1 Previous audit additional recommendations and status update as per 2018 audit

Condition number	Condition description	Compliance status (as per 2014 audit)	Comments and recommendations	Status update (2018 audit)
			<p>(ie in Section 3.5.2.2).</p> <p>Recommendation 2: Holcim clarifies with DPE that the intent of the project description in the EIS was to include the import rail ballast from Johnniefelds Quarry for loading to trains at the Lynwood site.</p>	
7	<p>Schedule 3 Specific Environmental Conditions</p> <p>Airblast Overpressure Criteria</p>	C	<p>2014 Draft Annual Review 2013/2014: section 4.0 states that a total of 11 blasts were recorded during the reporting period, with all undertaken during daytime hours and none were above 5mm/s allowed vibration levels. No fly rock left the site and currently there are no registered residents to be notified prior to blasting.</p> <p>No data were available to confirm that overblast criteria were met (see Schedule 5, Condition 11).</p> <p>Recommendation 6: The AEMR should make a statement regarding overpressure as well as ground vibration.</p>	<p>Compliant</p> <p>2015/2014 AER section 4.0 states that a total of 20 blasts were conducted during the 2014-2015 period with no exceedances. Table 3 of the AER provides the results of each blast and the corresponding monitoring locations. Blasting times are not provided.</p> <p>2016/2015 AER section 6.2 states that a total of 54 blasts were recorded during the reporting period. This has caused the loss of blast monitoring data for blast on dates. There were no exceedances as can be seen in Table 8 Blast Data 2015-2016. Blast records for 14/12/2015, 17/12/2015, 7/01/2016, 10/01/2016, 14/01/2016 and 21/01/2016 were not available from the blasting contractors. Appendix 2 of the AER includes Holcim’s letter (dated 26 February 2016) to Oliver Holm and Kane Winwood, DPE, regarding the lost blasting monitoring records.</p> <p>2017/2016 AER section 6.2 states that a total of 34 blasts were recorded during the reporting period, without an exceedance. Table 7. Blast data 2015-2016 shows that none were above 5mm/s allowed vibration levels. Times of blasting activities were not recorded.</p>

Table 4.1 Previous audit additional recommendations and status update as per 2018 audit

Condition number	Condition description	Compliance status (as per 2014 audit)	Comments and recommendations	Status update (2018 audit)
39	<p>Old Marulan Township</p> <p>Prior to seeking this approval, the Applicant shall undertake a detailed investigation of the archaeological potential of the proposed development area in the Old Marulan Township, including archaeological testing, to the satisfaction of the NSW Heritage Council. This archaeological investigation must clarify the nature, extent, and significance of the relics in the proposed development area.</p>	C	<p>A detailed report on the archaeological investigation into the Old Marulan Township is expected to be available in 2015. The stage 1 archaeological investigation report prepared by Rinker Australia Pty Ltd and Umwelt (Australia) Pty Ltd from 2007 is available online.</p> <p>Recommendation 14: The detailed European Heritage investigation report is finalised as soon as possible and made available on the Holcim website.</p>	Compliant

The fortnightly monitoring reports for the last three months of the audit period were examined as a sample of these reports. No exceedances were reported. However, some data was incorrectly entered (eg results for 23/10/17).
Recommendation: Refer to (REC2)

Table 4.1 Previous audit additional recommendations and status update as per 2018 audit

Condition number	Condition description	Compliance status (as per 2014 audit)	Comments and recommendations	Status update (2018 audit)
11	<p>Schedule 5 Environmental management, monitoring, auditing and reporting</p> <p>Access to information</p> <p>Within 1 month of the approval of any plan/strategy/program required under this consent (or any subsequent revision of these plans/strategies/programs), the completion of the independent audits required under this consent, or the completion of the AEMR, the Applicant shall (to the satisfaction of the Director-General):</p> <p>(b) ensure that a copy of the relevant document/s is made publicly available at the quarry</p>	O	<p>Public access to the quarry is limited but quarry contact details are on the website to request this information. Documents are available on the website but the most recent documents have not been added to the website.</p> <p>Recommendation 20: That Holcim requests that this condition be removed based on the availability of these documents on the website (Schedule 5, Condition 11(c)).</p>	This Condition has changed to Schedule 4, Condition 13. Refer to Table 4.1, response to Condition 11.
12	<p>During the life of the development, the Applicant shall (to the satisfaction of the Director-General):</p> <p>(a) make a summary of monitoring results required under this consent publicly available at the quarry and on its website; and</p>	C	<p>Monitoring results are placed on Holcim's website each fortnight. Some can be downloaded as Excel files and viewed. However, others could not be opened by the author (using Safari or Explorer web browsing programs).</p> <p>Recommendation 22: The monitoring results are all provided on the website so that they can be simply downloaded as Excel files on commonly used web browsers.</p>	This Condition has changed to Schedule 4, Condition 13. Refer to Table 4.1, response to Condition 11.
9	<p>Appendix 7: Detailed heritage conditions</p> <p>Access to information</p> <p>Throughout the archaeological excavation works and post-excavation analysis, the</p>	O	<p>The work has largely been completed. However, it would have been inappropriate to place public signage at the site which was on private land and part of a construction site due to safety concerns.</p>	<p>Compliant</p> <p>There are no signs. However, there are no appropriate publicly accessible locations to place these signs so this is considered appropriate.</p>

Table 4.1 Previous audit additional recommendations and status update as per 2018 audit

Condition number	Condition description	Compliance status (as per 2014 audit)	Comments and recommendations	Status update (2018 audit)
	<p>Applicant must ensure that:</p> <p>(a) Appropriate signage to explain the history of the site and the archaeological excavation works is placed at the site during the work</p>		<p>Recommendation 23: That the website addressing the archaeological works (see Schedule 5, Condition 9(d)) is considered to address this requirement.</p>	
M1.3	<p>EPL monitoring and recording conditions</p> <p>Monitoring records</p> <p>The following records must be kept in respect of any samples required to be collected for the purposes of this licence:</p> <p>a) the date(s) on which the sample was taken;</p> <p>b) the time(s) at which the sample was collected;</p> <p>c) the point at which the sample was taken; and</p> <p>d) the name of the person who collected the sample.</p>	C	<p>Sample times for surface water and groundwater samples were not recorded.</p> <p>Recommendation 25: All sample times and the name of the person who collected the sample are recorded with the published monitoring data.</p>	Compliant
M3.1	<p>Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:</p> <p>a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or</p> <p>b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or</p> <p>c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing</p>	C	<p>Data recorded as required in M2.1 but no methods recorded.</p> <p>Recommendation 26: Sampling methods are recorded with the monitoring data.</p>	<p>Compliant</p> <p>DPE letter to Holcim, dated 5 December 2016, which notes that Holcim has consulted with EPA during the preparation of the AQMP. The EPA is generally satisfied with the air quality monitoring suite, and as such the Secretary approves the AQMP.</p>

Table 4.1 Previous audit additional recommendations and status update as per 2018 audit

Condition number	Condition description	Compliance status (as per 2014 audit)	Comments and recommendations	Status update (2018 audit)
	<p>by the EPA for the purposes of that testing prior to the testing taking place.</p> <p>Note: The Protection of the Environment Operations (Clean Air) Regulation 2010 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".</p>			

Notes: 1. Compliance – C, Observation – O, Non-compliance – NC, Non-compliance Category 1 (NC1), Non-compliance Category 2 (NC2), Not applicable – NA.

5 2018 audit results

5.1 Overview

Compliance of the quarry with the conditions listed in DA-128-5-200, the associated Statement of Commitments and EPL 12939 is detailed in the compliance registers in Appendix A and Appendix B. As per the Independent Audit PAR 2018 requirement, the audit table provides:

- the approval or licence name;
- a unique identification number;
- the schedule and condition number for each item;
- the exact working of the compliance requirement;
- the evidence used to assess and determine whether each requirement has been complied with;
- commentary on findings and recommendations; and the compliance status based on the criteria provided in Table 2.1.

5.2 Audit results

A summary of the conditions where a non-compliance was recorded is provided in Table 5.1. A summary of recommendations that were not associated with a non-compliance is provided in Table 5.2. Photographs illustrating the condition of the site during the site inspection are provided following the tables.

Table 5.1 Non-compliance summary

Unique ID	Schedule and condition	Condition description	Comments and recommendations	Compliance
DA 128-5-2005 – development consent				
DA12	Schedule 2, Condition 9	<p>The Applicant must ensure that any 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.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for any building works. • Part 8 of the EP&A Regulation sets out the detailed requirements for the certification of development. 	<p>Construction and occupation certificates are not available for the pre-coat plant constructed within the audit period (22 October to 9 January 2018).</p> <p>Recommendation (REC1): the construction and occupation certificates for the pre-coat plant are obtained.</p>	Non-compliant
DA26	Schedule 3, Condition 3	<p>The Applicant must ensure that the noise generated by the operation of the development does not exceed the criteria in Table 1 at any residence on privately-owned land.</p> <p>Table 1</p> <p>Noise Assess Location -- Day(Laeq-15 minutes)/Evening(LAeq(15 minutes)/Night(Laeq-15 minutes)/Night(LA1-1 minute):</p> <p>1 - 35/35/35/45</p> <p>2 - 35/35/35/45</p> <p>3 - 35/35/35/45</p> <p>4 - 35/37/35/46</p> <p>5 - 35/35/35/46</p>	<p>Noise is monitored quarterly at four representative locations which are representative of the receivers listed.</p> <p>Annual Environmental Review (September 2015): section 3.0 states that four quarterly monitoring events took place within the reporting period and found that review of all documents confirmed that construction and operation noise complied with legislative noise emission requirements.</p> <p>There was one noises exceedance during the audit period - on 15 June 2016 (Annual Environmental Review (September 2016)).</p> <p>Holcim has undertaken corrective action including notifying the DPE Secretary of the exceedance and actions taken to address the above (sighted letter addressed to Katrina O'Reilly and Margaret Kirton, August 2016).</p> <p>Holcim received noise complaints from the same Marulan resident on two separate occasions. These incidents were reported and managed via the internal INX system. A. White has spoken to concerned residents, and the issue has been closed by Holcim.</p> <p>No further actions are recommended.</p>	Non-compliant

Table 5.1 Non-compliance summary

Unique ID	Schedule and condition	Condition description	Comments and recommendations	Compliance
		6 - 35/37/36/46 7 - 38/38/35/55 8 - 39/38/36/55 9 - 39/39/37/56 10 - 42/42/40/53 11 - 35/35/35/47 12 - 37/37/36/47 13 - 40/38/37/47 14 - 35/35/35/47 15 - 35/35/35/47 16 - 35/35/35/45		
		Notes: Receiver locations are shown on the plan in Appendix 3.		
DA62	Schedule 3, Condition 12	Partial criteria; not the entire condition: Particulate matter <10 µm (PM ₁₀) Averaging period: 24 hour Criterion 50 µg/m ³	<p>Average and maximum 24-hour PM₁₀ concentrations are reported in the Annual Environmental Reviews for the audit period. The annual average was below the 50 µg/m³ criterion in all recorded instances except for one sample (50.9 µg/m³) reported in the Annual Environmental Review (September 2015). This is a marginal exceedance and was attributed to road works adjacent to the high volume air sampler. This conclusion appears reasonable and there have been no subsequent exceedances.</p> <p>Annual Environmental Review (September 2015) reports that 19 scheduled samples were not collected. Annual Environmental Review (September 2016) reports that 2 scheduled samples were not collected. Annual Environmental Review (September 2016) does not report any samples that were not collected. Given this trend, no additional actions are recommended.</p> <p>The fortnightly monitoring reports for the last three months of the audit period were examined as a sample of these reports. No exceedances were reported.</p>	Non-compliant

Table 5.1 Non-compliance summary

Unique ID	Schedule and condition	Condition description	Comments and recommendations	Compliance
			<p>Annual Environmental Review (March 2017) (Figure 2) presents the air quality trend. The average daily PM₁₀ concentration has generally increased as the quarry is developed and the disturbance area is increasing. The average concentrations are well below the criteria. However, the trend highlights that Holcim will need to continue to minimise dust generation.</p> <p>No further actions are recommended.</p>	
DA81	Schedule 3, Condition 16	Except as may be expressly provided by a License, the Applicant must comply with section 120 of the Protection of the Environment Operations Act 1997 during the carrying out of the development.	<p>Annual Environmental Review (September 2015) section 7.0 (Water Management) notes that the Type C dam described in the EIS and water management plan would be insufficient to treat the fine sediments expected to run off the catchment area. An alternative dam construction was completed to meet compliance. In this reporting period, there were two overflow events. Investigation led to multiple corrective actions which were accepted by the EPA.</p> <p>Annual Environmental Review (September 2016) section 7.0 (Water Management) provides the surface water and groundwater data results for the 2015–2016 period. There was one dam spill resulting from above the 90th percentile rain event. Full compliance was met for freeboard requirements before the event occurred.</p> <p>Annual Environmental Review (March 2017) section 7.0 (Water Management) provides surface water and groundwater data results for the reporting period. Section 12.0 (Incidents and non-compliance) summarises a 1,500–2,000 L diesel spill caused by train fuelling on site. All contamination was contained on site without any harm caused to the receiving environment. Due diligence reporting continued for 6 months.</p> <p>No further actions are recommended.</p>	Non-compliant
DA82	Schedule 3, Condition 17	Except as may be expressly provided by a License, the Applicant must ensure that any controlled discharge from the controlled discharge points at Sediment Dams A to F comply with the limits in Table 10.	<p>In NSW Department of Primary Industry - Fisheries response to the auditor's request for comments they raised concern related to degradation of downstream water quality and aquatic habitats resulting from sediment and pollutants leaving the quarry working and passing into downstream waterways including "Lockeysleigh Creek, Joarimin Creek and the Wollondilly River."</p> <p>Annual Environmental Review reports for the audit period show that while most TSS</p>	Non-compliant

Table 5.1 Non-compliance summary

Unique ID	Schedule and condition	Condition description	Comments and recommendations	Compliance
		<p>Table 10: Surface Water Discharge Limits</p> <p>Pollutant: Unit of measure: 100 Percentile concentration limit</p> <p>Total Suspended Solids: 50 mg/L</p> <p>pH: 6.5-8.5</p> <p>Oil & Grease: 10 mg/L or none visible.</p>	<p>and pH values are within the criteria, there have been some minor exceedances.</p> <p>2005 EIS: Appendix 8, section 4.4.2.2: "Flocculation will be used to ensure that sediment loads from the site are not increased from the existing situation and that overflows have suspended sediments at concentrations of less than 50 mg/L."</p> <p>The Annual Environmental Review (September 2016) report states that Holcim has planted tubestock in riparian area of Joaramin Creek. The plantings are intended to stabilise the riparian areas in the Joaramin Creek through extensive tree planting. It is expected this will in time reduce the level of sediments entering the waterways.</p> <p>Surface water data in AER reports for the audit period states oil and grease were tested and were within parameters of the site's water management plan. Appendix 8, section 4.4.2.2: "Oil separators will be placed downstream from high traffic areas". "Flotation curtains will be placed at the outlets of all dams in order to protect downstream water quality in the event of oil spillage."</p> <p>Recommendation (REC4): water quality monitoring should continue in accordance with the Water Management Plan (July 2018) and the EPL.</p>	
DA89	Schedule 3, Condition 19(c)	(c) construct impervious bunds around all fuel, oil, chemical storage areas that are large enough to contain 110% of the volume held in the largest container in accordance with the requirements in the OEH Bunding and Spill Management manual; and	<p>Site observations indicated that all oil, chemical storage areas are large enough and comply with requirements in this condition.</p> <p>During the audit, one blue storage drum was observed close to the stormwater drain (see photograph provided in report). Although stored on concrete, it was not in a bunded area and was easy to knock over.</p> <p>Recommendation (REC7): all that drums (and any other chemical storage containers) are stored in appropriately bunded areas at all times.</p>	Non-compliant
DA118	Schedule 3, Condition 25	The vehicular crossing of Lockyersleigh Creek as detailed in EA (Mod 4) must be designed and constructed in accordance with the Policy and Guidelines for Fish Friendly Water Crossings (DPI Fisheries, 2004) and Why Do Fish Need to Cross the Road? Fish Passage Requirements for	<p>There is no evidence that design plans were submitted to DPI Fisheries for approval prior to the construction of the vehicular crossing of Lockyersleigh Creek.</p> <p>Recommendation (REC8): DPI Fisheries is consulted regarding the suitability of the vehicular crossing of Lockyersleigh Creek.</p>	Non-compliant

Table 5.1 Non-compliance summary

Unique ID	Schedule and condition	Condition description	Comments and recommendations	Compliance
		Waterway Crossings (2004) to the satisfaction of DPI Fisheries. Design plans should be submitted to DPI Fisheries for approval prior to the construction.		
DA193	Schedule 3, Condition 46	Within 3 months of the Independent Environmental Audit (see Condition 11 in Schedule 5), the Applicant shall update the Rehabilitation and Landscape Management Plan to the satisfaction of the Secretary.	The second Independent Environmental Audit was finalised on 25 February 2015. The plan was not updated by 25 May 2015. However, project MOD4 was underway that resulted in the site being reconfigured. This plan has subsequently been updated and approved. No further actions are recommended.	Non-compliant
DA196	Schedule 3, Condition 48	Within 3 months of each Independent Environmental Audit (see Condition 11 in Schedule 5) after the lodgement of the rehabilitation bond, the Applicant must review, and if necessary revise the sum of the bond to the satisfaction of the Secretary. This review must consider:	The second Independent Environmental Audit was finalised on 25 February 2015 so the bond review should have been completed by 25 May 2015. We understand that a bond of \$6,664,000 was approved in February 2017, and the DPE notified as per email provided as evidence. This was not within the required timeframe. No further actions are recommended.	Non-compliant
DA197	Schedule 3, Condition 48(a)	(a) the effects of inflation;	No evidence was sighted that the bond amount considered the effects of inflation. Recommendation (REC9): bond calculations are filed to allow future review.	Non-compliant
DA198	Schedule 3, Condition 48(b)	(b) any changes to the total area of disturbance; and	No evidence was sighted that the bond amount considered the any changes to the total area of disturbance. Recommendation: bond calculations are filed to allow future review.	Non-compliant
DA199	Schedule 3, Condition 48(c)	(c) the performance of the rehabilitation against the completion criteria of the Rehabilitation and Landscape Management Plan.	No evidence was sighted that the bond amount considered performance criteria. Recommendation: refer to REC9.	Non-compliant
DA231	Schedule 4, Condition 1(a)	(a) an exceedance of any relevant criteria in Schedule 3, the Applicant must notify the affected landowners in writing of the exceedance, and provide regular monitoring results to each affected	A noise exceedance is noted in the Annual Environmental Review (September 2016) report at assessment location 11. DPE is notified of any exceedance in writing, which is attached as an attachment to the Annual Environmental Review reports. This location appears to be representative of three residences (11, 14 and 14). As	Non-compliant

Table 5.1 Non-compliance summary

Unique ID	Schedule and condition	Condition description	Comments and recommendations	Compliance
		landowner until the development is again complying with the relevant criteria; and	described in the Annual Environmental Review Attachment 1, actions were taken to ensure that the situation was rectified. We understand that Bruce Dugan was notified about an exceedance in noise, which did not affect their property. However, evidence was not provided that landowners at all potentially affected residences were notified. Recommendation (REC10): the procedure for responding to/notifying exceedances to all landowners that are potentially impacted by any noise exceedance is reviewed.	
DA268	Schedule 5, Condition 5	Within 3 months of the submission of an: (a) incident report under condition 8 below; (b) Annual Review under condition 10 below; (c) audit report under condition 11 below; and (d) any modifications to this consent, the Applicant must 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>	This condition requires that all strategies, plans, and programs are reviewed annually and more frequently if there is an incident, audit, or modification during the year. While a number of plans were reviewed within the required timeframe, some plans remain not updated. Recommendation (REC16): all strategies, plans, and programs should be reviewed as soon as possible. Recommendation (REC17): a register is established that shows when each strategy, plan, and program was reviewed in accordance with this condition; stating whether updates were required.	Non-compliant
DA288	Schedule 5, Condition 10	Relevant part of condition: The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 7 of Schedule 5) and any interested person upon request.	While the Annual Environmental Review reports are available on the Holcim website, there is no evidence that the Annual Environmental Reviews in the reporting period were submitted directly to Council. Recommendation (REC20): all Annual Environmental Reviews are submitted to the Council.	Non-compliant
DA297	Schedule 5,	Within 12 weeks of commencing this audit, or as	The audit was finalised in March 2019.	Non-compliant

Table 5.1 Non-compliance summary

Unique ID	Schedule and condition	Condition description	Comments and recommendations	Compliance
	Condition 12	otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, Council, EPA and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report.	See Section 1.7. No further actions are recommended.	
DA303	Schedule 5, Condition 13(a)	Relevant part of condition: • a complaints register, which is to be updated on a quarterly basis;	Quarterly complaints registers are listed on the website. for Quarter 3 2016 to Quarter 4 2017. However, with the exception of Quarter 4 2017, the listings are not linked to any files. For example there was a dust complaint on 21 September 2017 that is not provided. Complaints are summarised in Annual Environmental Reviews which are available on the Holcim website. This is updated annually. Recommendation (REC21): the quarterly complaints register on the Holcim website is updated so that all complaints are available.	Non-compliant
DA307	Schedule 5, Condition 13(a)	• keep this information up-to-date,	Some of the management plans and monitoring programs need to be updated. Recommendation (REC22): the currency of all management plans and programs on the website is reviewed.	Non-compliant
DA327	Appendix 7, Condition 9(e)	The progress on the archaeological works on site is systematically video recorded	Interviews with Holcim personnel indicate that the works were videoed. However, all attempts to obtain copies of the footage have been unsuccessful and current personnel believe that it is unlikely this material will ever be found. Recommendation (REC23): video recordings of the archaeological works are located if possible.	Non-compliant
DA334	Appendix 7, Condition 12	The Applicant must ensure that an archaeological publication for the general public of Old Marulan Township incorporating the results of the archaeological programme at the site is prepared. Final design details of this publication are to be submitted to the Director of the NSW Heritage Office for approval within six months of the	Section 6.0 of the final report is about 'Results of the Archaeological Survey and Excavation'. Section 5.0 is about 'Research Design'. The reporting requirements were not completed within the specified timeframes. The report has now been placed in the Holcim website. No further actions are recommended.	Non-compliant

Table 5.1 Non-compliance summary

Unique ID	Schedule and condition	Condition description	Comments and recommendations	Compliance
		completion of the excavation programme. The publication is to be completed within one (1) year of the conclusion of the project unless an extension of time is approved by the Heritage Council of NSW.		
DA340	Appendix 7, Condition 18	The Applicant must ensure that a final excavation report is prepared by the nominated Excavation Director, to publication standard, within one (1) year of the completion of the field based archaeological activity unless an extension of time or other variation is approved by the Heritage Council of NSW.	The report was not submitted within the specified timeframe. No further actions are recommended.	Non-compliant
DA351	Appendix 7, Condition 20(i)	Relevant part of condition:: (i) Details of how this information about this excavation has been publicly disseminated.	Recommendation (REC24): the Old Marulan Township interpretation report is placed on the Holcim website.	Non-compliant
DA 128-5-2005 – Statement of Commitments				
SOC2		The approved Lynwood Quarry Environmental Management Strategy and environmental management plans will be revised and updated as part of the implementation of the Modification Project.	Not all management plans were revised as part of the latest 2017 DA 128 -5-2005 modification (ie after May 2017). Some have been revised or are in the process of undergoing revision (as per Holcim's correspondence with DPE, OEH and other relevant agencies provided during this audit). Recommendation: refer to REC16.	Non-compliant
SOC24		Holcim Australia will update the Lynwood Quarry Water Management Plan. This will include an update to the Lockyersleigh Creek Riparian Area Management Plan.	The Riparian Area Management Plan Lockyersleigh Creek Catchment has not been updated since June 2011. Recommendation (REC25): the Lockyersleigh Creek Riparian Area Management Plan is updated.	Non-compliant

Table 5.1 Non-compliance summary

Unique ID	Schedule and condition	Condition description	Comments and recommendations	Compliance
EPL 12939				
EPL11	L3.1	Noise generated at the premises must not exceed the noise limits presented in the table below: [followed by a table providing noise assessment criteria for day, evening and night periods]	<p>Table 6 'Historical comparison of noise monitoring' from the Annual Environmental Review (March 2017) indicates that there has been only one exceedance since the last audit period - on 15 June 2016.</p> <p>INX Community complaint report - Dust and noise complaint, 27 November 2017. Consultation at the house was completed with highway noise believed to be the cause.</p> <p>Holcim has undertaken corrective action including notifying the Secretary.</p> <p>No further actions are recommended.</p>	Non-compliant

Table 5.2 Additional recommendations

Unique identification number	Schedule and Condition	Condition description	Comments and recommendations	Compliance
DA 128-5-2005 – development consent				
DA34	Schedule 3, Condition 5	<p>The Applicant must comply with the operating hours in Table 2:</p> <p>Blasting</p> <p>Monday – Saturday: 9 am to 5 pm</p> <p>Sunday and Public Holidays - none</p>	<p>Two INX Community Complaint Records (entered into system 19 May 2016 and 21 September 2017, from two different residents) record complaints about blasting activities (with a focus on the level of noise/vibration rather than the blast time). In addition, one blasting complaint letter was sent by a community member to DPE. However, monitoring results do not indicate that criteria were exceeded.</p> <p>Pollution monitoring data provided on Holcim's website shows that blasts mostly occur between 11 am—2 pm. However there were a number of entries listing "12.00am". It is reasonable to conclude that this is a mistake as complaints would have been made if blasting occurred at midnight.</p>	Compliant

Table 5.2 Additional recommendations

Unique identification number	Schedule and Condition	Condition description	Comments and recommendations	Compliance
			Recommendation (REC2): All monitoring reports should be carefully checked before being issued.	
DA42		The Applicant must implement the management plan as approved from time to time by the Secretary.	<p>The measures listed in Section 4.0 of Noise Management Plan appear to have been implemented.</p> <p>The monitoring records do not include all of the information specified in Section 5.1 of the Noise Management Plan, eg operator name, time of measurement, height of the microphone, etc.</p> <p>Recommendation (REC3): monitoring records need to provide all monitoring conditions and the name of the operator.</p>	Compliant
DA43	Schedule 3, Condition 7	<p>The Applicant must ensure that the airblast overpressure level from blasting at the development does not exceed the criteria in Table 3 at any residence on privately owned land.</p> <p>Table 3: Airblast overpressure level: allowable exceedance</p> <p>115 dB(Lin Peak): 5% of the total number of blasts over a period of 12 months</p> <p>120 dB(Lin Peak): 0%</p>	<p>Annual Environmental Review (September 2015) section 4.0 states that a total of 20 blasts were conducted during the 2015-2015 period with no exceedances. Table 3 of the Annual Environmental Review report provides the results of each blast and the corresponding monitoring locations. Blasting times are not provided.</p> <p>Annual Environmental Review (September 2016) section 6.2 states that a total of 54 blasts were recorded during the reporting period. . This has caused the loss of blast monitoring data for blast on dates. There were no exceedances as can be seen in Table 8 Blast data 2015 - 2016. Blast records for 14/12/2015, 17/12/2015, 7/01/2016, 10/01/2016, 14/01/2016 and 21/01/2016 were not available from the blasting contractors. Appendix 2 of the Annual Environmental Review includes Holcim's letter (dated 26 February 2016) to O. Holm and K. Winwood, DPE, regarding the lost blasting monitoring records.</p> <p>Annual Environmental Review (March 2017) report section 6.2 states that a total of 34 blasts were recorded during the reporting period, without an exceedance. Table 7. Blast data 2015 - 2016 shows that none were above 5mm/s allowed vibration levels. Times of blasting activities were not recorded.</p> <p>The fortnightly monitoring reports for the last three months of the audit period were examined as a sample of these reports. No exceedances were reported.</p>	Compliant

Table 5.2 Additional recommendations

Unique identification number	Schedule and Condition	Condition description	Comments and recommendations	Compliance
			However, some data was incorrectly entered (eg results for 23/10/17). Recommendation: refer to REC2.	
DA60	Schedule 3, Condition 12	The Applicant must ensure that dust generated by the development does not cause additional exceedances of the criteria listed in Tables 6-8 at any residence that exists on the date of this consent, or on more than 25 percent of any privately owned land.: Total suspended particulate (TSP) matter, Averaging period: Annual, Criterion 90 ug/m3	Averaging annual TSP recorded in the Annual Environmental Reviews for the audit period. The annual average was below the 90 ug/m3 criterion in all recorded instances. The fortnightly monitoring reports for the last three months of the audit period were examined as a sample of these reports. No exceedances were reported. However, some data was incorrectly entered (egg results for 25/10/17). Recommendation: refer to REC2.	Compliant
DA63	Schedule 3, Condition 12	The Applicant must ensure that dust generated by the development does not cause additional exceedances of the criteria listed in Tables 6-8 at any residence that exists on the date of this consent, or on more than 25 percent of any privately owned land: Deposited dust Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS 3580.10.1-1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.	Annual average dust deposition results are compliant, as discussed above. The fortnightly monitoring reports for the last three months of the audit period were examined as a sample of these reports. No exceedances were reported. However, some data was incorrectly entered (eg results for 25/10/17). Recommendation: refer to REC2.	Compliant
DA84	Schedule 3, Condition 18(a)	The Applicant must ensure that: (a) Sediment Dams A, B and F are capable of treating the 90th percentile 5 day rainfall event;	Letter from GHD to Holcim states that the dams are designed to Blue Book standards, as described in the EIS and water management plan, but would be insufficient to treat the fine sediments expected to run off the catchment area. An alternative dam construction was completed to meet compliance. In this reporting	Compliant

Table 5.2 Additional recommendations

Unique identification number	Schedule and Condition	Condition description	Comments and recommendations	Compliance
			<p>period there were 2 overflow events. Investigation led to multiple corrective actions which were accepted by the EPA.</p> <p>Table 4.1, Existing Site Dams, in the Water Management Plan (July 2018) states that Dam F has a 90th percentile 5 day rainfall event type D/F as per Design Criteria specified for sediment control dams in with the Blue Book.</p> <p>Recommendation (REC5): the Water Management Plan should be updated so that it explicitly states that Sediment Dams A and B are cable of treating the 90th percentile 5 day rainfall event.</p> <p>In addition it states that dams that are yet to be constructed - Dam R1 and Dam R2 - will be capable of treating 90th percentile 5 day rainfall event type D/F. Likewise, sediment Dam G1 which is yet to be constructed will also be capable of treating 95th percentile 5 day rainfall event type D/F.</p>	
DA87	Schedule 3, Condition 19 (a)	The Applicant must: (a) ensure that the water collected in the Sediment Dams is pumped to the supply dams as soon as practicable;	<p>The Water Management Plan (July 2018), Section 4.2.1 notes "The sediment dams will be emptied using a pump and pipe or gravity system after rainfall events. Coagulant may be added to the dams in order to assist in lowering total suspended solids. Holcim has consulted with the EPA and DP&E and both agencies have approved this system."</p> <p>Recommendation (REC6): the Water Management Plan is updated so that it explicitly states that water from sedimentation dams is pumped to supply dams.</p>	Compliant
DA255	Schedule 5, Condition 2(a)	The Applicant must ensure that the Management Plans required under this consent are prepared in accordance with any relevant guidelines, and include: (a) detailed baseline data;	<p>This condition was introduced in MOD4 (May 2016) so does not apply to plans prepared prior to this time.</p> <p>Detailed baseline data is not provided in the draft Water Management Plan (September 2016).</p> <p>Recommendation (REC11): detailed baseline data is provided in management plans when they are updated.</p>	Compliant
DA259	Schedule 5, Condition 2(e)	The Applicant must ensure that the Management Plans required under this consent are prepared in	This condition was introduced in MOD4 (May 2016) so does not apply to plans prepared prior to this time.	Compliant

Table 5.2 Additional recommendations

Unique identification number	Schedule and Condition	Condition description	Comments and recommendations	Compliance
		accordance with any relevant guidelines, and include: (e) a contingency plan to manage any unpredicted impacts and their consequences;	Recommendation (REC12): contingency plans to manage any unpredicted impacts and their consequences are provided in the management plans prepared before May 2016 when they are updated.	
DA261	Schedule 5, Condition 2(g)	(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 	<p>This condition was introduced in MOD4 (May 2016) so does not apply to plans prepared prior to this time.</p> <p>Reporting protocols for incidents, complaints, non-compliances and exceedances are not described in the draft Rehabilitation & Landscape Management Plan (September 2016).</p> <p>However, where these plans have been approved by the Secretary, it is assumed that this requirement has been waived as per the note below.</p> <p>Recommendation (REC13): reporting protocols for incidents, complaints, non-compliances and exceedances are provided in the management plans prepared before May 2016 when they are updated.</p>	Compliant
DA262	Schedule 5, Condition 2(h)	(h) a protocol for periodic review of the plan.	<p>This condition was introduced in MOD4 (May 2016) so does not apply to plans prepared prior to this time.</p> <p>A protocol for periodic review is not described in the Blast Management Plan (November 2016).</p> <p>However, where these plans have been approved by the Secretary, it is assumed that this requirement has been waived as per the note below.</p> <p>Recommendation (REC14): a protocol for periodic review of plan is described in the Blast Management Plan (November 2016).</p> <p>Recommendation (REC15): a protocol for periodic review of plans is provided in the management plans prepared before May 2016 when they are updated.</p>	Compliant
DA276	Schedule 5, Condition 8	The Applicant must notify, at the earliest opportunity, the Secretary and any other relevant agencies of any incident that has caused, or	<p>Non-compliances generally appear to be reported to agencies appropriately.</p> <p>The 1,500–2,000 L diesel spill that occurred on 6 December 2016 was well</p>	Compliant

Table 5.2 Additional recommendations

Unique identification number	Schedule and Condition	Condition description	Comments and recommendations	Compliance
		threatens to cause, material harm to the environment. For any other incident associated with the development, the Applicant must 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 must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	<p>contained within site, with no offsite impact, and was immediately contained and the diesel removed.</p> <p>Page 20 of the PIRMP shows all the agencies that need to be notified in the event of an incident. It notes that emergency services, EPA, Appropriate Regulatory Authority, among other authorities, will be notified. However, there is no specific mention of the 'Secretary'.</p> <p>Recommendation (REC18): the PIRMP be amended to include notification of the Secretary following an emergency incident, as per the requirements of this condition.</p>	
DA286	Schedule 5, Condition 10(h)	(h) calculate the number of additional BioBanking (or equivalent) credits that will need to be purchased, before that clearing can be done; and	<p>Table 13 'Expected offsets per stage of granite pit development' from the Lynwood Quarry Annual Environmental Review (March 2017) report shows that the number of credits required per stage of development have been calculated for the granite pit.</p> <p>Biodiversity credits are being progressively retired.</p> <p>Recommendation (REC19): future Annual Environmental Reviews include information in the additional BioBanking (or equivalent) credits that will need to be purchased or note that no additional credits are required.</p>	Compliant
DA 128-5-2005 – Statement of Commitments				
SOC12		<p>Blasting:</p> <p>Holcim Australia has an existing blast management and monitoring system in place at Lynwood Quarry which will be implemented for the Modification Project including:</p> <ul style="list-style-type: none"> • blasts are typically undertaken between 10 am and 3 pm noting that blasting is permitted to be undertaken between 9 am and 5 pm Monday to Saturday 	<p>Two INX Community Complaint Records (entered into system 19 May 2016 and 21 September 2017, from two different residents) record complaints about blasting activities (with a focus on the level of noise/vibration rather than the blast time). In addition, one blasting complaint letter to was sent by a community member to DPE regarding a that went straight to DPE. However, monitoring results do not indicate that criteria were exceeded.</p> <p>Pollution monitoring data provided on Holcim's website shows that blasts mostly occur between 11 am - 2 pm. However there were a number of entries listing "12.00am". It is reasonable to conclude that this is a mistake as complaints would</p>	Compliant

Table 5.2 Additional recommendations

Unique identification number	Schedule and Condition	Condition description	Comments and recommendations	Compliance
			<p>have been made if blasting occurred at midnight. Recommendation: refer to REC2.</p>	
SOC31		<p>Land Management</p> <ul style="list-style-type: none"> Where appropriate, consult with neighbouring landholders when undertaking pest and weed management activities. 	<p>It is not clear when it is "appropriate" to consult with neighbouring landholders or the mechanism for this consultation. However, there are no complaints regarding pest or weed management. Recommendation (REC26): the consultation section of the Rehabilitation Landscape Management Plan explicitly states that consultation with neighbouring landholders will occur when undertaking pest and weed management activities.</p>	
SOC32		<p>Population Change (infrastructure and services)</p> <ul style="list-style-type: none"> Continue implementation of the community fund. 	<p>The round 2 Community Investment Fund (CIF) dedicated to the Marulan and surrounding communities was closed for applications in 2017. Under "Our community", the website states that "First round applications will open on the 1 December 2014, and will close 27 January 2015." Recommendation: refer to REC22.</p>	Compliant
SOC34		<p>Trust and Reputation</p> <ul style="list-style-type: none"> Existing engagement to continue as appropriate, with a focus on respectful, honest and open communications. 	<p>The generic Holcim news page, for all Holcim sites, are regularly updated (latest update dated 10/1/2018). Recommendation (REC27): Lynwood Quarry's information updates are updated on the website.</p>	Compliant
SOC37		<ul style="list-style-type: none"> Utilise additional communication channels such as local newsletter, updates and local blogs. 	<p>The most recent media article on the website is from 18 May 2105. Recommendation (REC28): the "In the media" section of the website is updated.</p>	Compliant

5.3 Site photographs (9 January 2018)



Photograph 5.1 View across the main quarry area



Photograph 5.2 Stockpiles and conveyor belts



Photograph 5.3 **Stockpiles and conveyor belts**



Photograph 5.4 **Conveyor belts and crusher / screening building**



Photograph 5.5 Oil and chemical storage area



Photograph 5.6 Shed next to the main oil and chemical storage area



Photograph 5.7 Oil separator pit



Photograph 5.8 Primary crusher area



Photograph 5.9 **Dam cleaning in progress**



Photograph 5.10 **Mobile asphalt plant**



Photograph 5.11 Truck fuelling station



Photograph 5.12 Protected area: Aboriginal heritage area

5.4 Agency consultation and comments

Agency consultation comments and auditor responses are summarised in Table 5.3. An example of the letter requesting input to the Holcim's quarry Independent Environmental Audit is provided in Appendix C. Agency consultation responses are provided in Appendix D.

Table 5.3 Summary of agency consultation

Agency and contact	Method/ correspondence date	Agency comments	Auditor response
NSW Department of Planning and Environment (DPE) M. Dawson	Letter via email, 21 November 2017	DPE’s email response received on 24 November 2017 indicated that the DPE did not have any specific comments regarding the quarry, “with the exception of reviewing how/if the quarry coordinates blasting with nearby quarries, such as the Gunlake Quarry. DPE’s understanding is that the Gunlake Quarry notifies Holcim 24 hours prior to blasting but there is no reverse notification. Holcim do not have a requirement to do this but it could be considered best practice to avoid cumulative impacts.”	During the site inspection, Ms White confirmed that notification and coordination of blasting activity between the quarry and Gunlake Quarry has not occurred to date. With consideration of local residents’ daily schedules, the quarry normally undertakes blasting activities between the hours of 10 am and 3 pm while the majority of residents are expected to be at work/school. Holcim is willing to implement notification and coordination of blasting activities with surrounding quarries including the Gunlake Quarry.
NSW Environment Protection Authority (EPA) J. Thompson	Letter via email, 17 November 2017	No comments received.	N/A
NSW Roads and Maritime Services (RMS) C. Millet	Letter via email, 17 November 2017 and follow up phone calls	No comments received.	N/A
NSW Department of Primary Industries (DPI)- Crown Lands and Water Division (DPI – CLW) Via two generic email for water enquiries and crown land	Letter via email, 17 November 2017 and 20 November 2017	No comment received.	N/A

Table 5.3 Summary of agency consultation

Agency and contact	Method/ correspondence date	Agency comments	Auditor response
NSW DPI – Fisheries (DPI – Fisheries) J. Reynolds	Letter via email, 20 November 2017	<p>DPI – Fisheries email response received on 6 December 2017 noted the following: “ The Departments key concern with the Lynwood Quarry relates to the degradation of downstream water quality and aquatic habitats resulting from sediment and pollutants leaving the quarry workings and passing into downstream waterways including Lockeyersleigh Creek, Jaorimin Creek and the Wollondilly River. Preliminary examinations of the surface water monitoring results available in the Annual Reports for the Lynwood Quarry have shown consistent incidents of Total Suspended Solid (TSS) levels exceeding ANZECC trigger values of 50mg/l (eg: 13 recorded TSS exceedances at SW5, including; 810mg/l (16 times the acceptable level) on 13/2/2012, 530mg/l on 16/4/2012, 140mg/l on 29/1/13 and 130mg/l on 20/4/2015.</p> <p>Also of relevance is that surface water sampling site 5 (SW5) was located approximately 2 km downstream of the approved quarry and has recorded 5 levels of exceedance during the 2014/2015 period.</p> <p>The Department is concerned that the current Water Management Plan operating at the approved quarry has not demonstrated a neutral effect on all relevant water quality parameters as was intended.”</p>	<p>Annual Environmental Review report (September 2015) shows that there were five occurrences where total suspended solids (TSS) were higher than the trigger level within the reporting period. This is higher than the previous year where two instances of TSS higher than the trigger level were recorded. The Annual Environmental Review report notes “<i>This could be attributed to a combination of higher than expected rainfall, disturbance within the catchment areas and medium to high erosion occurring in the riparian areas of the catchment. Holcim intends to invest in stabilising the riparian areas in the Joarim Creek in 2015-2016 reporting periods through extensive tree planting. It is expected this will in time reduce the level of sediments entering the waterways. Further, the site has bedded down water management processes and procedures which will ensure any water flowing into the catchment from the dams outside of the 90th percentile rain events, will record below 50mg/L TSS.</i>” The report notes that there were no instances where four consecutive exceedances were recorded within the reporting period and as a result, no investigations were undertaken pertinent to surface water quality monitoring results.</p> <p>Surface water monitoring data presented in Annual Environmental Review report (September 2016) shows no exceedances of TSS. Surface water monitoring data presented in Annual Environmental Review report (March 2017) shows one TSS exceedance at SW6. The report notes that operations within the period were consistent with all other months. These normal activities do not explain the minor increase and as it is not considered to be ecologically significant, no further</p>

Table 5.3 Summary of agency consultation

Agency and contact	Method/ correspondence date	Agency comments	Auditor response
			<p>investigations were completed.</p> <p>The Water Management Plan is currently under reviewed at four locations on Joarimin Creek (SW3 to SW6) and two locations on Marulan Creek (SW1 and SW2) (refer to Annual Environmental Review (September 2015)). Other surface water monitoring locations SW7 and SW13, are only required to be monitored during periods of active discharge from dams. Of these, only three require reporting including SW2, SW5 and SW6.</p> <p>In addition, water quality monitoring is undertaken from site water management dams (A, E, F, 1) prior to any release of water from sediment dams into the environment as agreed with the EPA and outlined in the DA-128-5-2005. Monitoring of site water dams is undertaken for due diligence purposes in case of sediment dam overtop (SWMP July 2016).</p>

Table 5.3 Summary of agency consultation

Agency and contact	Method/ correspondence date	Agency comments	Auditor response	
NSW Office of Environment and Heritage (OEH) S. Lamb and A. Treweek	Letter via email, 17 November 2017 Phone call P. Towler and S. Lamb, 22 November 2017	In their response received on 4 December 2017, the OEH requested that the audit include a focus on the following conditions that relate to their agency’s role of protecting Aboriginal cultural heritage and biodiversity on site:	Lynwood Quarry Aboriginal Heritage Management Plan, Caring for Country was updated in July 2018. (ie post audit period). Correspondence between Holcim, DPE and OEH provided during the audit period (dated 9 August 2018 and 18 September 2018) shows that consultation with OEH is currently being undertaken. The plan has not yet been approved.	
		“Whether the revised Aboriginal cultural heritage management plan (dated February 2017) has addressed and effectively implemented the management measures required under condition 35.”		Refer to Appendix A for audit results including Schedule 3, Condition 35 of DA-128-5-2005.
		“Whether the conservation measures for the Cultural heritage management zone and extension have been implemented and are adequate to conserve the heritage values (condition 35(d) and Appendix 6).”		Refer to Appendix A for audit results including Schedule 3, Condition 35 of DA-128-5-2005.
		“Whether the ‘Rehabilitation and Landscape Management Plan’ (condition 44) has been progressed. OEH provided comments on a draft version in March 2017, but does not know if these comments were incorporated in to a final plan, or whether the plan was finalised and implemented. This also includes the Riparian Area Management Plan under condition 45.”		Sighted DPE letter to Holcim dated 11 July 2018 which shows that the Rehabilitation and Landscape Management Plan has been finalised and approved.
		“Whether the proponent has secured the biodiversity credits under condition 48A, by 31 May 2017 for the following five years. OEH would also like to know what biodiversity offsets have been secured, and where – including those required from the original approval which the proponent was securing through a voluntary conservation agreement.”		Refer to Schedule 3, Condition 48A (Appendix A).
		OEH also noted that it continues to have ongoing notifications and consultation on salvage requirements and management measures for the Aboriginal Heritage Impact Permit and associated variations.		No comment required.

Table 5.3 Summary of agency consultation

Agency and contact	Method/ correspondence date	Agency comments	Auditor response
DPE – Division of Resources and Geoscience (DRG), Geological Survey of NSW (GSNSW) C. Gilmore	Letter via email, 21 November 2017	In their response received on 1 December 2017, the GSNSW noted that they have provided comment to DPE on Modification 4 for the quarry and were satisfied that the resource for the proposed quarry has been adequately assessed.	No comment required.
		GSNSW notes Condition 13 of the DA 128-5-2005 includes the requirement to provide annual production data to the DRG. GSNSW notes that “according to departmental records, no production data has been received for the 2016-2017 financial year to date, and to satisfy the requirements of this condition the quarry operator should provide the requested data to DRG – Royalties & Advisory Services at mineral.royalty@industry.nsw.gov.au .”	During the site inspection interviews, A. White confirmed that annual production data was provided to the DRG early 2018 by Holcim’s head office. There is no set date for the provision of data in DA 128-5-2005.
		“GSNSW notes that Modification 5 sought to modify Condition 48A of DA 128-5-2005, in relation to the timeframe for the retirement of biodiversity credits and includes other amendments. DPE considered the proposed modification to be of a minor administrative nature and did not seek comment from GSNSW. Modification 5 was approved on 29 May 2017. GSNSW requests consultation in relation to any proposed biodiversity offsets to ensure there are no potential sterilisation impacts to resources.”	DRG’s comment has been noted and will be taken into account with any future DA 128-5-2005 modifications.

Table 5.3 Summary of agency consultation

Agency and contact	Method/ correspondence date	Agency comments	Auditor response
WaterNSW M. Hughes	Letter via email, 17 November 2017	<p>WaterNSW’s email response received on 1 December 2017 noted the following in relation to WaterNSW’s involvement since the quarry’s last audit:</p> <p>“Since the last audit on 22 October 2017, WaterNSW has been involved in assessing the MOD 4 Environmental Assessment (between November 2015 and June 2016) and has reviewed the site’s Water Management Plan (WMP) and provided comments in August 2016. WaterNSW notes that the previous Audit made a number of recommendations regarding the WMP, but that WaterNSW has not received any further communication from Holcim on the status of the WMP. WaterNSW is disappointed that Holcim has not provided advice on how it had addressed WaterNSW’s comments nor apparently finalised the plan.”</p>	<p>Section 1.3 consultation of the WMP dated September 2016 notes “In accordance with Condition 20 of Schedule 3 of the Development Consent, this Water Management Plan has been prepared in consultation with the Environment Protection Authority (EPA), WaterNSW, DPI Water and DPI Fisheries. A copy of this plan has been provided to these agencies for comment. Relevant recommendations from these agencies have been incorporated prior to the plan being submitted to the secretary of DPE.”</p> <p>Since then a later version of the Water Management Plan (2018) has become available and is currently under review.</p>
		<p>“The key areas of interest for WaterNSW in relation to the quarry operations and compliance relate to onsite sewage/wastewater treatment and management, site water management including erosion and sediment controls to manage clear and dirty water runoff, and water quality leaving the site. WaterNSW requests that the audit clarify how the quarry has managed these matters including compliance with Lynwood Quarry’s EPL 12939 in relation to water quality discharges from the site.”</p>	<p>Section 3.2 water supply and storage of the Water Management Plan (2016) notes that wastewater from the administration offices and workshop is collected by a series of gravity and rising mains and treated on-site in an aerated wastewater treatment plant, which is located within the infrastructure area. The effluent water is subsequently irrigated at two locations (Dam F and Dam E catchment areas).</p> <p>This water, in a much smaller volume, runs into the mentioned sediment dams and is then recycled through the plant or used for dust suppression on the roads.</p> <p>For compliance with EPL 12939 refer to Table 5.1 and Appendix B.</p>
		<p>“WaterNSW would like to be kept informed about the outcomes of the audit and would appreciate receiving a copy when finalised.”</p>	<p>WaterNSW’s request has been noted and a copy of the audit will be provided accordingly.</p>

Table 5.3 Summary of agency consultation

Agency and contact	Method/ correspondence date	Agency comments	Auditor response
NSW Heritage Council R. Maini T. Smith	Letter via email, 17 November 2017	<p>The Heritage Division of OEH responded on behalf of the Heritage Council of NSW agency consultation letter noting that the project required management of impacts to the State Heritage Register listed Town of Marulan (SHR #00127). The Heritage management conditions under the approval are specified in conditions 38 through to 42 of DA 128-5-2005. This approval was issued through integrated development, rather than the typical mechanisms of part 3A, which switched off separate approvals under the <i>Heritage Act 1977</i>.</p> <p>The Heritage Division of OEH is also seeking:</p> <ul style="list-style-type: none"> • clarity whether the draft interpretation plan for the Township of Marulan was prepared following results of the test exaction. <i>“It is unclear if this was resubmitted following the completion of the salvage works to incorporate those archaeological results.”</i>Details of the conservation in situ for a timber lined well MRNH8. • clarity on whether the final interpretation plan for the Township of Marulan, following the results of the archaeological salvage, was submitted in compliance with the conditions of the consent. Their records are not clear with the receipt of any amended document. • Our latter of 5 March 2009 identified that a museum display in association with the local historical society would then be a preferred outcome. I understand that a permanent museum within the town of Marulan has not yet been secured but that investigations in partnership with Goulburn-Mulwaree Council are ongoing. This matter does not appear to have been progressed since the time and an update on that interpretation plan would be appropriate. • “A modification for this DA (Mod 4 expansion) was also referred to the Heritage Council of NSW for comments on 18 November 2015. Advice was provided regarding an item known as Lockyersleigh 	<p>Refer to responses for Schedule 3, Conditions 38 through to 42 of DA 128-5-2005 for audit results relevant to NSW Heritage Council comments (see Table 5.1 and Appendix A).</p> <p>The following correspondence and documentation was signed during the audit:</p> <ul style="list-style-type: none"> • DPE letter dated 5 December 2016 which endorses the appointment of Jan Wilson, Principal Archaeologist from Umwelt to prepare an Aboriginal Cultural Heritage Management Plan (ACHMP); • DPE letter dated 29 November 2016 that Holcim was granted an extension for the submission of the ACHMP. The ACHMP should have been submitted by 15 January 2017; and • Old Marulan 2007 Archaeological Investigations – Final Report Volume 2. However, no evidence was sighted whether the report was submitted in compliance with the conditions of consent.

Table 5.3 Summary of agency consultation

Agency and contact	Method/ correspondence date	Agency comments	Auditor response
		Homestead (LEP listed heritage item I033) suggesting the need for a structural integrity report and vibration monitoring. I seek your advice on whether a requirement for same was conditioned as part of the project approvals.”	
Goulburn Mulwaree Council (the council) L. Wakefield	Letter via email, 17 November 2017	Council’s email response received on 4 December 2017, noted that the Council has a very positive working relationship with the Managers at the quarry. The Council has had no compliance issues in relation to the quarry.	No response required.
Community Consultative Committee Chair B. Blakeley	Letter via email, 21 November 2017	<p>Mr Blakeley’s email and enclosed letter response received on 5 December 2017 noted that Holcim’s commitment to community and stakeholder engagement beyond the CCC forums is viewed very favourably by the CCC members.</p> <p>The response noted that members of the Towrang community raised concerns in relation to visual impacts of the quarry’s site lighting in 2014, and since then Webb Australia has been appointed as the lighting consultant to develop a report. Webb Australia’s findings fed directly into a site lighting reduction program, which has resulted in Holcim taking action to alleviate this issue.</p> <p>There have been no major issues noted by CCC members in relation to the modification that Holcim announced in June 2015, which is being closely monitored by the CCC.</p> <p>Mr Blakeley also noted that Holcim has a structured program of providing grants to support community groups throughout the region – the Community Investment Fund. The CCC assisted in establishing eligibility criteria for receiving grants and an independent process for assessing applications. The CCC continues to play a key role in promoting this program broadly throughout the area.</p>	No response required.

6 Audit summary

An independent environmental audit of the quarry was undertaken to meet the requirements of Schedule 5, Condition 11 of DA 128-5-2005 approved by the Minister for Planning on 21 December 2005 and the relevant policies and guidelines.

Audit evidence was collected during a site inspection on 9 January 2018 and documents provided by the quarry before and after the inspection. The audit period was 22 October 2014 to 8 December 2017. During the audit period the quarry was in construction and operations phases.

The matters raised during consultation with agencies and the CCC at the start of the audit have generally been addressed.

The majority of non-compliances related to:

- documentation not meeting the requirements of DA 128-5-2005 including:
 - the need for a construction certificate for recent building work;
 - provision of documents to agencies within the required timeframes;
 - recording/filing of all information required to demonstrate compliance;
 - ensuring that all management plans are reviewed and updated within the stipulated timeframes;
 - ensuring that the Holcim (Australia) website is kept up to date with all of the required information; and
- there were also short-term minor noise, air quality and water non-compliances during the audit period which have been subsequently addressed.

Overall, the quarry construction and operation is generally being undertaken in a responsible manner and, with the exceptions noted above, in accordance with DA 128-5-2005 (including the attached Statement of Commitments) and EPL 12939.

The quarry personnel interviewed generally have a good appreciation of the quarry's PA and EPL conditions, and the quarry's EMS. The requirements of these documents are being applied in a manner that considers protection of the environment within the context of the site.

Recommendations have been provided to address all non-compliances where further actions are considered to be required. A number of recommendations have been provided based on observations that were not related to non-compliances.

References

Australian Bureau of Statistics (ABS) 2016a *2016 Census QuickStats Goulburn Mulwaree*
http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA13310?open=document

Australian Bureau of Statistics (ABS) 2016b *2016 Census QuickStats Marulan*
http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC12513?open=document

NSW Government Department of Planning 2005, *Assessment Report: Lynwood Hard Rock Quarry Marulan*

Appendix A

Development consent and SoC compliance register

**Lynwood Quarry
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DA 128-5-2005 (including Modification 1 (21/12/05) , Modification 2 (22/3/11) Modification 3 (17/8/11), Modification 4 (5/2016) and Modification 5 (5/2017))						
Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
SCHEDULE 2 GENERAL ADMINISTRATIVE CONDITIONS						
Obligation to Minimise Harm to the Environment						
DA1	2	1	The Applicant must implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.	Site observations.	A wide range of measures to prevent and/or minimise any harm to the environment that may result from the operation have been implemented. During the audit inspection, the site was generally well maintained and tidy.	Compliant
Terms of Approval						
		2	The Applicant must carry out the development:	-		-
DA2		2 (a)	(a) generally in accordance with the EIS, EA (Mod 1), EA (Mod 2), EA (Mod 3), EA (Mod 4) and EA (Mod 5); and	Site observations.	The development is generally in accordance with DA (as modified) and as described in the associated environmental assessment documents. Some sediment dams have not been installed. However, these are associated with areas that have not yet been materially disturbed.	Compliant
DA3		2 (b)	(b) in accordance with the Development Layout Plan, the Statement of Commitments and the conditions of this consent. <i>Notes: The Development Layout Plan is included in Appendix 2, The Statement of Commitments is included in Appendix 11</i>	Site observations. Review of DigitalGlobe satellite image against Appendix 2 (Development Layout) and Appendix 4 (Location of Sediment Dams) of the development consent.	Development is generally in accordance with DA. Some sediment dams have not been installed. However, these are associated with areas that have not yet been materially disturbed.	Compliant
DA4		3	If there is any inconsistency between the documents identified in condition 2(a), the more recent document shall prevail to the extent of the inconsistency. The conditions of this consent shall prevail to the extent of any inconsistency with the documents identified in condition 2(a) or the Statement of Commitments.	-	-	Note
DA5		4	The Applicant shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:	Email: M. Dawson, DPE, to P. Towler, EMM, 24/11/17.	We understand that DPE has not provided any directions since the last audit (22 October 2014) and none were mentioned in consultation with DPE at the commencement of this audit.	Not triggered
DA6		4 (a)	(a) any reports, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent (including any stages of these documents);	Email: M. Dawson, DPE, to P. Towler, EMM, 24/11/17.	As above	Not triggered
DA7		4 (b)	(b) any reviews, reports or audits commissioned by the Department regarding compliance with this consent; and	Email: M. Dawson, DPE, to P. Towler, EMM, 24/11/17.	As above	Not triggered
DA8		4 (c)	(c) the implementation of any actions or measures contained in these documents.	Email: M. Dawson, DPE, to P. Towler, EMM, 24/11/17.	As above	Not triggered

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
Limits on Approval						
DA9		5	The Applicant may carry out quarrying operations as part of the development until 1 January 2038. <i>Note: Under this consent, the Applicant is required to rehabilitate lands associated with the development 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 lands associated with the development and those undertakings have been carried out to a satisfactory standard.</i>	-	-	Not triggered
		6	Deleted			
DA10		7	The Applicant must not transport more than 5 million tonnes of products from the site in a year.	Sighted spreadsheet called <i>Lynwood Monthly Sales Confidential Report [Confidential]</i> which included the total annual amount of product transported from site.	2005 EIS: section 3.4.2: states that production will reach 5 tpa. after 3 year and will remain at this level for the initial 30 year quarry plan. 2011 SEE: Despite proposed modifications, the project will still only produce 5 million tones per annum of saleable quarry product p. 2. section 2, however, states that they have approval to transport 5 Tap. by rail and 1.5 Tap. by road which, if combined, would be more transported product than allowed. 2010 EA: The proposed 2nd round of modifications states that approved production rate will not change. 2015 EA Mod 4: The proposed 4th round of modifications states that approved production rate will not change. 2017 EA Mod 5: The proposed 5th round of modifications applies to the retirement of biodiversity credits and includes no change to production.	Compliant
DA11		8	The Applicant must not transport more than 1.5 million tonnes of product from the site in a year by road.	EMM audit team sighted spreadsheet called <i>Lynwood Monthly Sales Confidential Report [Confidential]</i> which included the total annual amount of product transported from site.		Compliant
Structural Adequacy						
DA12		9	The Applicant must ensure that any 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. Notes: • Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for any building works. • Part 8 of the EP&A Regulation sets out the detailed requirements for the certification of development.	Construction certificates were sighted during 2015 audit.	Construction and occupation certificates are not available for the pre-coat plant constructed within the audit period (22 October to 9 January 2018). Recommendation (REC1): the construction and occupation certificates for the pre-coat plant are obtained.	Non-compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
Demolition						
DA13		10	The Applicant must ensure that all demolition work is carried out in accordance with <i>AS 2601-2001: The Demolition of Structures</i> , or its latest version.	-		Not triggered
Protection of Public Infrastructure						
		11	Unless the Applicant and the applicable authority agree otherwise, the Applicant must:			
DA14		11 (a)	(a) repair, or pay all reasonable costs associated with repairing any public infrastructure that is damaged by the development; and	Site interviews.		Not triggered
DA15		11 (b)	(b) relocate, or pay all reasonable costs associated with relocating any public infrastructure that needs to be relocated as a result of the development.	Site interviews.	No public infrastructure was relocated during the audit period.	Not triggered
Operation of Plant and Equipment						
		12	The Applicant must ensure that all plant and equipment at the site, or used in connection with the development are:			
DA16		12 (a)	(a) maintained in a proper and efficient condition; and	Sighted randomly selected operation of equipment maintenance (OEM) records.	The OEMs contain information about plant and equipment maintained onsite, any issues experienced with the machinery and work undertaken to repair these issues.	Compliant
DA17		12 (b)	(b) operated in a proper and efficient manner.	No site observations indicated that equipment was poorly operated.		Compliant
Production data						
		13	The Applicant must:			
DA18		13 (a)	(a) provide annual quarry production data to DRG using the standard form for that purpose; and	Viewed Excel spreadsheet of production data.	Following EMM's agency consultation as part of this audit DRG's response (1 December 2017), DGR noted that "according to departmental records, no production data has been received for the 2016-2017 financial year to date. To satisfy the requirements of Condition 12, the quarry operator should provide the requested data to DRG - Royalties & Advisory Services at mineral.royalty@industry.nsw.gov.au". Holcim's head office provides annual quarry production data to DRG for all Holcim sites. The Lynwood Quarry data was provided on 3 January 2018.	Compliant
DA19		13 (b)	(b) include a copy of this data in the Annual Review.	Lynwood Quarry Annual Environment Review, March 2017.	The Annual Review due date has changed from mid-year to calendar year. The latest Annual Environmental Review (AER) for the Lynwood Quarry in the audit period was submitted in March 2017. Table 5 Production within the reporting period provides total production data for the interim reporting period. This is condition was added in the May 2016.	Compliant

**Lynwood Quarry
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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
Compliance						
DA20		14	The Applicant must ensure that all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	Training modules: ENV: Training and Awareness, and HAUS Introduction to Environmental Risk Management.	Site interviews indicated that all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities via site inductions and the following training modules: ENV: Training and Awareness, and HAUS Introduction to Environmental Risk Management.	Compliant
SCHEDULE 3 - SPECIFIC ENVIRONMENTAL CONDITIONS						
GENERAL EXTRACTION AND PROCESSING PROVISIONS						
Identification of Boundaries						
	3	1	Prior to carrying out any development, or as otherwise agreed by the Secretary, the Applicant must:			
DA21		1 (a)	(a) engage an independent registered surveyor:	Sighted a copy of Southern Cross's documentation relevant to the granite extraction survey area dated 2 September 2016.	The survey covers the site area up to site boundaries and does not include non-disturbance zones.	Compliant
DA22			• survey the boundaries of the approved limit of extraction; and	Sighted a copy of Southern Cross's documentation relevant to the granite extraction survey area dated 2 September 2016.		Compliant
DA23			• submit a survey plan of these boundaries to the Department;	Sighted Holcim's letter re: DA 128-5-2005 Schedule 3, Condition 1a: Submission of surveyed extraction limit boundaries, addressed to Margaret Kirton, DPE dated October 2016.		Compliant
DA24		1 (b)	(b) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits.	Site observations.	Observed site boundaries were either fenced or marked with signs. It was reported that posts were installed by the surveyor.	Compliant
Development in the Riparian						
DA25		2	The Applicant must not carry out any development in the riparian zone of Joarimin, Lockyersleigh or Marulan Creek without the written approval of DPI Water. Any such development must be carried out in accordance with an approved Riparian Area Management Plan (see conditions 44 and 45).	Rehabilitation and Landscape Management Plan (Rev 2). Appendix 3: Lockyersleigh Creek RAMP Appendix 4: Joarimin Creek Management Plan. Site observations.	The Riparian Area Management plan is shown in the 2011 Rehabilitation and Landscape Management Plan (Rev 2). The majority of riparian zones were inspected. They were all fenced and marked with signs. One fence (about 100 m long) was damaged. It was reported that repairs had been organised. No development activities in the riparian zones that are mentioned in this condition were noted during the site inspection or in the reviewed documentation.	Compliant

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NOISE (Incorporates OEH GTA)						
Noise Limits						
DA26		3	<p>The Applicant must ensure that the noise generated by the operation of the development does not exceed the criteria in Table 1 at any residence on privately-owned land.</p> <p>Table 1 Noise Assess Location -- Day(Laeq-15 minutes)/Evening(LAeq(15 minutes)/Night(Laeq-15 minutes)/Night(LA1-1 minute):</p> <p>1 - 35/35/35/45 2 - 35/35/35/45 3 - 35/35/35/45 4 - 35/37/35/46 5 - 35/35/35/46 6 - 35/37/36/46 7 - 38/38/35/55 8 - 39/38/36/55 9 - 39/39/37/56 10 - 42/42/40/53 11 - 35/35/35/47 12 - 37/37/36/47 13 - 40/38/37/47 14 - 35/35/35/47 15 - 35/35/35/47 16 - 35/35/35/45</p> <p>Notes: Receiver locations are shown on the plan in Appendix 3.</p>	<p>Lynwood Quarry Annual Environment Review, September 2015.</p> <p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, April 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, June 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, September 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, December 2017.</p> <p>INX community complaint reports for audit period, including complaints recorded on 21 September 2017 and 27 November 2017.</p>	<p>Noise is monitored quarterly at four representative locations which are representative of the receivers listed.</p> <p>2015 AER 2014/2015: section 3.0 states that four quarterly monitoring events took place within the reporting period and found that review of all documents confirmed that construction and operation noise complied with legislative noise emission requirements.</p> <p>There was one noises exceedance during the audit period - on 15 June 2016 (AER, September 2016).</p> <p>Holcim has undertaken corrective action including notifying the DPE Secretary of the exceedance and actions taken to address the above (sighted letter addressed to Katrina O'Reilly and Margaret Kirton, August 2016).</p> <p>Holcim received noise complaints from the same Marulan resident on two separate occasions. These incidents were reported and managed via the internal INX system. A. White has spoken to concerned residents, and the issue has been closed by Holcim.</p> <p>No further actions are recommended.</p>	Non-compliant
			<p>Noise generated by the development is to be measured in accordance with the relevant requirements of the INP (as may be updated from time-to-time). Appendix 10 sets out 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 an 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>	<p>Lynwood Quarry Annual Environment Review, September 2015.</p> <p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, April 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, June 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, September 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, December 2017.</p>	There were no recorded exceedances at Holcim owned properties.	Compliant

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Noise Mitigation Measures						
	4	4	The Applicant must:			
DA27		4 (a)	(a) implement best practice management to minimise the operational noise of the development;	Site observations. Site interviews.	Holcim have an ongoing noise reduction program, eg installation of reversing "squawkers", and limiting operations at night, and recently, to address the noise at the newly formed emplacement area, Holcim has built a wall of material along the southern aspect for the Heavy Mobile Equipment (HME) to work behind. This will reduce any noise travelling to the south.	Compliant
DA28		4 (b)	(b) implement all reasonable and feasible measures to minimise road transportation noise associated with the development;	Site observations. INX Community Complaint Report dated 27 November 2017	INX Community Complaint Report dated 27 November 2017 showed that a resident complained about hearing trucks accelerating. A. White has spoken to the resident and closed out the matter.	Compliant
DA29		4 (c)	(c) minimise the noise impacts of the development during meteorological conditions when the noise criteria in this consent do not apply (see Appendix 10);	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017. Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, April 2017. Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, June 2017. Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, September 2017. Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, December 2017.	The noise exceedance on 15 July 2016 was not reported to occur during meteorological conditions when the noise criteria in this consent do not apply.	Compliant
DA30		4 (d)	(d) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent; and	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017. Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, April 2017. Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, June 2017. Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, September 2017. Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, December 2017.		Compliant

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DA31		4 (e)	(e) regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent,	<p>Lynwood Quarry Annual Environment Review, September 2015.</p> <p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, April 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, June 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, September 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, December 2017.</p>	As noted in regards to Schedule 3, Condition 3, corrective actions were taken in response to recorded noise exceedances.	Compliant
			to the satisfaction of the Secretary.	-		Note
			Operating Hours			
		5	The Applicant must comply with the operating hours in Table 2:			
DA32			<p>Construction works</p> <p>Monday-Friday: 7am to 6pm</p> <p>Saturday: 8am to 1pm</p> <p>Sunday and Public Holidays: None</p>	Lynwood Quarry Annual Environment Review, September 2015.	<p>Construction and commissioning was completed on 5 October 2015. The 2015 AER does not report compliance with construction hours. Although shift change-over reports were provided for evidence of working hours, none of them fell within the period prior to 5 October 2015 (and thus construction).</p> <p>(Compliance with operating hours is reported in the 2016 and 2017 AERs - see below).</p>	Compliant
DA33			<p>Topsoil/ overburden removal /emplacement; drilling</p> <p>Any day: 7am to 6pm</p>	<p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p>	The AERs report "all operations undertaken at Lynwood Quarry were undertaken as per the Schedule 3, Condition 5."	Compliant
DA34			<p>Blasting</p> <p>Monday-Saturday: 9am to 5pm</p> <p>Sunday and Public Holidays: None</p>	<p>Site interviews.</p> <p>Monitoring reports (https://www.holcim.com.au/sustainability/environment/pollution-monitoring-data#tabs-0-68884600-1525050091-0)</p>	<p>Two INX Community Complaint Records (entered into system 19 May 2016 and 21 September 2017, from two different residents) record complaints about blasting activities (with a focus on the level of noise/vibration rather than the blast time). In addition, one blasting complaint letter was sent by a community member to DPE. However, monitoring results do not indicate that criteria were exceeded.</p> <p>Pollution monitoring data provided on Holcim's website shows that blasts mostly occur between 11 am - 2 pm. However there were a number of entries listing "12.00am". It is reasonable to conclude that this is a mistake as complaints would have been made if blasting occurred at midnight.</p> <p>Recommendation (REC2): all monitoring reports should be carefully checked before being issued.</p>	Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA35			Extraction Any day: 7am to 10pm	Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.	The AERs report "all operations undertaken at Lynwood Quarry were undertaken as per the Schedule 3, Condition 5."	Compliant
DA36			Processing (crushing, screening, stockpiling); loading, delivery, and distribution; maintenance Any day: Anytime	Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.	The AERs report "all operations undertaken at Lynwood Quarry were undertaken as per the Schedule 3, Condition 5."	Compliant
			Notes: <ul style="list-style-type: none"> • Table 2 only relates to construction works that are audible at any residential receivers on privately owned land. Construction works that are inaudible at any residential receiver may be carried out at any time. • Construction works within the Hume Highway reserve may be undertaken outside the hours specified in Table 2 with the written approval of the RMS. 	-		Note
	Monitoring		Noise Management Plan			
DA37		6	The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. In addition to the standard requirements for management plans (see condition 2 of Schedule 5) this plan must:			
DA38		6 (a)	(a) be submitted to the Secretary for approval by 30 November 2016, unless otherwise agreed by the Secretary;	Sighted letter from DPE approving Noise Management Plan (dated 7/12/2016).		Compliant
DA39		6 (b)	(b) describe the measures that would be implemented to ensure: <ul style="list-style-type: none"> • compliance with the noise criteria in this consent; • best practice management is being employed; and • the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply (see Appendix 10); 	Lynwood Quarry, Noise Management Plan, September 2016.		Compliant
DA40		6 (c)	(c) describe the proposed noise management system; and	Lynwood Quarry, Noise Management Plan, September 2016.	Section 4.0 of Noise Management Plan	Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA41		6 (d)	(d) include a monitoring program that will be put in place to measure noise from the development against the noise criteria in Table 1, including noise monitoring to validate the predicted noise impacts for Location 11 contained in the EA (Mod 4), and which evaluates and reports on the effectiveness of the noise management system on site.	<p>Lynwood Quarry, Noise Management Plan, September 2016.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, April 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, June 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, September 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, December 2017.</p>	<p>Section 5.0 of Noise Management Plan</p> <p>The monitoring was performed by a third party in accordance to the Noise Management Plan and in general accordance with the Noise Policy for Industry to address conditions outlined in the Development Consent.</p>	Compliant
DA42			The Applicant must implement the management plan as approved from time to time by the Secretary.	<p>Site observations.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, April 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, June 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, September 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, December 2017.</p>	<p>The measures listed in Section 4.0 of Noise Management Plan appear to have been implemented.</p> <p>The monitoring records do not include all of the information specified in Section 5.1 of the Noise Management Plan, eg operator name, time of measurement, height of the microphone, etc.</p> <p>Recommendation (REC3): monitoring records need to provide all monitoring conditions and the name of the operator.</p>	Compliant

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BLASTING AND VIBRATION (Incorporates OEH GTA)						
Airblast Overpressure Criteria						
DA43		7	<p>The Applicant must ensure that the airblast overpressure level from blasting at the development does not exceed the criteria in Table 3 at any residence on privately owned land.</p> <p>Table 3: Airblast overpressure level: allowable exceedance 115 dB(Lin Peak): 5% of the total number of blasts over a period of 12 months 120 dB(Lin Peak): 0%</p>	<p>Lynwood Quarry Annual Environment Review, September 2015.</p> <p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p> <p>Fortnightly monitoring results: - Environmental_Monitoring_171001-171015 - Environmental_Monitoring_171016-171031 - Environmental_Monitoring_171101-171115 - Environmental_Monitoring_171116-171130 - environmental_monitoring_171201-171215 - environmental_monitoring_171216-171231 - environmental_monitoring_180101-180115</p>	<p>2015/2014 AER section 4.0 states that a total of 20 blasts were conducted during the 2015-2015 period with no exceedances. Table 3 of the AER provides the results of each blast and the corresponding monitoring locations. Blasting times are not provided.</p> <p>2016/2015 AER section 6.2 states that a total of 54 blasts were recorded during the reporting period. This has caused the loss of blast monitoring data for blast on dates. There were no exceedances as can be seen in Table 8 Blast data 2015 - 2016. Blast records for 14/12/2015, 17/12/2015, 7/01/2016, 10/01/2016, 14/01/2016 and 21/01/2016 were not available from the blasting contractors. Appendix 2 of the AER includes Holcim's letter (dated 26 February 2016) to Oliver Holm and Kane Winwood, DPE, regarding the lost blasting monitoring records.</p> <p>2017/2016 AER section 6.2 states that a total of 34 blasts were recorded during the reporting period, without an exceedance. Table 7. Blast data 2015 - 2016 shows that none were above 5mm/s allowed vibration levels. Times of blasting activities were not recorded.</p> <p>The fortnightly monitoring reports for the last three months of the audit period were examined as a sample of these reports. No exceedances were reported. However, some data was incorrectly entered (eg results for 23/10/17).</p> <p>Recommendation: Refer to (REC2).</p>	Compliant
Ground Vibration Impact Assessment Criteria						
		8	<p>The Applicant must ensure that the ground vibration level from blasting at the development does not exceed the criteria in Table 4 at any residence on privately owned land, or the criteria in Table 5 for the nominated infrastructure.</p>	-		-

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA44			<p>Table 4: Ground vibration impact assessment criteria for residences on privately-owned land</p> <p>Peak particle velocity: allowable exceedance 5 mm/s: (5% of the total number of blasts over a period of 12 months) 10 mm/s: 0%</p>	<p>Lynwood Quarry Annual Environment Review, September 2015.</p> <p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p> <p>Fortnightly monitoring results: - Environmental_Monitoring_171001-171015 - Environmental_Monitoring_171016-171031 - Environmental_Monitoring_171101-171115 - Environmental_Monitoring_171116-171130 - environmental_monitoring_171201-171215 - environmental_monitoring_171216-171231 - environmental_monitoring_180101-180115</p> <p>Neighbour blast notification register.</p>	<p>Holcim have a system that tracks notification of neighbouring six properties prior to blasting activities (spreadsheet available - Neighbour blast notification register).</p> <p>No blast exceedances are reported in the AERs.</p> <p>The fortnightly monitoring reports for the last three months of the audit period were examined as a sample of these reports. No exceedances were reported.</p>	Compliant
DA45			<p>Table 5: Ground vibration impact assessment criteria on infrastructure</p> <p>Peak particle velocity of 25 mm/s: Main Southern Railway Line Reservoir Peak particle velocity of 100 mm/s: Gas Pipeline</p>	<p>Lynwood Quarry Annual Environment Review, September 2015.</p> <p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p> <p>Fortnightly monitoring results: - Environmental_Monitoring_171001-171015 - Environmental_Monitoring_171016-171031 - Environmental_Monitoring_171101-171115 - Environmental_Monitoring_171116-171130 - environmental_monitoring_171201-171215 - environmental_monitoring_171216-171231 - environmental_monitoring_180101-180115</p> <p>Neighbour blast notification register.</p>	<p>Holcim have a system that tracks notification of neighbouring six properties prior to blasting activities (spreadsheet available - Neighbour blast notification register).</p> <p>No blast exceedances are reported in the AERs.</p> <p>The fortnightly monitoring reports for the last three months of the audit period were examined as a sample of these reports. No exceedances were reported.</p>	Compliant
DA46			Peak particle velocity (mm/s) of 100: Gas Pipeline	No exceedances reported in AMR for the audit period		Compliant
DA47			However, if the Applicant has a written agreement with the ARTC to vary the peak particle velocity for the Main Southern Railway Line in Table 5, and a copy of this agreement has been forwarded to the Department, then the Applicant may exceed the limit specified in Table 5 in accordance with the written agreement.	-		Not triggered

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Operating Conditions						
DA48		9	During the development, the Applicant must implement best blasting practice to: (to the satisfaction of the Director-General.)	Blast Management Plan (November 2016). Letter from H. Reed, DPE dated 7 December 2016. Letter from Holcim to DPE regarding DA 128-5-2008 granite pit blast GR1701 dated February 2017.	Blast Management Plan dated November 2016 summarises Blast Management, description of blasting activities for site and operational controls. Letter from H. Reed, DPE dated 7 December 2016 states that the Department has reviewed the Blast Management Plan (November 2016) and is satisfied that it addresses the relevant requirements of the consent. Letter to DPE summarises events surrounding a drill and blast procedure performed in the granite pit. During the process, one monitoring point (B4) was not monitored as required by DA 128-5-2005. This was rectified by placing a permanent monitor at all locations to ensure this does not occur again.	Compliant
DA49		9 (a)	(a) ensure that no flyrock leaves the site;	Blast Management Plan (November 2016).	Blast Management Plan, Section 5.2 (operational controls) states that Holcim will implement the following blast management practices: "detailed design for each blast in order to maximise the blast efficiency, minimise dust, fumes, ground vibration and air blast, the potential for fly rock as well as to ensure compliance with site specific blasting conditions." There are wide buffers, blasts are planned and there are no reports of fly rock leaving the site.	Compliant
DA50		9 (b)	(b) protect the safety of people, property, and livestock;	Blast Management Plan (November 2016).	Section 5.2 operational controls of the Blast Management Plan notes that Holcim will identify exclusion zones for each blast to protect the safety of personnel and assets.	Compliant

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DA51		9 (c)	(c) minimise the dust and fume emissions from blasting on the site,	Blast Management Plan (November 2016). INX Community Complaint Reports from three residents dated 19 May 2016, 21 September 2017 and 21 September 2017 regarding blasting activities (one directly related to dust from blasting activities).	2016/2017 AER section 9.3 states that there were no community complaints during the interim reporting period. 2016/2015 AER section 9.3 (page 33) 'Community complaints' states that complaints were received about dust management and blasting activities. Dust monitors (DDG and PM10) were placed at the residence of the complainant, noise experts were engaged, water filters were supplied and a number of meetings were conducted between the resident and Holcim personnel. Reports have been provided to the resident and various government departments regarding dust emissions. The AER report states that all monitoring data installed and around their residence provides no indication of any dust measuring above environmental performance measures. As part of their due diligence, Lynwood undertook monitoring during the subsequent six blast events. There was no exceedance measured during any of these blasts. 2015/2014 section 19.2 shows that one complaint about blasting was received. Monitoring was undertaken at the residents location to provide data that was proximate to the location of the complaint. After two monitoring events showed no results, Holcim ceased monitoring at the location. Holcim has continued dialogue with the resident. All INX Community Complaint Reports were closed out either by discussing the issue with the complainant or by taking, or committing to, actions to resolve complaints related to blasting activities. No further actions are recommended.	Compliant
			to the satisfaction of the Secretary.	-		Note
Public Notice						
		10	During the development, the Applicant must:			
DA52		10 (a)	(a) notify the landowner/occupier of any residence within 2 kilometres of the quarry pit who registers an interest in being notified about the blasting schedule on site;	Blast Management Plan (November 2016).	Six neighbouring properties are notified of the blasting schedule.	Compliant
DA53		10 (b)	(b) operate a blasting hotline, or alternative system agreed to by the Secretary to enable the public to get up-to-date information on blasting operations at the development; and	Blast Management Plan (November 2016). Blasting hotline phone number on Holcim's website http://www.holcim.com.au/about-us/community-link/lynwood/contact-details.html	Blast Management Plan, Section 9.0 (Complaints) states that Holcim maintains a blast hotline that allows the community to contact Lynwood Quarry about blasting activities. It also allows members of the community within a 2 km radius to register and be notified of blasting activities. All complaints are investigated, and If a community member raises concerns, Holcim will arrange for up to six due diligence monitoring events to occur at or near the premises. The data recorded will be assessed, recorded and discussed with the Quarry Manager and community member. Table 10 lists potential problems that may arise and corrective actions that would be taken.	Compliant
DA54		10 (c)	(c) keep the public informed about this hotline (or any alternative system).	Blasting hotline phone number on Holcim's website http://www.holcim.com.au/about-us/community-link/lynwood/contact-details.html		Compliant

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			to the satisfaction of the Secretary.			
Blast Management Plan						
		11	The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Secretary. In addition to the standard requirements for management plans (see condition 2 of Schedule 5) this plan must:	-		-
DA55		11 (a)	(a) be submitted to the Secretary for approval by 30 November 2016, unless otherwise agreed by the Secretary;	Blast Management Plan (November 2016). Letter from H. Reed, DPE dated 7 December 2016.		Compliant
DA56		11 (b)	(b) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent;	Blast Management Plan (November 2016).	The Blast Management Plan uses first year of blasting monitoring data as the baseline data for monitoring points. The plan uses assessment criteria from the Development Consent Conditions 7 and 8.	Compliant
DA57		11 (c)	(c) include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this consent; and	Blast Management Plan (November 2016).	A monitoring program is included in Section 6 of the Blast Management Plan.	Compliant
DA58		11 (d)	(d) include a protocol for investigating and responding to complaints.	Blast Management Plan (November 2016).	A protocol for investigating and responding to complaints included in the Blast Management Plan, Section 9.	Compliant
			The Applicant must implement the management plan as approved from time to time by the Secretary.	Blast Management Plan (November 2016). Site observations.		Compliant

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AIR QUALITY (Incorporates OEH GTA)						
Impact Assessment Criteria						
DA59		12	The Applicant must ensure that dust generated by the development does not cause additional exceedances of the criteria listed in Tables 6-8 at any residence that exists on the date of this consent, or on more than 25 percent of any privately owned land.	<p>Lynwood Quarry Annual Environment Review, September 2015</p> <p>Lynwood Quarry Annual Environment Review, September 2016</p> <p>Lynwood Quarry Annual Environment Review, March 2017</p> <p>INX Community Complaint Reports for audit period (in particular report dated 21 September 2017).</p> <p>INX Environment Report for audit period (in particular report dated 5 January 2017)</p> <p>Holcim letters to DPE regarding dust deposition gauge monitoring results, as below: - letter dated 11 January 2011 regarding monitoring results at DG #3 - letter dated 4 February 2016 regarding monitoring results at DG #3 and #9 - letter dated 12 March 2016 regarding monitoring results at DG #7 and #8 monitoring results at DG #3 and #10 - letter dated 20 June 2016 regarding monitoring results at DG #5</p>	<p>2005 EIS Appendix 5. Pages 16 - 18 provides predictions of air quality at 8 locations for 7 years in the 30 year period.</p> <p>2005 EIS section 5.8.5 of the main text found that only one vacant property may be potentially dust affected.</p> <p>2016/2015 AER section 9.3 (page 33) 'Community complaints' states that complaints were received about dust management and blasting activities. Dust monitors (DDG and PM10) were placed at the residence of the complainant, noise experts were engaged, water filters were supplied and a number of meetings were conducted between the resident and Holcim personnel. Reports have been provided to the resident and various government departments regarding dust emissions. The AER report states that all monitoring data installed and around their residence provides no indication of any dust measuring above environmental performance measures. As part of their due diligence, Lynwood undertook monitoring during the subsequent six blast events. There was no exceedance measured during any of these blasts.</p> <p>Lynwood Quarry Annual Environmental Review, September 2015:</p> <ul style="list-style-type: none"> - there were no exceedances of the TSP or annual PM10 criteria; - there was one exceedance (50.9 ug/m3) of the 24-hour PM10 criterion - this minor exceedance was reasonably attributed to offsite road works - the annual average deposited dust level did not exceed the criterion. <p>Lynwood Quarry Annual Environmental Review, September 2016 - there were no exceedances of TSP, 24-hour and annual PM10, deposited dust criteria.</p>	Compliant

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					<p>Lynwood Quarry Annual Environmental Review, September 2017 - there were no exceedances of TSP, 24-hour and annual PM10, deposited dust criteria.</p> <p>Holcim advised DPE of a number of individual dust deposition results that exceeded relevant criterion. However, these were not annual average results, and their purpose was to keep the DPE informed about ongoing monitoring and mitigation measures on-site.</p> <p>INX Community Complaint Report dated 21 September 2017 was directly related to dust emissions from site (due to general operations and blasting activities). Immediate action was taken to resolve the complaint. The INX Environment Report dated 5 January 2017 noted that one PM10 monitor was moved on 29 December 2016, and that technical difficulties led to samples not being taken as they should have been. Immediate action was taken to resolve issue.</p>	
			Table 6: Long term impact assessment criteria for particulate matter			
DA60			Total suspended particulate (TSP) matter, Averaging period: Annual, Criterion 90 ug/m3	<p>Lynwood Quarry Annual Environment Review, September 2015.</p> <p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p> <p>Fortnightly monitoring results: - Environmental_Monitoring_171001-171015 - Environmental_Monitoring_171016-171031 - Environmental_Monitoring_171101-171115 - Environmental_Monitoring_171116-171130 - environmental_monitoring_171201-171215 - environmental_monitoring_171216-171231 - environmental_monitoring_180101-180115</p>	<p>Averaging annual TSP recorded in 2014/2015, 2015/2016 and 2016/2017 AERs. The annual average was below the 90 ug/m3 criterion in all recorded instances.</p> <p>The fortnightly monitoring reports for the last three months of the audit period were examined as a sample of these reports. No exceedances were reported. However, some data was incorrectly entered (egg results for 25/10/17).</p> <p>Recommendation: Refer to (REC2).</p>	Compliant
DA61			Particulate matter < 10 µm (PM10)	<p>Lynwood Quarry Annual Environment Review, September 2015.</p> <p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p>	<p>Averaging annual PM10 is reported in the 2015, 2016 and 2017 AERs. The annual average was below the 30 ug/m3 criterion in all recorded instances.</p>	Compliant

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			Table 7: Short term impact assessment criteria for particulate matter			
DA62			Particulate matter < 10 µm (PM10) Averaging period: 24 hour Criterion 50 ug/m3	<p>Lynwood Quarry Annual Environment Review, September 2015.</p> <p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p> <p>Fortnightly monitoring results:</p> <ul style="list-style-type: none"> - Environmental_Monitoring_171001-171015 - Environmental_Monitoring_171016-171031 - Environmental_Monitoring_171101-171115 - Environmental_Monitoring_171116-171130 - environmental_monitoring_171201-171215 - environmental_monitoring_171216-171231 - environmental_monitoring_180101-180115 	<p>Average and maximum 24-hour PM10 concentrations are reported in the 2015, 2016 and 2017 AERs. The annual average was below the 50 ug/m3 criterion in all recorded instances except for one sample (50.9 ug/m3) reported in the 2015 AER. This is a marginal exceedance and was attributed to road works adjacent to the high volume air sampler. This conclusion appears reasonable and there have been no subsequent exceedances.</p> <p>The 2015 AER reports that 19 scheduled samples were not collected. The 2016 AER reports that 2 scheduled samples were not collected. The 2016 AER does not report any samples that were not collected. Given this trend, no additional actions are recommended.</p> <p>The fortnightly monitoring reports for the last three months of the audit period were examined as a sample of these reports. No exceedances were reported.</p> <p>The 2017 AER (Figure 2) presents the air quality trend. The average daily PM10 concentration has generally increased as the quarry is developed and the disturbance area is increasing. The average concentrations are well below the criteria. However, the trend highlights that Holcim will need to continue to minimise dust generation.</p> <p>No further actions are recommended.</p>	Non-compliant
			Table 8: Long term impact assessment criteria for deposited dust			
DA63			<p>Deposited dust</p> <p>Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS 3580.10.1-1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.</p>	<p>Lynwood Quarry Annual Environment Review, September 2015.</p> <p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p> <p>Fortnightly monitoring results:</p> <ul style="list-style-type: none"> - Environmental_Monitoring_171001-171015 - Environmental_Monitoring_171016-171031 - Environmental_Monitoring_171101-171115 - Environmental_Monitoring_171116-171130 - environmental_monitoring_171201-171215 - environmental_monitoring_171216-171231 - environmental_monitoring_180101-180115 	<p>Annual average dust deposition results are compliant, as discussed above.</p> <p>The fortnightly monitoring reports for the last three months of the audit period were examined as a sample of these reports. No exceedances were reported. However, some data was incorrectly entered (eg results for 25/10/17).</p> <p>Recommendation: Refer to (REC2).</p>	Compliant

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Operating Conditions (Incorporates OEH GTA)						
		13	The Applicant must:			
DA64		13 (a)	(a) implement best practice management to minimise the dust emissions of the development;	Site observations. Lynwood Quarry Air Quality Management Plan (Umwelt, October 2016) Lynwood Quarry Blast Management Plan (Holcim, November 2016).	Site inspection identified various dust control measures including dust screens and dust sprinklers, and confining traffic to identified construction traffic routes. A. White confirmed that water carts are hired on hot windy days to minimise and control dust emissions.	Compliant
DA65		13 (b)	(b) carry out periodic air quality monitoring to determine whether the development is complying with the relevant conditions of this consent;	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017. Fortnightly monitoring results: - Environmental_Monitoring_171001-171015 - Environmental_Monitoring_171016-171031 - Environmental_Monitoring_171101-171115 - Environmental_Monitoring_171116-171130 - environmental_monitoring_171201-171215 - environmental_monitoring_171216-171231 - environmental_monitoring_180101-180115		Compliant
DA66		13 (c)	(c) regularly assess meteorological and air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this consent;	Site interviews Lynwood Quarry Air Quality Management Plan (Umwelt, October 2016)	The Air Quality Management Plan Section 4.2 (Operation Controls) includes: daily assessment of meteorological conditions to enable construction/operation activities to be modified to minimise dust generation). It was not windy on the day of the site inspection. However, A. White confirmed there was one very hot, dry and windy day in the audit period where operations had to cease in order to control dust emissions.	Compliant
DA67		13 (d)	(d) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events; and	Site interviews Lynwood Quarry Air Quality Management Plan (Umwelt, October 2016)	See row above.	Compliant
DA68		13 (e)	(e) minimise the area of surface disturbance and maximise progressive rehabilitation of the site.	Site observations.	The site was being established during the audit period. Some rehabilitation of construction areas and stockpiles has started.	Compliant
			to the satisfaction of the Secretary.			
Quarry-owned Land						
DA69		14	The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria in Tables 6-8 at any occupied residence on quarry owned land unless;	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.	Only one tenant resides on Holcim land, close to the Johnnifields Quarry. Dust deposition gauge 2 is about half way between the quarry and this residence. A high average deposited dust level was recorded at this site in the 2016 AER. However as stated in regards to Schedule 3, Condition 13(a), Holcim is implementing best practice measures to minimise dust emissions.	Compliant

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DA70		14 (a)	(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; and	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.	Only one tenant resides on Holcim land, close to the Johnnifields Quarry, east of Lynwood Quarry. Health-based air quality criteria have not been exceeded at the high volume air sampler on the eastern side of the quarry (HVAS 2).	Not triggered
DA71		14 (b)	(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,	-		Not triggered
			to the satisfaction of the Secretary.			
Air Quality Management Plan						
		15	The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. In addition to the standard requirements for management plans (see condition 2 of Schedule 5) this plan must:			
DA72		15 (a)	(a) be submitted to the Secretary for approval by 30 November 2016, unless otherwise agreed by the Secretary;	Lynwood Quarry Air Quality Management Plan (October 2016). Sighted DPE letter to Holcim dated 5 December 2016 approving Lynwood Quarry Air Quality Management Plan.	The DPE letter notes DPE's satisfaction with air quality monitoring suite.	Compliant
DA73		15 (b)	(b) be prepared in consultation with the EPA;	Lynwood Quarry Air Quality Management Plan (October 2016)	The Air Quality Management Plan Section 1.5 states that it was prepared in consultation with the EPA and recommendations from EPA have been incorporated in the plan.	Compliant
DA74		15 (c)	(c) describe the measures that would be implemented to ensure: <ul style="list-style-type: none"> • compliance with the relevant conditions of this consent; • best practice management is being employed; and • the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events; 	Lynwood Quarry Air Quality Management Plan (October 2016)		Compliant
DA75		15 (d)	(d) describe the proposed air quality management system; and	Lynwood Quarry Air Quality Management Plan (October 2016)	The Air Quality Management Plan Section 4.0 describes engineering and operational controls.	Compliant
DA76		15 (e)	(e) include an air quality monitoring program that: <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. 	Lynwood Quarry Air Quality Management Plan (October 2016)	The Air Quality Management Plan Section 5.0 describes monitoring.	Compliant

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DA77			The Applicant must implement the management plan as approved from time to time by the Secretary.	Lynwood Quarry Air Quality Management Plan (October 2016) Site observations.		Compliant
METEOROLOGICAL MONITORING (Incorporates OEH GTA)						
DA78		15A	For the life of the development, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline.	Lynwood Quarry Air Quality Management Plan (October 2016)	A meteorological station is installed at Lynwood Quarry in accordance with the requirements of this condition. The data is used to assess dust related compliance or complaints, and to assist proactive air quality/dust controls and management Air Quality Management Plan Section 5.3. The station uses telemetry to provide realtime site weather data.	Compliant
Greenhouse Gas Emissions						
DA79		15B	The Applicant must implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site.	Site interviews.	There are a number of energy-saving programs on site including automatic lights. Holcim reports to the Department of the Environment and Energy - National Pollution Inventory (NPI) with a list of all emissions leaving the site. Management of greenhouse gas emissions is not mentioned in Holcim's Lynwood Quarry Air Quality Management Plan (October 2016), of the AERs.	Compliant
SURFACE AND GROUND WATER (Incorporates NOW and OEH GTAs)						
DA80			<i>Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development.</i>	-	Groundwater is not extracted at the site. Water is not extracted from water courses.	Note

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Pollution of Waters						
DA81		16	Except as may be expressly provided by a License, the Applicant must comply with section 120 of the Protection of the Environment Operations Act 1997 during the carrying out of the development.	<p>Lynwood Quarry Annual Environment Review, September 2015.</p> <p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p>	<p>The 2015 AER section 7.0 (Water Management) notes that the Type C dam described in the EIS and water management plan would be insufficient to treat the fine sediments expected to run off the catchment area. An alternative dam construction was completed to meet compliance. In this reporting period, there were two overflow events. Investigation led to multiple corrective actions which were accepted by the EPA.</p> <p>The 2016 AER section 7.0 (Water Management) provides the surface water and groundwater data results for the 2015-2016 period. There was one dam spill resulting from above the 90th percentile rain event. Full compliance was met for freeboard requirements before the event occurred.</p> <p>The 2017 AER section 7.0 (Water Management) provides surface water and groundwater data results for the reporting period. Section 12.0 (Incidents and non-compliance) summarises a 1,500-2,000 L diesel spill caused by train fuelling on site. All contamination was contained on site without any harm caused to the receiving environment. Due diligence reporting continued for 6 months.</p> <p>No further actions are recommended.</p>	Non-compliant
Water Discharge Limits						
DA82		17	<p>Except as may be expressly provided by a License, the Applicant must ensure that any controlled discharge from the controlled discharge points at Sediment Dams A to F comply with the limits in Table 10.</p> <p>Table 10: Surface Water Discharge Limits Pollutant: Unit of measure: 100 Percentile concentration limit Total Suspended Solids: 50 mg/L pH: 6.5-8.5 Oil & Grease: 10 mg/L or none visible.</p>	<p>Site observations.</p> <p>Lynwood Quarry Annual Environment Review, September 2015.</p> <p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p>	<p>In NSW Department of Primary Industry - Fisheries response to the auditor's request for comments they raised concern related to degradation of downstream water quality and aquatic habitats resulting from sediment and pollutants leaving the quarry working and passing into downstream waterways including "Lockeyersleigh Creek, Joarimin Creek and the Wollondilly River."</p> <p>AER reports for the audit period show that while most TSS and pH values are within the criteria, there have been some minor exceedances.</p> <p>2005 EIS: Appendix 8, section 4.4.2.2: "Flocculation will be used to ensure that sediment loads from the site are not increased from the existing situation and that overflows have suspended sediments at concentrations of less than 50 mg/L."</p> <p>The 2016 AER states that Holcim has planted tubestock in riparian area of Joaramin Creek. The plantings are intended to stabilise the riparian areas in the Joaramin Creek through extensive tree planting. It is expected this will in time reduce the level of sediments entering the waterways.</p>	Non-compliant

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					<p>Surface water data in AER reports for the audit period states oil and grease were tested and were within parameters of the site's water management plan. Appendix 8, section 4.4.2.2: "Oil separators will be placed downstream from high traffic areas". "Flotation curtains will be placed at the outlets of all dams in order to protect downstream water quality in the event of oil spillage."</p> <p>Recommendation (REC4): water quality monitoring should continue in accordance with the Water Management Plan (July 2018) and the EPL.</p>	
			Note: For more information on the location of Sediment Dams A to F see Appendix 4.	-		Note
Sediment Dams						
DA83		18	The Applicant must ensure that:			
DA84		18 (a)	(a) Sediment Dams A, B and F are capable of treating the 90th percentile 5 day rainfall event; and	<p>Letter from GHD to Holcim, 21 May 2012.</p> <p>Lynwood Quarry Water Management Plan (July 2018)*.</p>	<p>Letter from GHD to Holcim states that the dams are designed to Blue Book standards, as described in the EIS and water management plan, but would be insufficient to treat the fine sediments expected to run off the catchment area. An alternative dam construction was completed to meet compliance. In this reporting period there were 2 overflow events. Investigation led to multiple corrective actions which were accepted by the EPA.</p> <p>Table 4.1, Existing Site Dams, in the Water Management Plan (July 2018) states that Dam F has a 90th percentile 5 day rainfall event type D/F as per Design Criteria specified for sediment control dams in with the Blue Book.</p> <p>Recommendation (REC5): The Water Management Plan should be updated so that it explicitly states that Sediment Dams A and B are cable of treating the 90th percentile 5 day rainfall event.</p> <p>In addition it states that dams that are yet to be constructed - Dam R1 and Dam R2 - will be capable of treating 90th percentile 5 day rainfall event type D/F. Likewise, sediment Dam G1 which is yet to be constructed will also be capable of treating 95th percentile 5 day rainfall event type D/F.</p>	Compliant

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DA85		18 (b)	(b) Sediment Dams C, D and E are capable of treating the 1:20 year ARI Critical Duration Storm Event.	Letter from GHD to Holcim, 21 May 2012. Water Management Plan (July 2018)*.	Letter from GHD to Holcim states that the dams are designed Blue Book standards. 2014/2015 AER section 7.0 water management notes that the Type C dam described in the EIS and water management plan would be insufficient to treat the fine sediments expected to run off the catchment area. An alternative dam construction was completed to meet compliance. In this reporting period there were 2 overflow events. Investigation led to multiple corrective actions which were accepted by the EPA. Water Management Plan (July 2018) notes in Section 4.2.1.1 "The installed catch drains have been designed to safely convey peak discharge from critical duration 20 year Average Recurrence Interval (ARI) storm events and will provide a minimum of 0.5 metre freeboard." Additionally, Table 4.1, Existing Site Dams, in the Water Management Plan states that Dams C, D and E the following minimum design criteria - "Type C critical storm duration" in accordance with the Blue Book.	Compliant
DA86			Notes: • Locations of the Sediment Dams referred to in this condition are shown on the plans in Appendix 4; • Dams must be designed to be in accordance with 'Managing Urban Stormwater: Soils and Construction (the Blue Book)', including Volume 1 (Landcom, 2004) and Volume 2 (OEH, 2008).	Sighted letter from GHD to Holcim on 21/5/12 which states that the dams are designed Blue Book standards. Water Management Plan (July 2018).		Compliant
Operating Conditions						
		19	The Applicant must:			
DA87		19 (a)	(a) ensure that the water collected in the Sediment Dams is pumped to the supply dams as soon as practicable;	Water Management Plan (July 2018)*	The Water Management Plan (July 2018), Section 4.2.1 notes "The sediment dams will be emptied using a pump and pipe or gravity system after rainfall events. Coagulant may be added to the dams in order to assist in lowering total suspended solids. Holcim has consulted with the EPA and DP&E and both agencies have approved this system." Recommendation (REC6): It is recommended that the Water Management Plan is updated so that it explicitly states that water from sedimentation dams is pumped to supply dams.	Compliant
DA88		19 (b)	(b) ensure that the accumulated sediment in all the Sediment Dams is kept below 30% of their design capacity;	Audit observations - sighted sediment removal from Dam E. Water Management Plan (July 2018)*	Water Management Plan (July 2018), Section 4.2.1 notes "All sediment dams will be managed to ensure that accumulated sediment is kept below 30 per cent of the dam design capacity."	Compliant

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DA89		19 (c)	(c) construct impervious bunds around all fuel, oil, chemical storage areas that are large enough to contain 110% of the volume held in the largest container in accordance with the requirements in the OEH Bunding and Spill Management manual; and	Site observations.	Site observations indicated that all oil, chemical storage areas are large enough and comply with requirements in this condition. During the audit, one blue storage drum was observed close to the stormwater drain (see photograph provided in report). Although stored on concrete, it was not in a bunded area and was easy to knock over. Recommendation (REC7): all that drums (and any other chemical storage containers) are stored in appropriately bunded areas at all times.	Non-compliant
DA90		19 (d)	(d) not use any flocculants on site for water pollution control treatment without the written approval of OEH.	Water Management Plan (July 2018)*	Water Management Plan (July 2018) Section 4.2.1 notes "Coagulant may be added to the dams in order to assist in lowering total suspended solids. Holcim has consulted with the EPA and DP&E and both agencies have approved this system."	Compliant*
DA91			<i>Note: The EIS indicated that flocculants maybe used for the treatment of collected stormwater. While the specific flocculent was not specified, some types of flocculants have the potential to cause ecotoxicological impacts on receiving waters.</i>	-		Note
DA92	19A	19A	The Applicant must ensure it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations to match the licensed water entitlements, to the satisfaction of the Secretary.	Water Management Plan (July 2018)*	Water Management Plan (July 2018) section 3.0, site water balance, outlines water demands, water supply and storage, site water balance, external water sourcing, water minimisation and annual water balance review - indicating that Holcim has adequate mechanisms in place to monitor and adjust the scale of operations to match licenced water entitlements.	Compliant
Management and Monitoring						
		20	The Applicant must prepare a Water Management Plan for the development to the satisfaction of the Secretary. In addition to the standard requirements for management plans (see condition 2 of Schedule 5) this plan must:			
DA93		20 (a)	(a) be prepared in consultation with the EPA, WaterNSW, DPI Water and DPI Fisheries;	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Holcim has consulted with all relevant agencies in preparing the 2018 Water Management Plan*. Holcim received comments and now needs to resubmit the draft version once more before finalising (as confirmed by A. White during site audit interviews).	Compliant
DA94		20 (b)	(b) be submitted to the Secretary for approval by 30 November 2016, unless otherwise agreed by the Secretary;	Correspondence with DPE dated 12 February 2017	Correspondence with DPE dated 12 February 2017 advised Holcim that the Water Management Plan will need to be revised, and that DPI Fisheries need to undertake a second review. The latest version of the Water Management Plan (July 2018) was emailed to DPI Fisheries for review on 17 July 2018 and Holcim is waiting for a response.	Compliant

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DA95		20 (c)	(c) include a Water Balance;	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Section 3. Water Management Plan (2016) Section 3. Water Management Plan (July 2018) Section 3.6	Compliant
DA96		20 (d)	(d) include an Erosion and Sediment Control Plan;	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Section 4. Water Management Plan (2016) Section 4. Water Management Plan (July 2018) Section 4.	Compliant
DA97		20 (e)	(e) include a Surface Water Monitoring Program;	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Appendix 2: Surface Water Monitoring Program Water Management Plan (2016) Appendix 2: Surface Water Monitoring Program Water Management Plan (July 2018) Appendix 2: Surface Water Monitoring Program	Compliant
DA98		20 (f)	(f) include a Ground Water Monitoring Program; and	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2016) Appendix 3: Groundwater Monitoring Program. Water Management Plan (2016) Appendix 3: Groundwater Monitoring Program Water Management Plan (July 2018) Appendix 2: Surface Water Monitoring Program	Compliant
DA99		20 (g)	(g) include a Surface and Ground Water Response Plan to address any potential adverse impacts associated with the development.	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Section 6 Water Management Plan (2016) Section 6 Water Management Plan (July 2018) Appendix 2: Surface Water Monitoring Program Section 6	Compliant
DA100			The Applicant must implement the management plan as approved from time to time by the Secretary.	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)* Site observations		Compliant
		21	The Water Balance must:			
DA101		21 (a)	(a) include details of all water extracted (including water make), dewatered, transferred, used and/or discharged by quarry; and	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Section 3.0 Water Management Plan (2016) Section 3.0 Water Management Plan (July 2018) Sections 3.2 to 3.4	Compliant
DA102		21 (b)	(b) describe measures to minimise water use by the development.	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Section 3.5 Water Management Plan (2016) Section 3.5 Water Management Plan (July 2018) Sections 3.1	Compliant

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		22	The Erosion and Sediment Control Plan must:			
DA103		22 (a)	(a) be consistent with the requirements of the Landcom's <i>Managing Urban Stormwater: Soils and Construction manual</i> ;	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Section 4.0 Water Management Plan (2016) Section 4.0 Plans outline controls that are designed and constructed to a standard consistent with Landcom's <i>Managing Urban Stormwater - Soils and Construction Manual, Volume 1 (the Blue Book)</i> Water Management Plan (July 2018) Section 4.0	Compliant
DA104		22 (b)	(b) identify activities that could cause soil erosion and generate sediment;	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Section 4.0 Water Management Plan (2016) Section 4.0 Plans include activities that have the potential to cause erosion and generate sediment on site. Water Management Plan (July 2018) Section 4.0.	Compliant
DA105		22 (c)	(c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Section 4.0 Water Management Plan (2016) Section 4.0 Plans Section 4.0 include activities that have the potential to cause erosion and generate sediment on site.	Compliant
DA106		22 (d)	(d) describe the location, function, and capacity of erosion and sediment control structures; and	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	The Water Management Plan (2016) plan has been updated to reflect project changes. The Water Management Plan (July 2018) was updated to reflect the further project changes.	Compliant
DA107		22 (e)	(e) describe what measures would be implemented to maintain (and if necessary decommission) the structures over time.	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Section 7.0 Water Management Plan (2016) Section 7.0 Water Management Plan (July 2018) A brief description of maintenance and decommissioning is provided.	Compliant
		23	The Surface Water Monitoring Program must include:			
DA108		23 (a)	(a) detailed baseline data on surface water flows and quality in Joarimin Creek, Lockyersleigh Creek, and Marulan Creek;	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Appendix 2: Surface Water Monitoring Program Section 2.0 Water Management Plan (2016) Appendix 2: Surface Water Monitoring Program Section 2.0 Water Management Plan (July 2018) Appendix 2: Surface Water Monitoring Program Section 2.0	Compliant

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DA109		23 (b)	(b) surface water impact assessment criteria;	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Appendix 2: Surface Water Monitoring Program Section 3.0 Water Management Plan (2016) Appendix 2: Surface Water Monitoring Program Section 3.0 Water Management Plan (July 2018) Appendix 2: Surface Water Monitoring Program	Compliant
DA110		23 (c)	(c) a program to monitor surface water flows and quality;	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Appendix 2: Surface Water Monitoring Program Section 4.0 Water Management Plan (2016) Appendix 2: Surface Water Monitoring Program Section 4.0 Water Management Plan (July 2018)* Appendix 2: Surface Water Monitoring Program	Compliant
DA111		23 (d)	(d) a protocol for the investigation of identified exceedances of the surface water impact assessment criteria; and	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Appendix 2: Surface Water Monitoring Program Section 5.0 Water Management Plan (2016) Appendix 2: Surface Water Monitoring Program Section 5.0 Water Management Plan (July 2018) Appendix 2: Surface Water Monitoring Program	Compliant
DA112		23 (e)	(e) a program to monitor the effectiveness of the Erosion and Sediment Control Plan.	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Appendix 2: Surface Water Monitoring Program Section 6.0 Water Management Plan (2016) Appendix 2: Surface Water Monitoring Program Section 6.0 Water Management Plan (July 2018) Appendix 2: Surface Water Monitoring Program	Compliant
			<i>Note: Monitoring of surface flows to be completed by visual assessment.</i>	-		Note
		24	The Ground Water Monitoring Program must include:			
DA113		24 (a)	(a) detailed baseline data on ground water levels, flows, and quality, based on statistical analysis;	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Appendix 3: Groundwater Monitoring Program Section 2.0 Water Management Plan (2011) Appendix 3: Groundwater Monitoring Program Section 2.0 Water Management Plan (July 2018) Appendix 3: Groundwater Monitoring Program	Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA114		24 (b)	(b) groundwater impact assessment criteria for monitoring bores;	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Appendix 3: Groundwater Monitoring Program Section 3.0 Water Management Plan (2011) Appendix 3: Groundwater Monitoring Program Section 3.0 Water Management Plan (July 2018) Appendix 3: Groundwater Monitoring Program	Compliant
DA115		24 (c)	(c) a program to monitor regional ground water levels and quality; and	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Appendix 3: Groundwater Monitoring Program Section 4.0 Water Management Plan (2011) Appendix 3: Groundwater Monitoring Program Section 4.0 Water Management Plan (July 2018) Appendix 3: Groundwater Monitoring Program	Compliant
DA116		24 (d)	(d) a protocol for the investigation of identified exceedances of the groundwater impact assessment criteria.	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Appendix 3: Groundwater Monitoring Program Section 5.0 Water Management Plan (2011) Appendix 3: Groundwater Monitoring Program Section 5.0 Water Management Plan (July 2018) Appendix 3: Groundwater Monitoring Program	Compliant
DA117			<i>Note: The surface and ground water monitoring programs must be consistent with the current version of Approved Methods for the Sampling and Analysis of Water Pollutants in New South Wales (OEH).</i>	Water Management Plan (2011) Water Management Plan (2016) Water Management Plan (July 2018)*	Water Management Plan (2011) Appendix 2: Surface water Monitoring Program Section 4.1 (Monitoring Standards) states that groundwater monitoring at Lynwood Quarry will be undertaken in accordance with the required method, as per this condition. Water Management Plan (2011) Appendix 3: Groundwater Monitoring Program Section 5.1 (Monitoring Standards) states that groundwater monitoring at Lynwood Quarry will be undertaken in accordance with the required method, as per this condition. Water Management Plan (July 2018) Appendix 3: Groundwater Monitoring Program	Compliant
Waterway Crossings						
DA118		25	The vehicular crossing of Lockyersleigh Creek as detailed in EA (Mod 4) must be designed and constructed in accordance with the <i>Policy and Guidelines for Fish Friendly Water Crossings</i> (DPI Fisheries, 2004) and <i>Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings</i> (2004) to the satisfaction of DPI Fisheries. Design plans should be submitted to DPI Fisheries for approval prior to the construction.	-	There is no evidence that design plans were submitted to DPI Fisheries for approval prior to the construction of the vehicular crossing of Lockyersleigh Creek. Recommendation (REC8): DPI Fisheries is consulted regarding the suitability of the vehicular crossing of Lockyersleigh Creek.	Non-compliant
TRAFFIC AND TRANSPORT (Incorporates RTA, Council and Department of Lands GTAs)						
Construction Traffic						
DA119		26	The Applicant must ensure that:			

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DA120		26 (a)	(a) construction traffic on the temporary construction access is kept to a minimum;	Site observations (2014).	Construction/commissioning phase completed on 5 October 2015.	Compliant
DA121		26 (b)	(b) no construction traffic uses the temporary construction access once the proposed bridge over the Main Southern Railway Line has been commissioned;	Site observations (2014).	Construction/commissioning phase completed on 5 October 2015. The bridge was commissioned and the temporary construction access road gated and locked in the first months of the audit period.	Compliant
DA122		26 (c)	(c) all other traffic uses the construction site access prior to the commissioning of the proposed Hume Highway Interchange; and	Site observations (2014).	Access road used as other access option, Stoney Creek Rd, is now locked.	Compliant
DA123		26 (d)	(d) where practicable, no heavy vehicle construction traffic movements occur on George Street during school zone times (ie between 8:00am to 9:30am and 2:30pm to 4:00pm on school days);	Holcim Construction Traffic Management Plan (Rev 2)	Construction/commissioning phase completed on 5 October 2015.	Compliant
DA124		26 (e)	(e) heavy vehicle construction traffic using George Street does not exceed 40kph; and	Site observations (2014)	40 kph road signs on traffic control plans in Holcim traffic management plan. Signs observed during previous audit inspection.	Compliant
DA125		26 (f)	(f) no traffic uses the construction site access once the proposed Hume Highway Interchange has been commissioned.	Site observations	The Hume Highway Interchange is used exclusively to access the site.	Compliant
DA126			<i>Note: The temporary construction access routes are shown in Appendix 5. The requirements of this condition are to be reflected in the Construction Traffic Management Plan required under Condition 28 below.</i>	-		Note
DA127		27	Prior to the commissioning of the proposed Hume Highway Interchange, the Applicant shall maintain the public roads on the construction access routes, or pay all reasonable cost associated with maintaining these roads during the period these roads are used for construction access, to the satisfaction of Council and/or the Department of Lands.	Sighted Holcim Construction Traffic Management Plan (Rev 2), emails from S. Mitchell to T. Cooper at Goulburn Council in December 2011 requesting road repairs during last audit period.		Compliant
DA128		28	Prior to carrying out any development, the Applicant must prepare (and following approval implement) a Construction Traffic Management Plan for the development, in consultation with the RMS, Council and the Department of Lands, and to the satisfaction of the Secretary. This plan must: (a) include a Road Dilapidation Report of the public roads on the construction access routes; and (b) describe what measures would be implemented to: • maintain the public roads; • minimise the potential noise and safety impacts associated with the construction traffic; and • keep the community informed of any traffic disruptions that would be caused by the development.	Letter from Director-General DP&I approving construction traffic management plan (4/4/2012) Letter from Goulburn-Mulwaree Council (3/11/2010), letter from RTA (27/10/2010)		Compliant

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Hume Highway Interchange						
		29	The Applicant must:			
DA129		29 (a)	(a) design and construct the proposed grade separated intersection at the existing junction of the Hume Highway (SH2) and Marulan South Road/Jerrara Road; and following the satisfactory completion of this development,	Site observations. RTA Major Works Authorisation Deed Private Financing of Construction March 2008 (211396379-1).		Compliant
DA130		29 (b)	(b) close the existing median and proclaimed access point on the Hume Highway, to the satisfaction of the RTS.	Site observations Letter from Road Traffic Authority to Holcim (10/9/12)		Compliant
DA131			Notes: <ul style="list-style-type: none"> • The design of these works must be in accordance with relevant RMS standards and specifications: - geometric road design in accordance with RMS Road Design Guide; - pavement design in accordance with the AUSTRROADS Pavement Design Guide; - bridge design in accordance with Australian Standard AS5100; and - grade separated interchange in accordance with NAASRA (AUSTRROADS) Grade Separated Interchanges – A Design Guide. 			Note
DA132			<ul style="list-style-type: none"> • The Applicant will be required to meet all the costs associated with this development, including design, land acquisitions, gazettal of new boundaries and access point, construction and project management. 	Site interviews (previous audit)	There were no disputes or non payments	Not triggered
DA133			<ul style="list-style-type: none"> • If other quarries or developments are approved that use this intersection, the applicants for such developments may be required to contribute to the cost of constructing the intersection, pro-rata on maximum usage rates. The Applicant must keep detailed records of the intersection design and construction costs and provide this information to the Secretary if requested to assist in levying costs on any such developments. 	-		Note
DA134		30	Prior to carrying out any development in the Hume Highway road reserve, the Applicant must prepare a Traffic Management Plan for the proposed development in the road reserve to the satisfaction of the RMS.	Appendix R of BMD Interchange CEMP		Compliant
Crown Roads/Land						
DA135		31	The Applicant must not carry out any development on Crown roads or land without the written approval of the Department of Lands.	RTA approval #211396379-1 (S. Liganaarachchi, RTA Project Manager 10/6/2011)		Compliant
Road Haulage						
DA136		32	The Applicant must ensure that all loaded vehicles entering or leaving the site are covered at all times.	Site observations.		Compliant

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DA137		33	The Applicant must ensure that all loaded vehicles leaving the site are cleaned of materials that may fall on the road before they are allowed to leave the site.	Site observations. INX Community Complaint Report dated 27 November 2017	No quarry materials were observed on sealed roads. There were no recorded complaints regarding materials on public roads.	Compliant
Monitoring of Quarry Product Transport						
DA138		33A	The Applicant must keep accurate records of all laden truck movements from the site (weekly, monthly and annually) and publish a summary of records in its Annual Review.	Lynwood Quarry Annual Environment Review, March 2017. Lynwood Monthly Sales, Confidential Report spreadsheet.	2017 AER 2016/2017 Table 4 (Summary of Operations) provides a summary of product transported total, by rail and truck) and Table 5 provides production within the reporting period . EMM audit team sighted spreadsheet called Lynwood Monthly Sales Confidential Report which included product transported from site.	Compliant
Protection of Aboriginal Sites						
DA139		34	The Applicant must ensure that the development does not cause any direct or indirect impact on identified Aboriginal sites located outside the approved disturbance area of the development. Only those Aboriginal sites identified within the approved Aboriginal Cultural Heritage Management Plan (see condition 35) or any approved Aboriginal Heritage Impact Permit may be impacted within the approved disturbance area of the development.	Caring for Country, Lynwood Quarry Aboriginal Heritage Management Plan, Rev 2 (2011). Site observations. Review of DigitalGlobe satellite image against Appendix 2 (Development Layout). Holcim letter to DPE dated 15 June 2017, re: Lynwood Quarry Extraction Area Modification Stage 1 Archaeological Salvage Program - Notification of Status of LKAS7, LKST1 and LKST2	Exclusion fencing with appropriate signage observed. Some Aboriginal sites have not been fenced, as per the Holcim letter to DPE dated 15 June 2017.	Compliant
Aboriginal Cultural Heritage Management Plan						
DA140		35	The Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development to the satisfaction of the Secretary. The plan must:	Caring for Country, Lynwood Quarry Aboriginal Heritage Management Plan, Rev 2 (2011). Draft Lynwood Quarry Aboriginal Heritage Management Plan (July 2018)* Correspondence with DPE and OEH regarding Lynwood Quarry Aboriginal Heritage Management Plan (8 August 2018, 13 September 2018).	Sighted Holcim's email to OEH and DPE (dated 8 August 2018) regarding the finalised Lynwood Quarry Aboriginal Heritage Management Plan (2018). A link to the plan was provided to both agencies. Holcim is still awaiting OEH comments, DPE has confirmed that they are in the process of reviewing the plan.	Compliant*
DA141		35 (a)	(a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;	DPE Letter of 5 December 2016	DPE's letter of 5 December 2016 endorses the appointment of Jan Wilson, Principal Archaeologist Umwelt to prepare the updated (2018) ACHMP.	Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA142		35 (b)	(b) be prepared in consultation with OEH and local Aboriginal stakeholders;	<p>Caring for Country, Lynwood Quarry Aboriginal Heritage Management Plan, Rev 2 (2011).</p> <p>Letter to DPE (dated 3 January 2017) regarding Aboriginal Heritage Management Plan).</p> <p>Letter to OEH (dated 15 June 2017) regarding agreed management commitments, current status of site, commencement of work notification and consultation participants.</p> <p>Memorandum of Understanding between Holcim (Australia) Pty Ltd and Lynwood Quarry Aboriginal Heritage Management Committee dated 15/16/17 May 2017.</p> <p>Lynwood Quarry Aboriginal Heritage Management Plan (July 2018)*.</p>	Sighted Section 1.3 of the Lynwood Quarry Aboriginal Heritage Management Plan (July 2018) "This revised AHMP was developed in consultation with the Registered Aboriginal Parties with a draft provided on 6 January 2017." The section summarised key meeting dates with Aboriginal stakeholders.	Compliant*
DA143		35 (c)	(c) be submitted to the Secretary for approval by 30 November 2016, unless the Secretary agrees otherwise;	DPE Letter of 29 November 2017	Sighted DPE's letter to Holcim's Lynwood quarry environmental representative A. White, re: request for extension to date for submission of Aboriginal Cultural Heritage Management Plan (ACHMP). Secretary agrees to Holcim's request for an extension, ACHMP can be submitted by 15 January 2018. The draft has subsequently been submitted.	Compliant*
DA144		35 (d)	(d) include the following; • a Conservation Management Plan that details how the Cultural Heritage Management Zones (shown conceptually on the plan in Appendix 6) are managed;	<p>Caring for Country, Lynwood Quarry Aboriginal Heritage Management Plan, Rev 2 (2011).</p> <p>Site observations.</p>	Sign-posted and cordoned-off cultural heritage management zones were observed during the audit inspection.	Compliant
DA145			• a detailed archaeological salvage program for Aboriginal sites/objects will be managed and protected; and • a description of the measures that would be implemented for:	Caring for Country, Lynwood Quarry Aboriginal Heritage Management Plan, Rev 2 (2011).		Compliant
DA146			protecting, monitoring and managing Aboriginal sites outside the approved disturbance area;	Caring for Country, Lynwood Quarry Aboriginal Heritage Management Plan, Rev 2 (2011).		Compliant
DA147			maintaining and managing reasonable access for Aboriginal stakeholders to cultural heritage items on site;	Caring for Country, Lynwood Quarry Aboriginal Heritage Management Plan, Rev 2 (2011).		Compliant
DA148			managing the discovery of any human remains or previously unidentified Aboriginal objects on site, including (in the case of human remains) stop work provisions and notification protocols;	Caring for Country, Lynwood Quarry Aboriginal Heritage Management Plan, Rev 2 (2011).		Compliant

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DA149			ongoing consultation with local Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage; and	<p>Caring for Country, Lynwood Quarry Aboriginal Heritage Management Plan, Rev 2 (2011).</p> <p>Memorandum of Understanding (MOU) between Holcim (Australia) Pty Ltd and Lynwood Quarry Aboriginal Heritage Management Committee dated 16/17/18 May 2017</p> <p>Holcim letter to OEH dated 15 June 2017 regarding Lynwood Quarry Extraction Area Modification Stage 1 Archaeological Salvage Program.</p> <p>DPE letter to Holcim dated 29 November 2016 regarding extension to submit updated Aboriginal Cultural Heritage Management Plan.</p>	<p>RAP Management Committee "will meet at least once every six months during the first three years of quarry. The meeting times may then move to annual meetings if all Management Committee members agree that this is appropriate."</p> <p>The MOU show's Holcim's commitment to establishing a Cultural Heritage Centre, the ongoing operation and funding of the Cultural Heritage Centre. The MOU was signed by a number of representatives from the Aboriginal community, Holcim and an archaeologist.</p> <p>Holcim letter to OEH shows evidence of engagement with Aboriginal communities relevant to the site.</p> <p>DPE's letter states "I note that Holcim has been actively engaging with Aboriginal stakeholders in the preparation of the revised ACHMP, particularly with regard to management of scar trees on site..."</p>	Compliant
DA150			ensuring any workers on site receive suitable heritage inductions prior to carrying out any activities which may disturb Aboriginal sites, and that suitable records are kept of these inductions.	Training modules: ENV: Training and Awareness, and HAUS Introduction to Environmental Risk Management.	Site interviews indicated that all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities via site inductions and the following training modules: ENV: Training and Awareness, and HAUS Introduction to Environmental Risk Management.	Compliant
DA151			The Applicant must implement the management plan as approved from time to time by the Secretary.	-		Compliant
DA152		36	<i>deleted</i>			
DA153		37	Unless the OEH approves otherwise, the Applicant must ensure that all ground disturbing works on the site are monitored at all times by a suitably qualified and experienced archaeologist and representatives of all the relevant Aboriginal community groups. If this monitoring detects any previously unrecorded Aboriginal objects not listed in Table 10, then the Applicant must immediately cease work in the area and notify the OEH.	<p>Lynwood Quarry Annual Environment Review, September 2015.</p> <p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p>	Aboriginal heritage monitoring is described in each AER, including the condition of Aboriginal sites and management actions taken.	Compliant
DA154			<p><i>Notes:</i></p> <ul style="list-style-type: none"> • <i>This monitoring only relates to topsoil stripping, not quarrying operations.</i> • <i>For safety reasons, topsoil stripping may be undertaken before the commencement of development.</i> 	-		Note
Old Marulan Township						
DA155		38	The Applicant may carry out the development in the area identified in the State Heritage Register as the Old Marulan Township (SHR No. 00127) with the written approval of the NSW Heritage Council.	Previous audit evidence.	Original letter from NSW Heritage Council not sighted but ongoing correspondence from the council indicates that it approved development in Old Marulan Township (eg application to vary S 65A no 2007/S65/11. Confirmed by Heritage Branch 22/10/09)	Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA156		39	Prior to seeking this approval, the Applicant must undertake a detailed investigation of the archaeological potential of the proposed development area in the Old Marulan Township, including archaeological testing, to the satisfaction of the NSW Heritage Council. This archaeological investigation must clarify the nature, extent, and significance of the relics in the proposed development area.	Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak) 2006		Compliant
DA157			<i>Note: The Applicant will be required to submit an application to the NSW Heritage Council under Section 60 of the Heritage Act 1977 for this archaeological investigation.</i>	-		Note
DA158		40	In seeking this approval, the Applicant must submit the following information to the NSW Heritage Council:	-		
DA159		40 (a)	(a) the final design of the proposed Hume Highway interchange, incorporating the results of the archaeological investigations (see condition 39), and including information on landscaping, lighting, and stormwater management;	Non-indigenous archaeology assessment, Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak) 2006		Compliant
		40 (b)	(b) an Archaeological Assessment of the area to be impacted by the proposed interchange, that includes the:	-		
DA160			• nomination of an Excavation Director and archaeology team which will be approved by the Director of the NSW Heritage Office;	Sighted Old Marulan Archaeological Letter to DECC, S65_2009_65A_11 (27/10/10)*		Compliant
DA161			• assessment of the significance of the archaeological remains to be impacted within the development area,	Non-indigenous archaeology assessment, Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak) 2006		Compliant
DA162			• plans and details of the location and depth of excavation works and assessment of the exact impact on potential archaeological remains;	Non-indigenous archaeology assessment, Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak) 2006		Compliant
DA163			• identification of research themes and identification of both site specific and general research questions,	Non-indigenous archaeology assessment, Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak) 2006		Compliant
DA164			• details of the proposed on-site excavation methodology including details on philosophical approach to on-site work and the process and procedures proposed for recovery and recording of archaeological data, and details on how the archaeological research is proposed to be satisfactorily completed,	Non-indigenous archaeology assessment, Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak) 2006		Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA165			<ul style="list-style-type: none"> details of the proposed post-excavation methodology; and 	Non-indigenous archaeology assessment, Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak) 2006		Compliant
DA166			<ul style="list-style-type: none"> details of the Interpretation Plan for the entire Old Marulan Township precinct. 	Non-indigenous archaeology assessment, Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak) 2006		Compliant
DA167		40A	The Applicant must prepare a structural integrity report for the Lockyersleigh Homestead Property and Garden, subject to receiving the landowner's agreement, by 30 June 2016.	A & R Engineering Design Pty Ltd condition report (structural integrity report) dated 22 June 2016.	A & R Engineering Design Pty Ltd condition report (structural integrity report) dated 22 June 2016 provides photographic records of building condition at Lockyersleigh Homestead and settlement compound 1437 Carrick Road Brayton.	Compliant
Operating Conditions						
DA168		41	The Applicant must ensure that:			
DA169		41 (a)	(a) the development does not have any impact on: <ul style="list-style-type: none"> the archaeological remains within the former Lot 1, DP210885; 	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017. Sighted application to vary S 65A no 2007/S65/11. Confirmed by Heritage Branch 7/9/09*	The AERs report on European Heritage. The 2017 AER reports "The Old Marulan European Heritage report was reviewed in the beginning of the reporting period for any outstanding actions. There are no outstanding commitments with respect to European Heritage".	Compliant
DA170			<ul style="list-style-type: none"> heritage items MRNH1, MRNH2, and MRNH3; 	Sighted letter from Heritage Branch_SheepDipMRNH1_ArtifactPolicy_20090907a_ltr LTR_CWC_Cess Pit_Old Marulan_August 2011	These sites are adjacent to the Hume Highway intersection. There was no construction in this area in the audit period.	Compliant
DA171			<ul style="list-style-type: none"> the section of the State Heritage Register curtilage located at the eastern side of the Hume Highway, other than the impact upon the timber lined cistern/well (MRNH8) except where undertaken in accordance with the written approval of the NSW Heritage Council; 	Site observations (2014).	These sites are adjacent to the Hume Highway intersection. There was no construction in this area in the audit period.	Compliant
DA172		41 (b)	(b) as much fabric of the timber-lined cistern/well (MRNH8) and the archaeological remains uncovered through the archaeological excavation as possible is salvaged and incorporated as a key element in the interpretation of the site as part of the new development; and	Sighted letter from Heritage Branch_Well MRNH8_InterpPlan_20090305 which details approved specification, Old Marulan Archaeological_Letter to DECC 27 Oct 2010	These sites are adjacent to the Hume Highway intersection. There was no construction in this area in the audit period.	Compliant

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DA173		41 (c)	(c) the movement of machines across archaeologically sensitive areas is kept to a minimum.	Site observations. EIS 2005, Non-Indigenous Archaeology Assessment (Appendix 12 of the EIS) Figure 2.5. Review of DigitalGlobe satellite image against Appendix 2 (Development Layout) and Appendix 4 (Location of Sediment Dams) of the development consent.	Areas are well flagged and movements outside of quarry are confined to formed roadways.	Compliant
Archaeological Field Work/Excavations						
DA174		42	The Applicant must comply with the detailed requirements in Appendix 7 to the satisfaction of the NSW Heritage Office.	-	See Appendix 7 conditions detailed later in this table.	-
REHABILITATION AND LANDSCAPING						
DA175		43	The Applicant must rehabilitate the site in a manner that is generally consistent with the conceptual final landform in Appendix 8, to the satisfaction of the Secretary.	-		Not triggered
Rehabilitation and Landscape Management Plan						
DA176		44	Within 6 months of this consent, the Applicant must prepare (and following approval implement) a Rehabilitation and Landscape Management Plan for the development, in consultation with OEH, DPI Water and Council, and to the satisfaction of the Director-General. This plan must:	Rehabilitation and Landscape Management Plan (September 2016) (RLMP). Rehabilitation and Landscape Management Plan (2018) (RLMP). DPE letter to Holcim dated 11 July 2018 confirming approval of the RLMP*.		Compliant
		44 (a)	(a) describe in general the short, medium, and long-term measures that would be implemented to:			
DA177			<ul style="list-style-type: none"> rehabilitate the site; 	Rehabilitation and Landscape Management Plan (September 2016).	Given the changes to the project, including incorporation of the granite pit, it is not appropriate to review the compliance of the project against the previous Sighted Rehabilitation and Landscape Management Plan (Rev 2), June 2011. Rather the September 2016 version of the plan has been used even though it had not been approved.	Compliant
DA178			<ul style="list-style-type: none"> implement the Habitat Management Area (shown conceptually in Appendix 9) unless this area is incorporated into a conservation area subject to a BioBanking agreement); 	Rehabilitation and Landscape Management Plan (September 2016).	The Habitat Management Area shown in Figure 5.1 of the plan matches that in Appendix 9 of the Development Consent.	Compliant
DA179			<ul style="list-style-type: none"> replace cleared hollow-bearing trees with durable and appropriate nest boxes that reflect the type, size, usability and condition of the hollows to be cleared; 	Rehabilitation and Landscape Management Plan (September 2016).		Compliant
DA180			<ul style="list-style-type: none"> manage the remnant vegetation and habitat on the site; and 	Rehabilitation and Landscape Management Plan (September 2016).		Compliant
DA181			<ul style="list-style-type: none"> landscape the site to mitigate any visual impacts of the development; 	Rehabilitation and Landscape Management Plan (September 2016).		Compliant

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DA182		44 (b)	include Riparian Area Management Plan/s (see condition 45) for those riparian areas to be disturbed in the next 5 years, excluding areas within quarry pits or emplacement areas as agreed with the Secretary;	Riparian Management Plan, Joarimin Creek Catchment Area, Rev 2, June 2011. Riparian Management Plan, Lockyersleigh Creek Catchment Area, Rev 2, June 2011. Riparian Management Plan, Marulan Creek Catchment Area, Rev 2, June 2011.		Compliant
DA183		44 (c)	describe in detail the measures that would be implemented over the next 5 years to rehabilitate and manage the landscape on the site;	Rehabilitation and Landscape Management Plan (September 2016).	The plan describes rehabilitation between 2016 and 2021.	Compliant
DA184		44 (d)	describe how the performance of these measures would be monitored over time; and	Rehabilitation and Landscape Management Plan (September 2016).		Compliant
DA185		44 (e)	set completion criteria for the rehabilitation of the site.	Rehabilitation and Landscape Management Plan (September 2016).		Compliant
DA186		45	The Riparian Area Management Plan/s must be prepared by a suitably qualified hydrologist; whose appointment has been approved by the Secretary, and include:	Letter from Director-General DP&I approving management plans (4/4/2012), which included Riparian Area Management Plans		Compliant
DA187		45 (a)	baseline surveys of creeks, providing existing bed, bank and vegetation information (including representative cross and longitudinal sections), in the areas in which the development is located, excluding the quarry pits and emplacement areas;	Riparian Management Plan, Joarimin Creek Catchment Area, Rev 2, June 2011. Riparian Management Plan, Lockyersleigh Creek Catchment Area, Rev 2, June 2011. Riparian Management Plan, Marulan Creek Catchment Area, Rev 2, June 2011.		Compliant
DA188		45 (b)	detailed designs of the proposed works, including any proposed stabilization, scour protection, and/or enhancement works (including representative cross and longitudinal sections);	Riparian Management Plan, Joarimin Creek Catchment Area, Rev 2, June 2011. Riparian Management Plan, Lockyersleigh Creek Catchment Area, Rev 2, June 2011. Riparian Management Plan, Marulan Creek Catchment Area, Rev 2, June 2011.		Compliant
DA189		45 (c)	a description of the measures that would be implemented in the event of flooding during construction/rehabilitation.	Riparian Management Plan, Joarimin Creek Catchment Area, Rev 2, June 2011. Riparian Management Plan, Lockyersleigh Creek Catchment Area, Rev 2, June 2011. Riparian Management Plan, Marulan Creek Catchment Area, Rev 2, June 2011.		Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA190		45 (d)	details of proposed staging of the works;	Riparian Management Plan, Joarimin Creek Catchment Area, Rev 2, June 2011. Riparian Management Plan, Lockyersleigh Creek Catchment Area, Rev 2, June 2011. Riparian Management Plan, Marulan Creek Catchment Area, Rev 2, June 2011.		Compliant
DA191		45 (e)	completion criteria for the rehabilitation of the riparian area;	Riparian Management Plan, Joarimin Creek Catchment Area, Rev 2, June 2011. Riparian Management Plan, Lockyersleigh Creek Catchment Area, Rev 2, June 2011. Riparian Management Plan, Marulan Creek Catchment Area, Rev 2, June 2011.		Compliant
DA192		45 (f)	a protocol for monitoring the performance of the rehabilitation over time.	Riparian Management Plan, Joarimin Creek Catchment Area, Rev 2, June 2011. Riparian Management Plan, Lockyersleigh Creek Catchment Area, Rev 2, June 2011. Riparian Management Plan, Marulan Creek Catchment Area, Rev 2, June 2011.		Compliant
DA193		46	Within 3 months of the Independent Environmental Audit (see Condition 11 in Schedule 5), the Applicant shall update the Rehabilitation and Landscape Management Plan to the satisfaction of the Secretary.	Rehabilitation and Landscape Management Plan (September 2016) (RLMP) Rehabilitation and Landscape Management Plan (2018) (RLMP)* DPE letter to Holcim dated 11 July 2018 confirming approval of the RLMP*	The second Independent Environmental Audit was finalised on 25 February 2015. The plan was not updated by 25 May 2015. However, project MOD4 was underway that resulted in the site being reconfigured. This plan has subsequently been updated and approved.	Non-compliant
Rehabilitation Bond						
DA194		47	Within 3 months of the first Independent Environmental Audit (see Condition 11 in Schedule 5), the Applicant must lodge a rehabilitation bond for the development with the Secretary. The sum of the bond must be calculated at \$2.50/m ² for the total area to be disturbed in each 5 year period, or as otherwise directed by the Secretary.	Letter to Director-General DP&I lodging rehabilitation bond to value of \$1,844,272 (11/02/13)	The first Independent Environmental Audit was finalised on 8 October 2012 so the bond should have been submitted by 11 May 2012.	Compliant
DA195			Notes: • If the rehabilitation is completed to the satisfaction of the Secretary, the Secretary will release the rehabilitation bond. • If the rehabilitation is not completed to the satisfaction of the Secretary, the Secretary will call in all or part of the rehabilitation bond, and arrange for the satisfactory completion of the relevant works.	-		Note

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA196		48	Within 3 months of each Independent Environmental Audit (see Condition 11 in Schedule 5) after the lodgement of the rehabilitation bond, the Applicant must review, and if necessary revise the sum of the bond to the satisfaction of the Secretary. This review must consider:	Email correspondence between Holcim and DPE regarding rehabilitation bond (dated 9 February 2017) Holcim's letter to DPE regarding rehabilitation bond (dated February 2017)	The second Independent Environmental Audit was finalised on 25 February 2015 so the bond review should have been completed by 25 May 2015. We understand that a bond of \$6,664,000 was approved in February 2017, and the DPE notified as per email provided as evidence. This was not within the required timeframe. No further actions are recommended.	Non-compliant
DA197		48 (a)	(a) the effects of inflation;	Email correspondence between Holcim and DPE regarding rehabilitation bond (dated 9 February 2017) Holcim's letter to DPE regarding rehabilitation bond Holcim's letter to DPE regarding rehabilitation bond (dated February 2017)	No evidence was sighted that the bond amount considered the effects of inflation. Recommendation (REC9): bond calculations are filed to allow future review.	Non-compliant
DA198		48 (b)	(b) any changes to the total area of disturbance; and	Email correspondence between Holcim and DPE regarding rehabilitation bond (dated 9 February 2017) Holcim's letter to DPE regarding rehabilitation bond Holcim's letter to DPE regarding rehabilitation bond (dated February 2017)	No evidence was sighted that the bond amount considered the any changes to the total area of disturbance. Recommendation: refer to (REC9).	Non-compliant
DA199		48 (c)	(c) the performance of the rehabilitation against the completion criteria of the Rehabilitation and Landscape Management Plan.	Email correspondence between Holcim and DPE regarding rehabilitation bond (dated 9 February 2017) Holcim's letter to DPE regarding rehabilitation bond Holcim's letter to DPE regarding rehabilitation bond (dated February 2017)	No evidence was sighted that the bond amount considered performance criteria. Recommendation: refer to (REC9).	Non-compliant
Retirement of Biodiversity Credits						
Table 11. Biodiversity Credits to be retired						
DA200		48A	The Applicant must retire the biodiversity credits specified in Table 11 to the satisfaction of the Secretary and OEH. The retirement of credits must be undertaken in accordance with the <i>Framework for Biodiversity Assessment - NSW Biodiversity Offsets Policy for Major Projects</i> by:	Holcim's letter to DPE dated 15 Dec 2017 requesting extension to biodiversity credit retirement date (to 30 June 2018) DPE letter to Holcim 31 May 2017 granting an extension to 31 December 2017. Holcim's letter to DPE dated 15 Dec 2017 requesting extension to biodiversity credit retirement date (to 30 June 2018) DPE letter to Holcim 18 December 2017 granting an extension to 30 June 2018. Letter from DPE, 12 July 2018 regarding retirement of biodiversity credits.	Credits have been retired in accordance with this condition.	Compliant*

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA201		48A (a)	(a) acquiring or retiring credits under the Biobanking Scheme in the TSC Act;	-		Note
DA202		48A (b)	(b) making payments into an offset fund that has been developed by the NSW Government; or	-		Note
		48A (c)	(c) providing supplementary measures.	-		Note
DA203			Credits may be retired progressively as the vegetation to be offset by the credits is cleared. By 31 May 2017, unless otherwise agreed by the Secretary, the Applicant must retire the credits associated with the projected vegetation clearing for the following five years. Credits must continue to be obtained and retired in five-yearly increments prior to clearance of the area of vegetation expected to be cleared in the forthcoming five years. Each Annual Review required under condition 10 of Schedule 5 must record the number of credits retired in the reporting year (or previously) and the area of vegetation expected to be cleared in the forthcoming five years).	Letter from DPE, 12 July 2018 regarding retirement of biodiversity credits.	Credits are being progressively retired.	Note
DA204			Credit type: Ecosystem credits: HN614 Yellow Box – Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion Credits to be retired: 2124	Letter from DPE, 12 July 2018 regarding retirement of biodiversity credits.	Partial retirement - 1063 credits retired in July 2018 out of 2124 total credits required, with total credit balance of 1061 remaining	Compliant
DA205			Credit type: Ecosystem credits: HN570 Red Stringybark – Brittle Gum – Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion Credits to be retired: 881	Letter from DPE, 12 July 2018 regarding retirement of biodiversity credits.	Complete retirement - 881 total credits retired in July 2018, with 0 credit balance remaining	Compliant
DA206			Credit type: Ecosystem credits: HN515 Broad-leaved Peppermint – Ribbon Gum grassy open forest in the north-east of the South Eastern Highlands Bioregion Credits to be Retired 33	Letter from DPE, 12 July 2018 regarding retirement of biodiversity credits.	Not yet retired. Not to be disturbed until 2036 (total credit balance 33).	Compliant
DA207			Credit type: Ecosystem credits: Total: 3038 (2124 + 881 + 33)	Letter from DPE, 12 July 2018 regarding retirement of biodiversity credits.	Partial retirement - 1,944 credits retired July 2018)	Compliant
DA208			Credit type: Species Credits: Squirrel Glider (Petaurus norfolcensis) Credits to be retired: 1725	Letter from DPE, 12 July 2018 regarding retirement of biodiversity credits.	Completed retirement.	Compliant
DA209			Credit type: Species Credits: Total: 1725	Letter from DPE, 12 July 2018 regarding retirement of biodiversity credits.	Complete retirement - 1725 total credits retired July 2018, with 0 credit balance remaining	Compliant
DA210			<i>Note: The management actions used to generate credits will need to avoid impacting on Aboriginal cultural heritage unless these impacts are identified within an approved Aboriginal Cultural Heritage Management Plan (see condition 35) or an approved Aboriginal Heritage Impact Permit.</i>	-		Note

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
VISUAL IMPACT						
Visual Amenity						
DA211		49	The Applicant must minimise the visual impacts of the development to the satisfaction of the Director-General.	Letter from Director-General DP&I approving management plans (4/4/2012). Site observations.	A visual screen (over 10 m tall) has been erected west of the infrastructure area. Screening bunds were under construction and the outer face had not been planted at the time of the site inspection.	Compliant
Lighting Emissions						
DA212		50	The Applicant must take all practicable measures to prevent and/or minimise any off-site lighting impacts from the development.	Site observations. Letter from B. Blakely, Lynwood Quarry's CCC Chair, 30 November 2017	In this audit period, lighting issues were raised by residents during the audit period. Holcim implementing a range of actions to reduce lighting impacts (see http://www.holcim.com.au/about-us/community-link/lynwood/our-community.html). CCC Chair confirmed (letter dated 30 November 2017) that the issue has been successfully resolved "through a combination of input from the CCC and Holcim's actions (consultation, studies, trials, and ultimately, wattage changes, timed on/off switches, height alterations and the construction of a light screen)."	Compliant
DA213		51	All external lighting associated with the development must comply with <i>Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting</i> .	GHD Lynwood Hard Rock Quarry Detailed Design and Documentation Design Certificate for Process Area External Lighting (31/01/14)		Compliant
Advertising						
DA214		52	The Applicant must not erect or display any advertising structure(s) or advertisements on the site without the written approval of the Secretary.	Site observations.	No advertising signage observed.	Compliant
WASTE MANAGEMENT						
DA215		53	The Applicant must:			
DA216		53 (a)	(a) monitor the amount of waste generated by the development;	Waste Management and Minimisation Strategy 2017. Sighted examples of waste contractors receipts.	Waste monitoring data was not available. Waste Management and Minimisation Strategy (WMMS) 2017, section 5.0 monitoring, review and continuous improvement	Compliant
DA217		53 (b)	(b) investigate ways to minimise waste generated by the development;	Waste Management and Minimisation Strategy 2017	Table 1 Waste classification lists minimisation strategies for different types of waste	Compliant
DA218		53 (c)	(c) implement reasonable and feasible measures to minimise waste generated by the development; and	Waste Management and Minimisation Strategy 2017 Site observations	Observed waste was appropriately segregated during the site inspection.	Compliant
DA219		53 (d)	(d) report on waste management and minimisation in the Annual Review.	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.	AERs have a waste management summary for the reporting period.	Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
			to the satisfaction of the Secretary.			
DA220		54	The Applicant must ensure that all wastes generated or stored at the site are assessed, classified and managed in accordance with the <i>Assessment, Classification and Management of Liquid and Non-liquid Waste</i> (OEH) guideline, or its successor (incorporates OEH GTA).	Waste Management and Minimisation Strategy 2017 Site observations	Waste Management and Minimisation Strategy Section 4.0 (waste classification) states that "as per the development consent, waste at Lynwood Quarry needs to be classified as per the <i>Assessment, Classification and Management of Liquid and Non-liquid Wastes (OEH) guideline</i> . Table 1 outlines the waste types and classifications managed by Lynwood."	Compliant
EMERGENCY AND HAZARDS MANAGEMENT						
Dangerous Goods						
DA221		55	The Applicant must ensure that the storage, handling, and transport of dangerous goods are conducted in accordance with the relevant <i>Australian Standards</i> , particularly AS1940 and AS1596, and the <i>Dangerous Goods Code</i> .	Site observations indicated that materials are securely stored in specified locations.	2005 EIS Section 4.2.12 outlines compliance with the Dangerous Goods Code.	Compliant
Safety						
DA222		56	The Applicant must secure the development to ensure public safety to the satisfaction of the Director-General.	Site observations		Compliant
Bushfire Management						
		57	The Applicant must:			
DA223		57(a)	ensure that the development is suitably equipped to respond to any fires on-site; and	Site observations	The site contains extensive water management infrastructure, including dams that could be used to source fire fighting water.	Compliant
DA224		57(b)	assist the rural fire service and emergency services as much as possible if there is a fire on-site.	Site interviews.	We understand that a fire in a conveyor during the audit period was extinguished by Holcim and the Rural Fire Service.	Not triggered
DA225		58	<i>deleted</i>			
QUARRY EXIT STRATEGY						
DA226		59	At least 5 years prior to the cessation of quarry operations, the Applicant must prepare a Quarry Exit Strategy for the development, in consultation with the DPI Water and Council, and to the satisfaction of the Secretary. This plan must:			Not triggered
DA227		59 (a)	define the objectives and criteria for quarry closure;			Not triggered
DA228		59 (b)	investigate options for the future use of the site, including any final void/s;			Not triggered
DA229		59 (c)	describe the measures that would be implemented to minimise or manage the ongoing environmental effects of the development; and			Not triggered
DA230		59 (d)	describe how the performance of these measures would be monitored over time.			Not triggered
SCHEDULE 4 ADDITIONAL PROCEDURES						
NOTIFICATION OF LANDOWNERS						
		1	As soon as practicable after obtaining monitoring results shown:			

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA231		1 (a)	(a) an exceedance of any relevant criteria in Schedule 3, the Applicant must notify the affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and	Lynwood Quarry Annual Environment Review, September 2016 Site interviews	A noise exceedance is noted in the 2016 AER at assessment location 11. DPE is notified of any exceedance in writing, which is attached as an attachment to the AERs. This location appears to be representative of three residences (11, 14 and 14). As described in the AER Attachment 1, actions were taken to ensure that the situation was rectified. We understand that Bruce Dugan was notified about an exceedance in noise, which did not effect their property. However, evidence was not provided that landowners at all potentially affected residences were notified. Recommendation (REC10): the procedure for responding to/notifying exceedances to all landowners that are potentially impacted by any noise exceedance is reviewed.	Non-compliant
DA232		1 (b)	(b) an exceedance of any relevant air quality criteria in Schedule 3, the Applicant must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and current tenants of the land (including the tenants of land which is not privately owned).	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.	Only one tenant resides on Holcim land, close to the Johnnifields Quarry, east of Lynwood Quarry. Health-based air quality criteria have not been exceeded at the high volume air sampler on the eastern side of the quarry (HVAS 2).	Not triggered
INDEPENDENT REVIEW						
DA233		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
DA234		3	If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant must:	-		Not triggered
DA235		3 (a)	(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; • conduct monitoring to 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 	-		Not triggered
DA236		3 (b)	(b) give the Secretary and landowner a copy of the independent review.	-		Not triggered
SCHEDULE 5 ENVIRONMENTAL						
ENVIRONMENTAL MANAGEMENT STRATEGY (Incorporates OEH GTA)						
DA237		1	If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:	Environmental Management Strategy, Rev 3, January 2013		Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA238		1 (a)	(a) be submitted to the Secretary for approval within 6 months of the Secretary requiring preparation of the strategy by notice to the Applicant;	Letter from DP&I , 19 April 2007.	The original strategy was approved, and the EMS has subsequently been updated.	Compliant
DA239		1 (b)	(b) provide the strategic framework for the environmental management of the development;	Environmental Management Strategy, Rev 3, January 2013	EMS Section 2 (Environmental Management Framework)	Compliant
DA240		1 (c)	(c) identify the statutory approvals that apply to the development;	Environmental Management Strategy, Rev 3, January 2013	EMS Section 3.2 (Statutory Requirements)	Compliant
DA241		1 (d)	(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Environmental Management Strategy, Rev 3, January 2013	EMS Table 4.1 (General Environmental Responsibilities at Lynwood Quarry) lists the specifications for requirements of this condition.	Compliant
DA242		1 (e)	(e) describe the procedures that would be implemented to:			
DA243			<ul style="list-style-type: none"> keep the local community and relevant agencies informed about the operation and environmental performance of the development; 	Environmental Management Strategy, Rev 3, January 2013	EMS Section 4.3.2 (External Communication)	Compliant
DA244			<ul style="list-style-type: none"> receive, handle, respond to, and record complaints; 	Environmental Management Strategy, Rev 3, January 2013	EMS Section 4.4 (Complaints Management and Dispute Resolution)	Compliant
DA245			<ul style="list-style-type: none"> resolve any disputes that may arise during the course of the development; 	Environmental Management Strategy, Rev 3, January 2013	EMS Section 4.4.2 (Dispute Resolution)	Compliant
DA246			<ul style="list-style-type: none"> respond to any non-compliance; and 	Environmental Management Strategy, Rev 3, January 2013	EMS Section 5 (Environmental Monitoring, Corrective Action and Audits)	Compliant
DA247			<ul style="list-style-type: none"> respond to emergencies; and 	Environmental Management Strategy, Rev 3, January 2013	EMS Section 4.8 (Emergency Preparedness and Response)	Compliant
DA248		1 (f)	(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. 	Environmental Management Strategy, Rev 3, January 2013	The strategies, plans and programs approved under the Development Consent are described. However, they are not attached. This is appropriate as the plans need to be reviewed and updated periodically. It is better that there is one version of each plan in the system rather than replicating the plan as an appendix to the EMS so that it is clear which is the most recent version of each plan. Similarly, monitoring requirements should be provided in only one place - the plan to which they are relevant.	Compliant
DA249			The Applicant must implement any Environmental Management Strategy as approved from time to time by the Secretary.	Site observations.		Compliant
Evidence of Consultation						
DA250		1A	Where consultation with any public authority is required by the conditions of this consent, the Applicant must:			

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA251		1A (a)	(a) consult with the relevant public authority prior to submitting the required document to the Secretary for approval;	Numerous letters/emails (2016/2017) involving consultation with government agencies regarding conditions relevant to their jurisdiction, plans/programs/strategies relevant to their scope.	This condition was introduced in MOD5 (May 2017). Recently prepared plans describe the consultation undertaken during their preparation.	Compliant
DA252		1A (b)	(b) submit evidence of this consultation as part of the relevant document;	Numerous letters/emails (2016/2017) involving consultation with government agencies regarding conditions relevant to their jurisdiction, plans/programs/strategies relevant to their scope. Water Management Plan, September 2016 Rehabilitation and Landscape Management Plan, September 2016	The Water Management Plan (2016) and the Rehabilitation and Landscape Management Plan, September 2016 describe consultation but does not provide evidence. Evidence has been provided that agencies were consulted during the preparation of more recent plans.	Compliant
DA253		1A (c)	(c) describe how matters raised by the authority have been addressed and any matters not resolved; and	Numerous letters/emails (2016/2017) involving consultation with government agencies regarding conditions relevant to their jurisdiction, plans/programs/strategies relevant to their scope.		Compliant
DA254		1A (d)	(d) include details of any outstanding issues raised by the authority and an explanation of disagreement between any public authority and the Applicant.	Numerous letters/emails (2016/2017) involving consultation with government agencies regarding conditions relevant to their jurisdiction, plans/programs/strategies relevant to their scope.		Compliant
MANAGEMENT PLAN REQUIREMENTS						
		2	The Applicant must ensure that the Management Plans required under this consent are prepared in accordance with any relevant guidelines, and include:			
DA255		2 (a)	(a) detailed baseline data;	Riparian Area Management Plans (June 2011); Noise Management Plan (September 2016); Blast Management Plan (November 2016); Air Quality Management Plan (October 2016); Draft Water Management Plan (September 2016); Aboriginal Heritage Management Plan, Caring for Country Final (July 2018) Water Management Plan (2018) Waste Management and Minimisation Strategy (2017) Pollution Incident Response Management Plan (September 2018)	This condition was introduced in MOD4 (May 2016) so does not apply to plans prepared prior to this time. Detailed baseline data is not provided in the draft Water Management Plan (September 2016). Recommendation (REC11): detailed baseline data is provided in management plans when they are updated.	Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA256		2 (b)	(b) a description of: <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; 	See list of management plans above.	This condition was introduced in MOD4 (May 2016) so does not apply to plans prepared prior to this time.	Compliant
DA257		2 (c)	(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;	See list of management plans above.	This condition was introduced in MOD4 (May 2016) so does not apply to plans prepared prior to this time.	Compliant
DA258		2 (d)	(d) a program to monitor and report on the: <ul style="list-style-type: none"> impacts and environmental performance of the development; and effectiveness of any management measures (see (c) above) 	See list of management plans above.	This condition was introduced in MOD4 (May 2016) so does not apply to plans prepared prior to this time.	Compliant
DA259		2 (e)	(e) a contingency plan to manage any unpredicted impacts and their consequences;	See list of management plans above.	This condition was introduced in MOD4 (May 2016) so does not apply to plans prepared prior to this time. Recommendation (REC12): contingency plans to manage any unpredicted impacts and their consequences are provided in the management plans prepared before May 2016 when they are updated.	Compliant
DA260		2 (f)	(f) a program to investigate and implement ways to improve the environmental performance of the development over time;	See list of management plans above.	This condition was introduced in MOD4 (May 2016) so does not apply to plans prepared prior to this time.	Compliant
DA261		2 (g)	(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 	See list of management plans above. Holcim's INX system	This condition was introduced in MOD4 (May 2016) so does not apply to plans prepared prior to this time. Reporting protocols for incidents, complaints, non-compliances and exceedances are not described in the draft Rehabilitation & Landscape Management Plan (September 2016). However, where these plans have been approved by the Secretary, it is assumed that this requirement has been waived as per the note below. Recommendation (REC13): reporting protocols for incidents, complaints, non-compliances and exceedances are provided in the management plans prepared before May 2016 when they are updated.	Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA262		2 (h)	(h) a protocol for periodic review of the plan.	See list of management plans above.	<p>This condition was introduced in MOD4 (May 2016) so does not apply to plans prepared prior to this time.</p> <p>A protocol for periodic review is not described in the Blast Management Plan (November 2016).</p> <p>However, where these plans have been approved by the Secretary, it is assumed that this requirement has been waived as per the note below.</p> <p>Recommendation (REC14): a protocol for periodic review is described in the Blast Management Plan (November 2016).</p> <p>Recommendation (REC15): a protocol for periodic review is provided in the management plans prepared before May 2016 when they are updated.</p>	Compliant
DA263			<i>Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i>			Note
DA264		3	Prior to approval of management plans required under Schedule 3, all existing management plans, monitoring programs, strategies, programs, protocols, etc approved as at the date of approval of Modification 4 must continue to have full force and effect, and may be revised under the requirements of condition 5 below as if subject to the conditions of this consent that applied prior to the approval of Modification 4, or otherwise with the approval of the Secretary.	-	This audit has considered plans prepared prior to the approval of MOD 4 as appropriate.	Note
UPDATING & STAGING SUBMISSION OF STRATEGIES, PLANS OR PROGRAMS						
DA265		4	To ensure the strategies, plans or programs under this consent are updated on a regular basis, and that they incorporate any appropriate mitigation measures to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.	-		Note
DA266			With the agreement of the Secretary, the Applicant may revise any strategy, plan or program approved under this consent without consulting with all the parties nominated under the applicable conditions of consent.	-		Note

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA267			Notes: <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. 	-		Note
REVISION OF STRATEGIES, PLANS & PROGRAMS						
DA268		5	Within 3 months of the submission of an: <ul style="list-style-type: none"> (a) incident report under condition 8 below; (b) Annual Review under condition 10 below; (c) audit report under condition 11 below; and (d) any modifications to this consent, the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent, to the satisfaction of the Secretary.	Notification of noise exceedances and missing blast information, August 2016, appended to 2016 AER.	This condition requires that all strategies, plans, and programs are reviewed annually and more frequently if there is an incident, audit, or modification during the year. While a number of plans were reviewed within the required timeframe, some plans remain not updated. Recommendation (REC16): all strategies, plans, and programs should be reviewed as soon as possible. Recommendation (REC17): a register is established that shows when each strategy, plan, and program was reviewed in accordance with with this condition; stating whether updates were required.	Non-compliant
DA269			<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>	-		Note
ADAPTIVE MANAGEMENT						
DA270		6	The Applicant must 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.	-		Note
			Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:			
DA271		6 (a)	take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017	Sighted AERs for the audit period, each of which shows actions taken to minimise/control/report on exceedances.	Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA272		6 (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	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.	For example, information regarding exceedance of noise criteria is provided in an appendix to 2016 AER.	Compliant
DA273		6 (c)	implement remediation measures as directed by the Secretary,	-	DPE did not note any occurrences during consultation as part of this audit.	Not triggered
			to the satisfaction of the Secretary.			
COMMUNITY CONSULTATIVE COMMITTEE						
DA274		7	The Applicant must operate a Community Consultative Committee (CCC) for the development, to the satisfaction of the Secretary. This CCC must be operated in general accordance with the Department's Community Consultative Committee Guidelines for State Significant Projects, November 2016 (or its latest version).	Letter from Brendan Blakeley, Lynwood Quarry's CCC Chair, 30 November 2017.	Brendan Blakeley, Lynwood Quarry's CCC Chair responded to EMM's audit consultation letter and noted "The CCC runs in accordance with the original conditions of approval. However, we have progressively aligned our practices with the DPE's recently revised CCC Guidelines. This has included a summary report to the DPE, as well as members signing forms to recommitment themselves to the CCC." Information about the Community Consultative Committee available on Holcim website http://www.holcim.com.au/about-us/community-link/lynwood/our-community.html	Compliant
DA275			<i>Notes:</i> <ul style="list-style-type: none"> The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent. In accordance with the guideline, the committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, and the local community. 	-		Note
REPORTING						
INCIDENT REPORTING						
DA276		8	The Applicant must 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 must 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 must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Pollution Incident Response Management Plan Lynwood Quarry (September 2018)* (PIRMP) Annual Environmental Review 2016 INX Incident register.	Non-compliances generally appear to be reported to agencies appropriately. The 1,500-2,000 L diesel spill that occurred on 6 December 2016 was well contained within site, with no offsite impact, and was immediately contained and the diesel removed. Page 20 of the PIRMP shows all the agencies that need to be notified in the event of an incident. It notes that emergency services, EPA, Appropriate Regulatory Authority, among other authorities, will be notified. However, there is no specific mention of the 'Secretary'. <<Update - fully contained well within site and no impacts>> Recommendation (REC18): PIRMP should be amended to include notification of the Secretary following an emergency incident, as per the requirements of this condition.	Compliant

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REGULAR REPORTING						
DA277	9	9	The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	Holcim website Lynwood Quarry webpage, Planning - Approvals-Reporting page (last visited 18 October 2018) https://www.holcim.com.au/about-us/community-link/lynwood/planning-approvals-reporting	Annual reports and fortnightly monitoring reports are provided on the Holcim website. Holcim website Lynwood Quarry webpage provides information about Lynwood Quarry, heritage, community, community investment fund, CIF projects funded, information updates and planning, approvals and reporting documentation. However, not everything is up to date.	Compliant
ANNUAL REVIEW						
DA278		10	By the end of September each year, or other timing as may be agreed by the Secretary, the Applicant must review the environmental performance of the development to the satisfaction of the Secretary. This review must:	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.	The timing of the Annual Environment Review reports has been changed in consultation with DPE to match the Financial Year.	Compliant
DA279		10 (a)	(a) describe the development (including rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.	Each of the AERs includes a section that summarises development within the past year, and activities proposed for the next reporting period.	Compliant
DA280		10 (b)	(b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against: <ul style="list-style-type: none"> • the relevant statutory requirements, limits or performance measures/criteria; • requirements of any plan or program required under this consent; • the monitoring results of previous years; and • the relevant predictions in the documents listed in condition 2(a) of Schedule 2; 	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.		Compliant
DA281		10 (c)	(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.		Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA282		10 (d)	(d) identify any trends in the monitoring data over the life of the development;	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.	Historical trend data generally presented for air quality, surface water quality and groundwater quality presented in 2015 AER. Historical trend data generally presented for air quality in 2016 AER. No historical trend data presented in 2017 AER. However, this report only considered 6 months of data so annual trends were not provided.	Compliant
DA283		10 (e)	(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies;	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.	For example, notification of noise exceedances and missing blast information appended to 2016 AER.	Compliant
DA284		10 (f)	(f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.		Compliant
DA285		10 (g)	(g) describe the area of vegetation cleared as part of the development and identify the area proposed to be cleared over the next 5 years;	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.		Compliant
DA286		10 (h)	(h) calculate the number of additional BioBanking (or equivalent) credits that will need to be purchased, before that clearing can be done; and	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017. Letter from DPE, 12 July 2018 regarding retirement of biodiversity credits.	Table 13 'Expected offsets per stage of granite pit development' from the Lynwood Quarry Annual Environmental Review 2017 report shows that the number of credits required per stage of development have been calculated for the granite pit. Biodiversity credits are being progressively retired. Recommendation (REC19): future annual environmental reviews should include information in the additional BioBanking (or equivalent) credits that will need to be purchased or note that no additional credits are required.	Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA287		10 (i)	(i) report on the number of BioBanking (or equivalent) credits that have been purchased to allow ongoing clearing and completion of stages.	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017.	Table 13 'Expected offsets per stage of granite pit development' from the Lynwood Quarry Annual Environmental Review 2017 report shows that the number of credits required per stage of development have been calculated for the granite pit.	Compliant
DA288			The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 7 of Schedule 5) and any interested person upon request.	Documentation provided during the audit period	While the AERs are available on the Holcim website, there is no evidence that that the AERs in the reporting period were submitted directly to Council. Recommendation (REC20): all Annual Environmental Reviews are submitted to the Council.	Non-compliant
INDEPENDENT ENVIRONMENTAL AUDIT						
DA289		11	By 30 September 2017, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:	Holcim Purchase order number 4520427805, 30 May 2017.	Audit commissioned in May 2017. Site audit inspection arranged for 9 January 2018. See Audit Report Section 2.3.	Compliant
DA290		11 (a)	(a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;	Holcim letter to DPE, dated 30 May 2017.	Dr Philip Towler, the lead auditor, was approved by DPE to undertake the audit.	Compliant
DA291		11 (b)	(b) include consultation with the relevant agencies and the CCC;	Responses received from: DPE, DPI Fisheries, DRG, Goulburn Mulwaree Council, Heritage Council NSW, OEH, Water NSW and Chair of the CCC.	See Appendix D of Lynwood Quarry Independent Environmental Audit Report (2018) for example of consultation letter provided to agencies. Refer to Table 4.4 for a summary of agency comments received during the consultation process, and audit responses.	Compliant
DA292		11 (c)	(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 Licence (including any assessment, plan or program required under these approvals);	-	All conditions of this consent, statement of commitments (SoC), the EPL and management plans have been audited.	Compliant
DA293		11 (d)	(d) review the adequacy of any approved strategy, plan or program required under the these approvals;	Various.	The adequacy of approved strategies, plans and programs required under the these approvals has been reviewed.	Compliant
DA294		11 (e)	(e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals; and	-	See audit recommendations section.	Compliant
DA295		11 (f)	(f) be conducted and reported to the satisfaction of the Secretary.	-	This will be determined by DPE.	Note
DA296			<i>Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.</i>	-		Note

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA297		12	Within 12 weeks of commencing this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, Council, EPA and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report.	-	This audit was finalised in March 2019. See discussion in main Lynwood Quarry Independent Environmental Audit Report (2019) Section 1.7. No further actions are recommended.	Non-compliant
ACCESS TO INFORMATION						
		13	By 30 November 2016, unless otherwise agreed by the Secretary, until the completion of all works, including rehabilitation and remediation, the Applicant must:			
DA298		13 (a)	a) make the following information publicly available on its website:			
DA299			<ul style="list-style-type: none"> the documents listed in condition 2(a) of Schedule 2; 	http://www.holcim.com.au/about-us/community-link/lynwood/planning-approvals-reporting.html (29/01/18)		Compliant
DA300			<ul style="list-style-type: none"> current statutory approvals for the development; 	http://www.holcim.com.au/about-us/community-link/lynwood/planning-approvals-reporting.html (29/01/18)		Compliant
DA301			<ul style="list-style-type: none"> approved strategies, plans or programs; 	http://www.holcim.com.au/about-us/community-link/lynwood/planning-approvals-reporting.html (29/01/18)		Compliant
DA302			<ul style="list-style-type: none"> 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; 	http://www.holcim.com.au/about-us/community-link/lynwood/planning-approvals-reporting.html (29/01/18)	AERs available on the website. Fortnightly monitoring reports are available on the website.	Compliant
DA303			<ul style="list-style-type: none"> a complaints register, which is to be updated on a quarterly basis; 	https://www.holcim.com.au/about-us/community-link/lynwood/our-community/complaints-register (29/01/18)	Quarterly complaints registers are listed on the website. for Quarter 3 2016 to Quarter 4 2017. However, with the exception of Quarter 4 2017, the listings are not linked to any files. For example there was a dust complaint on 21 September 2017 that is not provided. Complaints are summarised in AERs which are available on the Holcim website. This is updated annually. Recommendation (REC21): the quarterly complaints register on the Holcim website is updated so that all registers are available.	Non-compliant
DA304			<ul style="list-style-type: none"> the Annual Reviews (over the last 5 years); 	http://www.holcim.com.au/about-us/community-link/lynwood/planning-approvals-reporting.html (29/01/18)	AERs from 2010/2011 to 2017 are available.	Compliant
DA305			<ul style="list-style-type: none"> any independent environmental audit, and the Applicant's response to the recommendations in any audit; 	http://www.holcim.com.au/about-us/community-link/lynwood/planning-approvals-reporting.html (29/01/18)		Compliant
DA306			<ul style="list-style-type: none"> any other matter required by the Secretary; and 			Note

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DA307			<ul style="list-style-type: none"> keep this information up-to-date, 	http://www.holcim.com.au/about-us/community-link/lynwood/planning-approvals-reporting.html (29/01/18)	Some of the management plans and monitoring programs need to be updated. Recommendation (REC22): the currency of all management plans and programs on the website is reviewed.	Non-compliant
			to the satisfaction of the Secretary.			Note
DA308	APPENDIX 1: SCHEDULE OF LAND		Includes a list of all Lot, DP numbers as well as Owner details			Note
DA309	APPENDIX 2: DEVELOPMENT LAYOUT [Map figure]			Site observations. Review of DigitalGlobe satellite image against Appendix 2 (Development Layout).	Development layout is generally in accordance with DA.	Compliant
DA310	APPENDIX 3. NOISE RECEIVER LOCATIONS [Map figure]					Note
DA311	APPENDIX 4. LOCATION OF SEDIMENT DAMS [Map figure]			Site observations. Review of DigitalGlobe satellite image against Appendix 4 (Location of Sediment Dams).	Sedimentation dams have been contracted in accordance with the plan. Some sediment dams have not been installed. However, these are associated with areas that have not yet been materially disturbed.	Compliant
DA312	APPENDIX 5. CONSTRUCTION TRAFFIC ROUTES [Map figure]			Site observations.	While there was construction during the audit period, it was not occurring at the time of the audit. The South Marulan Interchange was operating for the entire audit period and there is no reason that construction traffic would use routes other than the Hume Highway and the site access road.	Compliant
DA313	APPENDIX 6. CULTURAL HERITAGE MANAGEMENT ZONE [Map figure]			Site observations. Review of DigitalGlobe satellite image against Appendix 6 (Location of Sediment Dams).	There appears to be no quarry-related disturbance within the Cultural Heritage Management Zones. Fences and signs were observed while on site.	Compliant
APPENDIX 7: DETAILED HERITAGE CONDITIONS						
			These conditions apply to the portion of the State Heritage Register Area within the site that is impacted by the development.			
DA314		1	The NSW Heritage Office must be informed in writing of the start of the archaeological investigation at least five (5) days prior to the commencement of, and within five (5) days of the completion of on-site archaeological work.	LTR_Old Marulan_Sign off_Dec 2010.		Compliant
DA315		2	The Heritage Council and staff of the NSW Heritage Office authorised under section 148(1) of the 'Heritage Act, 1977' reserve the right to inspect the site and records at all times, as well as access any relics recovered from the site.	Site interviews (2012).	Inspection was conducted on 22/12/07*	Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA316		3	The Applicant must ensure that all personnel involved in excavation works attend a comprehensive briefing on the requirements of the 'Heritage Act, 1977' in relation to archaeological relics and the proposed archaeological programme. The briefing is to be presented by the Excavation Director nominated in the section 60 application and is to be undertaken prior to the commencement of on-site works. A copy of this approval and conditions of consent should be made available to all archaeological on-site staff.	Interview with the Excavation Director, T. Adams (Umwelt) (6/6/12).		Compliant
DA317		4	The Applicant must ensure that if substantial intact archaeological deposits and/or State significant relics not identified in <i>Environmental Impact Statement, Readymix Holding Pty Ltd Proposed Lynwood Quarry, Marulan</i> , prepared by Umwelt Environmental Consultants, are discovered, work must cease in the affected area(s) and the Heritage Council of NSW must be notified. Additional assessment and approval may be required prior to works continuing in the affected area(s) based on the nature of the discovery.	-		Not triggered
DA318		5	The Heritage Council of NSW must approve any substantial deviations from the approved research design outlined in <i>Environmental Impact Statement, Readymix Holding Pty Ltd Proposed Lynwood Quarry, Marulan</i> , prepared by Umwelt Environmental Consultants, including extent and techniques of excavations, as an application for the variation of an approval under section 65A or a new application under section 60 of the 'Heritage Act, 1977'.	Old Marulan Archaeological Letter to DECC, S65_2009_65A_11 (27/10/10).	The S65A variation 2007/S65/11 which refers to the approval of the changed research design has not been sighted but subsequent DECC letters note this variation as occurring.	Compliant
DA319		6	The Applicant must ensure that the nominated Excavation Director is present at the site supervising all archaeological fieldwork activity likely to expose significant relics 100% of the duration of the archaeological activity. Should this not be possible, then the Applicant must forward for the approval of the Heritage Council or Director of the NSW Heritage Office the details of a Site Director in charge for this period.	Sighted S65_2009_65A_13, s65 assist director and notification.		Compliant
DA320		7	At all times during periods of archaeological excavation the Applicant must comply with any directions of the nominated Excavation Director in relation to works likely to impact on this resource. Where major issues arise the Excavation Director must consult with the Director of the heritage Office prior to issuing directions.	Holcim letter to OEH dated 15 June 2017.	Letter sighted shows that all archaeological salvage works are to be completed with involvement from archaeologist (ie monitoring is to be undertaken by archaeologist).	Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA321		8	Given the exceptional significance of the archaeological remains of the Old Marulan Township, the Applicant must ensure that the nominated Excavation Director, and archaeological excavation team, are given priority when allocating resources to allow thorough archaeological excavation and full and detailed recording to be undertaken to the satisfaction of the Heritage Council. Where necessary, work schedules shall be adjusted to accommodate the approved archaeological works.	Heritage Branch sign off (16/12/2010).		Compliant
DA322		9	Throughout the archaeological excavation works and post-excavation analysis, the Applicant must ensure that:			
DA323		9(a)	Appropriate signage to explain the history of the site and the archaeological excavation works is placed at the site during the work,	Site observations.	There are no signs. However, there are no appropriate publicly accessible locations to place these signs so this is considered appropriate.	Compliant
DA324		9(b)	A local public information program is implemented including press releases to ensure the public is informed about the project and its outcomes,	http://www.holcim.com.au/about-us/community-link/lynwood/our-community.html (29/01/18)		Compliant
DA325		9(c)	Community participation in the archaeological works on the site is allowed for through the inclusion of volunteers on the archaeological team under the supervision of the Excavation Director,	Interview with T. Adams (6/6/12)	Community is invited to submit enquiries online http://www.holcim.com.au/about-us/community-link/lynwood/our-heritage.html (29/01/18)	Compliant
DA326		9(d)	A website addressing the archaeological works on the site must be created. This website must feature a history of the site, archaeological methodology, updated information on the archaeological works, photographs of the site and significant archaeological remains uncovered, links to the archaeological reports and links to other relevant sites. Public feedback must also be allowed for in this section of the website. Updated information on the Open Day to be held during archaeological works at Old Marulan Township and an on-line booking service must also be included,	http://www.holcim.com.au/about-us/community-link/lynwood/our-heritage.html (29/01/18)		Compliant
DA327		9(e)	The progress on the archaeological works on site is systematically video recorded,	Interviews with Holcim personnel indicate that the works were videoed. However, all attempts to obtain copies of the footage have been unsuccessful and current personnel believe that it is unlikely this material will ever be found.	Recommendation (REC23): video recordings of the archaeological works are located if possible.	Non-compliant
DA328		9(f)	The services of a conservator must be utilised for conservation of significant artefacts,	Sighted Old Marulan Archaeological Letter to DECC (27/10/10)		Compliant
DA329		9(g)	The Heritage Office is notified weekly, in writing, of the progress of work during excavation and monthly during post excavation analysis,	Sighted combined weekly reports 1-4	No return correspondence from Heritage Branch*	Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA330		9(h)	All affected areas of the site are signed off by the Heritage Office prior to commencement of bulk excavation in those identified locations, and	Heritage Branch sign off on 16/12/2010		Compliant
DA331		9(i)	At the completion of the archaeological works on site the results of the archaeological programme are interpreted as part of an interpretation programme for the Old Marulan Township precinct.	Umwelt letter to OEH, dated 29 June 2011 regarding Old Marulan Township - Road Reserve Works		Compliant
DA332		10	It is essential that the Applicant and nominated Excavation Director allow for and present opportunities for interpretation, public education and public access to the results of the archaeological investigation during and upon completion of the works programme. A number of Public Open Days (to be determined based on public demand) must be conducted at the site. These Public Open Days must be scheduled to take place during a weekend to facilitate public attendance and must be advertised at least one week ahead to facilitate greater public awareness of the opportunity. Visits need to be prebooked to better organise the groups and on-site activities. The Applicant must ensure that local historical societies and other relevant cultural organisations are formally notified and invited to the Public Open Days.	Sighted letter from Heritage Branch_Well MRNH8_InterpPlan_20090305 - stating Heritage Branch satisfied with public interpretation Information on exhibitions of artists in residence. Site interviews.	An open day was held in 2017 and a number of community tours have been held.	Compliant
DA333		11	An interpretation programme for the entire Old Marulan Township heritage precinct incorporating the results of the archaeological excavation must be implemented. This interpretation should help the public understand the history and significance of the site. Final design details of the interpretation plan, including information on the display and housing of artefacts and other relevant materials, and interpretation of the structural remains, is to be submitted to the Director of the Heritage Office for written approval before implementation of the interpretation.	Sighted letter from Heritage Branch_Well MRNH8_InterpPlan_20090305 - stating Heritage Branch satisfied with public interpretation		Compliant
DA334		12	The Applicant must ensure that an archaeological publication for the general public of Old Marulan Township incorporating the results of the archaeological programme at the site is prepared. Final design details of this publication are to be submitted to the Director of the NSW Heritage Office for approval within six months of the completion of the excavation programme. The publication is to be completed within one (1) year of the conclusion of the project unless an extension of time is approved by the Heritage Council of NSW.	Sighted photographs of the Old Marulan 2007 Archaeological Investigations - Final Report - Volume 2 Umwelt letter to Holcim advising that the final archaeological report for the Old Marulan 2007 archaeological excavations has been completed (and enclosing a copy with the letter) dated 20 May 2015	Section 6.0 of the final report is about 'Results of the Archaeological Survey and Excavation'. Section 5.0 is about 'Research Design'. The reporting requirements were not completed within the specified timeframes. The report has now been placed in the Holcim website. No further actions are recommended.	Non-compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA335		13	The Applicant must ensure that the nominated Excavation Director takes adequate steps to record in detail relics, structures and features discovered on the site during the archaeological works in accordance with current best practice. This work must be undertaken in accordance with the NSW Heritage Office guidelines, 'How to Prepare Archival Records of Heritage Items' (1998) and 'Guidelines for Photographic Recording of Heritage Items' (2004). One (1) copy of the photographic and archival recording shall be submitted to the Heritage Council of NSW. A further copy shall be lodged with the local library and/or another appropriate local repository in the area in which the site is located.	Holcim letter to OEH dated 15 June 2017	Letter provided evidence and reporting requirements of archaeological salvage.	Compliant
DA336		14	The Applicant is responsible for the safe-keeping of all relics recovered from the site.	Heritage Branch letter detailing Artefact management policy is appropriate (7/9/09)		Compliant
DA337		15	The Applicant must ensure that the site under archaeological investigation is made secure and that the unexcavated artefacts, structures and features are not subject to deterioration, damage or destruction during and after fieldwork.	Site observations (2012)		Compliant
DA338		16	The Applicant must ensure that the nominated Excavation Director cleans, stabilises, labels, analyses, catalogues and stores any artefacts recovered from the site in a way that allows them to be retrieved according to both type and provenance.	Holcim letter to OEH dated 15 June 2017	Letter shows that care and diligence was taken during archaeological salvage undertaken on site.	Compliant
DA339		17	The Applicant must ensure that a summary of the results of the field work, up to 500 words in length, is submitted to the Heritage Council of NSW for approval within one (1) month of completion of archaeological field work. This information is required in accordance with section 146(b) of the 'Heritage Act, 1977'.	End of fieldwork 500 word report - final (2) (D. Gojak, Banksia Heritage + Archaeology, 15/3/08)		Compliant
DA340		18	The Applicant must ensure that a final excavation report is prepared by the nominated Excavation Director, to publication standard, within one (1) year of the completion of the field based archaeological activity unless an extension of time or other variation is approved by the Heritage Council of NSW.	Sighted relevant pages of the Old Marulan 2007 Archaeological Investigations - Final Report - Volume 2 Umwelt letter to Holcim advising that the final archaeological report for the Old Marulan 2007 archaeological excavations has been completed (and enclosing a copy with the letter) dated 20 May 2015	The report was not submitted within the specified timeframe. No further actions are recommended.	Non-compliant
DA341		19	The Applicant must ensure that one (1) electronic copy of the final excavation report is submitted on CD to the Heritage Council of NSW together with two (2) printed copies of the final excavation report. These reports are required in accordance with section 146(b) of the 'Heritage Act, 1977'. The Applicant must also ensure that further copies are lodged with the local library and/or another appropriate local repository in the area in which the site is located.	Umwelt letter to Heritage Division, OEH, providing the final excavation report and electronic data, dated 20 May 2015.		Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA342		20	The Applicant must ensure that the information presented in a final excavation report includes the following:			
DA343		20(a)	(a) An executive summary,	Sighted relevant pages of the Old Marulan 2007 Archaeological Investigations - Final Report - Volume 2		Compliant
DA344		20(b)	(b) Due credit to the client paying for the excavation on the title page,	Sighted relevant pages of the Old Marulan 2007 Archaeological Investigations - Final Report - Volume 2		Compliant
DA345		20(c)	(c) An accurate site location and site plan,	Sighted relevant pages of the Old Marulan 2007 Archaeological Investigations - Final Report - Volume 2	Attachment 1 includes air photo analysis	Compliant
DA346		20(d)	(d) Historical research, references, and bibliography,	Sighted relevant pages of the Old Marulan 2007 Archaeological Investigations - Final Report - Volume 2		Compliant
DA347		20(e)	(e) Detailed information on the excavation including the aim, the context for the excavation, procedures, treatment of artefacts (cleaning, conserving, sorting, cataloguing, labelling, scale photographs and/or drawings, location of repository) and analysis of the information retrieved,	Sighted relevant pages of the Old Marulan 2007 Archaeological Investigations - Final Report - Volume 2		Compliant
DA348		20(f)	(f) Detailed response to research questions,	Sighted relevant pages of the Old Marulan 2007 Archaeological Investigations - Final Report - Volume 2		Compliant
DA349		20(g)	(g) Nominated repository for the items,	Sighted relevant pages of the Old Marulan 2007 Archaeological Investigations - Final Report - Volume 2		Compliant
DA350		20(h)	(h) Conclusions from the archaeological programme. This information must include a reassessment of the site's heritage significance, statement(s) on how archaeological investigations at this site have contributed to the community's understanding of the site and recommendations for the future management of the site, and	Sighted relevant pages of the Old Marulan 2007 Archaeological Investigations - Final Report - Volume 2	Section 6.0 of the final report is about 'Results of the Archaeological Survey and Excavation'. Section 5.0 is about 'Research Design'.	Compliant
DA351		20(i)	(i) Details of how this information about this excavation has been publicly disseminated.	https://www.holcim.com.au/about-us/community-link/lynwood/planning-approvals-reporting (Recommendation (REC24): The Old Marulan Township interpretation report is placed on the Holcim website.	Non-compliant
DA352		APPENDIX 8: CONCEPTUAL REHABILITATION PLAN [Map figure]				Not triggered
DA353		APPENDIX 9. HABITAT MANAGEMENT AREAS [Map figure]		Site observations. Review of DigitalGlobe satellite image against Appendix 2 (Development Layout).		Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
DA354	APPENDIX 10. NOISE COMPLIANCE ASSESSMENT					
Applicable Meteorological Conditions						
		1	The noise criteria in Table 1 apply under all meteorological conditions except the following:			
DA355		1 (a)	monitoring locations for the collection of representative noise data;	<p>Lynwood Quarry Annual Environment Review, September 2015.</p> <p>Lynwood Quarry Annual Environment Review, September 2016.</p> <p>Lynwood Quarry Annual Environment Review, March 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, April 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, June 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, September 2017.</p> <p>Noise Monitoring Assessment, Quarterly Lynwood Quarry, Marulan, NSW, December 2017.</p> <p>INX community complaint reports for audit period, including complaints recorded on 21 September 2017 and 27 November 2017.</p>	Noise is measured in four representative locations (as documented in each of the quarterly noise monitoring reports Q1, Q2, Q3 and Q4 2017), and as approved by the Secretary in the NMP.	Compliant
DA356		1 (b)	wind speeds greater than 3 metres/second at 10 metres above ground level; or	Attended noise surveys are undertaken as part of regular Quarterly Noise Monitoring Assessment Reports.	<p>Noise monitoring is undertaken by suitably qualified acoustic consultant Muller Acoustic Consulting Pty Ltd.</p> <p>All Quarterly Noise Monitoring Assessment Reports state that the assessment has been conducted in accordance with a list of documents, which includes the Industrial Noise Policy (INP), 2000</p>	Compliant
DA357		1 (c)	stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or	Attended noise surveys are undertaken as part of regular Quarterly Noise Monitoring Assessment Reports.	<p>Noise monitoring is undertaken by suitably qualified acoustic consultant Muller Acoustic Consulting Pty Ltd.</p> <p>All Quarterly Noise Monitoring Assessment Reports state that the assessment has been conducted in accordance with a list of documents, which includes the Industrial Noise Policy (INP), 2000</p>	Compliant
DA358		1 (d)	stability category G temperature inversion conditions.	Attended noise surveys are undertaken as part of regular Quarterly Noise Monitoring Assessment Reports.	<p>Noise monitoring is undertaken by suitably qualified acoustic consultant Muller Acoustic Consulting Pty Ltd.</p> <p>All Quarterly Noise Monitoring Assessment Reports state that the assessment has been conducted in accordance with a list of documents, which includes the Industrial Noise Policy (INP), 2000</p>	Compliant

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Unique ID	Sched	Condition	Condition text	Evidence	Comments and recommendations	Compliance
Determination of Meteorological Conditions						
DA359		2	Except for wind speed at microphone height, the data to be used for determining meteorological conditions must be that recorded by the meteorological station required under condition 15A of Schedule 3.		Page 9 of the Quarterly Noise Monitoring Assessment (April 2017) states: "In the event of quarry attributed noise being above criteria, prevailing meteorological conditions for the monitoring period were sourced from the onsite meteorological station and analysed in accordance with Appendix E4 of the INP to determine the stability category present at the time of each attended measurement." Assessment results with the meteorological data are summarised in Table 3, 4, 5 and 6.	Compliant
Compliance Monitoring						
DA360		3	Attended monitoring is to be used to evaluate compliance with the relevant conditions of this consent.	Attended noise surveys are undertaken as part of regular Quarterly Noise Monitoring Assessment Reports.	Assessment Methodology section of the Quarterly Noise Monitoring Assessment Reports states that "The attended noise surveys were conducted in general accordance with the procedures described in Australian Standards AS 1055-1997, "Acoustics - Description and Measurement of Environmental Noise" and the EPL. The methodology section of the following reports was reviewed: Q1 2017 (dated April 2017) , Q2 (dated June 2017), Q3 (dated September 2017), and Q4 (December 2017).	Compliant
DA361		4	Unless otherwise directed by the Secretary, attended quarterly monitoring is to be used to evaluate compliance with the relevant conditions of this consent.	Attended noise surveys are undertaken as part of regular Quarterly Noise Monitoring Assessment Reports.	The introduction of each Quarterly Noise Monitoring Assessment Report states the following "This assessment has been undertaken during..... and forms part of the annual noise monitoring program to address conditions outlined in the Development Consent."	Compliant
DA362			<i>Note: The Secretary may direct that the frequency of attended monitoring increase or decrease at any time during the life of the development.</i>	-		Note
DA363		5	Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the INP (as amended from time to time), in particular the requirements relating to:	Attended noise surveys are undertaken as part of regular Quarterly Noise Monitoring Assessment Reports. DPE letter dated 7 December 2016.	All Quarterly Noise Monitoring Assessment Reports state that the assessment has been conducted in accordance with a list of documents, which includes the Industrial Noise Policy (INP), 2000. DPE's letter dated 7 December 2016 approving the latest NMP.	Compliant
DA364		5 (a)	monitoring locations for the collection of representative noise data;	Attended noise surveys are undertaken as part of regular Quarterly Noise Monitoring Assessment Reports.		Compliant
DA365		5 (b)	meteorological conditions during which collection of noise data is not appropriate;	Attended noise surveys are undertaken as part of regular Quarterly Noise Monitoring Assessment Reports.	Noise monitoring is undertaken by suitably qualified acoustic consultant	Compliant
DA366		5 (c)	equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and	Attended noise surveys are undertaken as part of regular Quarterly Noise Monitoring Assessment Reports.	Noise monitoring is undertaken by suitably qualified acoustic consultant	Compliant
DA367		5 (d)	modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.	Attended noise surveys are undertaken as part of regular Quarterly Noise Monitoring Assessment Reports.	Noise monitoring is undertaken by suitably qualified acoustic consultant	Compliant

* Evidence provided outside of audit period.

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DA 128-5-2005 Statement of Commitments (including Mod 1 (21/12/05) , Mod 2 (22/3/11), Mod 3 (17/8/11), Mod 4 (5/2016) and Mod 5 (5/2017)

Unique ID	Commitments	Evidence	Comments and recommendations	Compliance
	APPENDIX 11: STATEMENT OF COMMITMENTS (Final May 2016)			
SOC1	The Environmental Assessment for Modification Application DA 128-5-2005 MOD 4 (EA (MOD 4) in its entirety is the guiding document which provides context to the following commitments made by in relation to the Lynwood Extraction Area Modification Project. The EA (Mod 4) is to be used as the reference for interpreting how Holcim Australia will operate to implement these commitments.			Note
	Modification Project Management and Mitigation Measures			
	Management Plans			
SOC2	The approved Lynwood Quarry Environmental Management Strategy and environmental management plans will be revised and updated as part of the implementation of the Modification Project.	<ol style="list-style-type: none"> 1. Air Quality Management Plan (October 2016) 2. Riparian Area Management Plan Lockyersleigh Creek Catchment Revision 2 (June 2011) 3. Riparian Area Management Plan Marulan Creek Catchment Area (2011) 4. Noise Management Plan (September 2016) 5. Blast Management Plan (November 2016) 6. Marulan Traffic Management Plan (May 2018) 7. Environmental Management Strategy Revision 3 (January 2013) 8. Aboriginal Heritage Management Plan, Caring for Country Final (July 2018) 9. Rehabilitation and Landscape Management Plan (September 2016) & (2018) 10. Water Management Plan (2018) 11. Waste Management and Minimisation Strategy (2017) 12. Pollution Incident Response Management Plan (September 2018) 13. Riparian Area Management Plan Joarimin Creek Catchment (2011). <p>Correspondence with various agencies regarding management plan due date extension, revision, consultation and/or approval.</p>	<p>Not all management plans were revised as part of the latest 2017 DA 128 -5-2005 modification (ie after May 2017).</p> <p>Some have been revised or are in the process of undergoing revision (as per Holcim's correspondence with DPE, OEH and other relevant agencies provided during this audit).</p> <p>Recommendation: Refer to (REC16).</p>	Non-compliant
	Noise			
SOC3	The design of the Modification Project incorporates the measures proposed in the 2004 Noise Impact Assessment (Heggies Australia, 2004) and 2010 modification (Umwelt, 2009a), where they are still applicable noting the proposed changes to Lynwood Quarry.	Noise Management Plan (September 2016)	Lynwood Quarry Noise Management Plan (NMP) was updated on September 2016 to incorporate Modification Project.	Compliant
SOC4	In addition to the noise management measures (outlined in Appendix 4 of the EA (MOD 4)), the following measures are proposed to be incorporated into the routine operation of the quarry over the life of the Modification Project to further minimise noise impacts:	Noise Management Plan (September 2016)	Lynwood Quarry Noise Management Plan (NMP) was updated on September 2016 to incorporate Modification Project.	Compliant
SOC5	<ul style="list-style-type: none"> • The use of broad band reversing alarms instead of beeper style alarms on all mobile equipment. 	Noise Management Plan (September 2016)	Section 4.3 of the NMP.	Compliant

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Unique ID	Commitments	Evidence	Comments and recommendations	Compliance
SOC6	<ul style="list-style-type: none"> The management of mobile machines during adverse weather conditions when wind conditions or inversion conditions enhance the noise propagation towards sensitive receiver locations. This could include, but not be limited to: <ul style="list-style-type: none"> o ensuring the sales loader operates behind the product stockpile during adverse weather conditions in the evening and night time period; and/or o moving quarrying activities to locations deeper in the quarry pit during adverse weather conditions and ceasing operations in exposed areas (e.g. on the face of the overburden emplacement areas). 	Noise Management Plan (September 2016)	Section 4.3 of the NMP.	Compliant
SOC7	<ul style="list-style-type: none"> Regular inspection and maintenance of noise attenuation systems on quarry equipment. 	Noise Management Plan (September 2016)	Section 4.3 of the NMP.	Compliant
SOC8	<ul style="list-style-type: none"> Implementation of a process for periodic review of noise performance of equipment. 	Noise Management Plan (September 2016)	Section 4.3 of the NMP.	Compliant
	Blasting			
SOC9	Holcim Australia has an existing blast management and monitoring system in place at Lynwood Quarry which will be implemented for the Modification Project including:			
SOC10	<ul style="list-style-type: none"> design of each blast to meet the required criteria and considering the particular needs, location, geological conditions of each blast. Appropriate blast initiation sequences will be used to minimise impacts with blast MIC limited as required to meet vibration and overpressure criteria 	Blast Management Plan (November 2016)	Lynwood Quarry Blast Management Plan updated on October 2016 to incorporate Modification Project. Sections 5.2, 6.1 and 6.2 of the BMP.	Compliant
SOC11	<ul style="list-style-type: none"> a pre-blast review of environmental conditions (including weather conditions) to avoid blasting in conditions which may significantly increase blasting impacts or dust impacts 	Blast Management Plan (November 2016)	Section 5.2.1 of the BMP.	Compliant
SOC12	<ul style="list-style-type: none"> blasts are typically undertaken between 10 am and 3 pm noting that blasting is permitted to be undertaken between 9 am and 5 pm Monday to Saturday 	<p>Site interviews.</p> <p>Monitoring reports (https://www.holcim.com.au/sustainability/environment/pollution-monitoring-data#tabs-0-68884600-1525050091-0)</p>	<p>Two INX Community Complaint Records (entered into system 19 May 2016 and 21 September 2017, from two different residents) record complaints about blasting activities (with a focus on the level of noise/vibration rather than the blast time). In addition, one blasting complaint letter to was sent by a community member to DPE regarding a that went straight to DPE. However, monitoring results do not indicate that criteria were exceeded.</p> <p>Pollution monitoring data provided on Holcim's website shows that blasts mostly occur between 11 am - 2 pm. However there were a number of entries listing "12.00am". It is reasonable to conclude that this is a mistake as complaints would have been made if blasting occurred at midnight.</p> <p>Recommendation: Refer to (REC2).</p>	Compliant

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SOC13	<ul style="list-style-type: none"> a blast monitoring system is in place at Lynwood Quarry with the results of monitoring used to assess compliance and feedback into the site blast model to provide for ongoing refinement of blast design. The blast monitoring program will be updated as part of the implementation of the Modification Project 	Blast Management Plan (November 2016)	Section 6 of the BMP.	Compliant
SOC14	<ul style="list-style-type: none"> a blast notification process in accordance with Condition 10 of Schedule 3 of the development consent which requires Holcim Australia to notify residents of upcoming blasts, operate a blasting hotline and keep the community informed about this hotline. 	Blast Management Plan (November 2016)	Section 5.2 of the BMP.	Compliant
SOC15	Holcim Australia will, subject to agreement of the landowner, commission a structural assessment of Lockyersleigh Homestead and the associated heritage structures to confirm the suitability of blast limits for these structures.	A & R Engineering Design Pty Ltd condition report (structural integrity report) dated 22 June 2016.	A & R Engineering Design Pty Ltd condition report (structural integrity report) dated 22 June 2016 provided, showing photographic record of building condition at "Lockyersleigh Homestead" and settlement compound 1437 Carrick Road Brayton.	Compliant
	Air quality			
SOC16	Holcim Australia will continue to implement the existing air quality management and monitoring system in place at Lynwood Quarry which includes both engineering and operations controls measures as outlined in Section 6.5.5 of the EA (MOD 4).	Air Quality Management Plan (October 2016)	Section 4 of the AQMP.	Compliant
SCO17	The existing air quality monitoring program will be revised as operations commence in the Granite Pit with monitoring locations revised as indicated in Figure 2.5 of the Response to Submissions report. This monitoring program may be revised over the life of the Project with any changes outlined in the Air Quality Management Plan.	Air Quality Management Plan (October 2016)	Sections 4 and 5 of the AQMP.	Compliant
	Biodiversity			
	Holcim Australia will implement the following biodiversity controls:			
SOC18	<ul style="list-style-type: none"> a robust tree felling procedure as outlined in Appendix 7 of the EA (MOD 4) will be implemented to minimise the potential for impacts on native fauna species (focusing on threatened species) as a result of the clearing of hollow-bearing trees 	Rehabilitation and Landscape Management Plan (September 2016)	Section 3.8.2 of the RLMP.	Compliant
SOC19	<ul style="list-style-type: none"> nest boxes will be established in retained vegetation in proximity to the proposed disturbance footprint to mitigate the loss of hollow-bearing trees 	Rehabilitation and Landscape Management Plan (September 2016)	Section 3.8.2 of the RLMP.	Compliant
SOC20	<ul style="list-style-type: none"> targeted weed management measures including regular weed inspections and weed control and eradication techniques such as herbicides, physical removal and prompt revegetation of bare areas will be implemented in the Modification Project Area 	Rehabilitation and Landscape Management Plan (September 2016)	Section 2.0 of the RLMP notes "This revision (Revision 2) of the plan was undertaken following approval of the second modification in March 2011).	Compliant
SOC21	<ul style="list-style-type: none"> targeted feral animal management measures will be implemented in accordance with Holcim Australia's existing Landscape Management Plan 	Rehabilitation and Landscape Management Plan (September 2016)	Section 3.5.3.2 of the RLMP.	Compliant

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SOC22	<ul style="list-style-type: none"> • traffic control measures/speed limits/signage will be implemented on haul roads to minimise fauna injury/road kills, as much as possible. 	Site observations.		Compliant
SOC23	Holcim Australia will deliver a Biodiversity Offset Strategy for the Modification Project in accordance with the NSW Biodiversity Offsets Policy for Major Projects.	Rehabilitation and Landscape Management Plan (September 2016) Box Gum Woodland Management Plan (September 2013)	Section 3.6.1 'Establishment of Habitat Management Area (HMA)' of the Lynwood Quarry RLMP notes that the purpose of the HMA is to offset the loss of vegetation within the quarry footprint. Section 2.0 'Offset Description' of Lynwood Quarry - Box Gum Woodland Management Plan (September 2013) discusses the Biodiversity Offset Package and its two components - direct actions (non-land) and direct land offset (the Biodiversity Offset Area). Offset credits have been retired (see Schedule 3 Condition 48A.	Compliant
	Surface Water			
SOC24	Holcim Australia will update the Lynwood Quarry Water Management Plan. This will include an update to the Lockyersleigh Creek Riparian Area Management Plan.	Water Management Plan (July 2018)* Riparian Area Management Plan Lockyersleigh Creek Catchment Revision 2 (June 2011)	The Riparian Area Management Plan Lockyersleigh Creek has not been updated since June 2011. Recommendation (REC25): the Lockyersleigh Creek Riparian Area Management Plan is updated.	Non-compliant
	Key surface water management controls for the Modification Project will include:			
SOC25	<ul style="list-style-type: none"> • Erosion and sediment controls will set out and monitored during construction and operation in accordance with the Blue Book (Landcom, 2004 and DECC, 2008). 	Water Management Plan (July 2018)*	Section 4 of the WMP.	Compliant*
SOC26	<ul style="list-style-type: none"> • Monitoring of water imported to site, water used on site and water discharged following the guidelines for Water Reporting Requirements for Mines (NSW Office of Water, undated), where applicable. 	Water Management Plan (July 2018)*	The Water Reporting Requirements for Mines (undated) could not be accessed by the auditor.	-
SOC27	<ul style="list-style-type: none"> • The existing surface water monitoring program will be updated to include four additional sites as shown in Figure 2.2 of the Response to Submissions report. The final details of the proposed surface water monitoring program will be contained within the updated Water Management Plan. 	Response to Submissions (Mod 4) page 12 Figure 2.2. Surface Water Monitoring Program (2018)*	The Surface Water Monitoring Program (2018) has since been revised and is currently going through the approval process as part of the Water Management Plan 2018*. It does not include SW1 and SW2 surface water monitoring locations which were in the original Figure (Figure 2.2 of the RTS report) as these related to construction of the Hume Highway intersection is complete.	Compliant*
SOC28	<ul style="list-style-type: none"> • The water quality parameters and frequency of sampling will remain as for the existing approved operations. Flow monitoring will continue to be undertaken by visual observation of the flows during water quality sampling (flow, no-flow). 	Surface Water Monitoring Program (2011) Surface Water Monitoring Program (2018)	Surface water monitoring frequency and parameters have remained the same as in the older version of Surface Water Monitoring Program (2011).	Compliant

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	Groundwater			
SOC29	Holcim Australia will extend the current groundwater monitoring program, which includes both groundwater level and quality, to include the new monitoring piezometers that were constructed for the Granite Pit during the exploration drilling phase. Details of these locations are provided in Appendix 9 of the EA (MOD 4). These bores will be monitored until they are progressively removed by the progression of the Granite Pit or as otherwise refined via the Water Management Plan.	Groundwater Monitoring Program (2011) Groundwater Monitoring Program (2018)*	The Lynwood Quarry Groundwater Monitoring Program (GMP) was updated to incorporate the Modification Project.	Compliant*
	Social Impact and Opportunities			
	Holcim Australia will implement the following measures in relation to mitigating social impacts and maximising opportunities:			
SOC30	Visual <ul style="list-style-type: none"> • Ongoing liaison with interested members of the Towrang community with regard to lighting and other visual impacts as appropriate. • Ongoing discussion with key residents in Marulan and surrounds. • Implementation of the visual management measures outlined later in this section. 	Letter from the CCC Chair Brendan Blakeley dated 30 November 2017 (received during the agency consultation period)	The letter noted that <i>"Members of the Towrang community first raised concerns in relation to visual impacts of the quarry's site lighting in 2014. An additional workshop regarding site lighting was held in November 2014 with interested residents. Following this, Holcim and the Towrang Progress Associated jointly appointed Webb Australia and the lighting consultant to develop a report, which fed directly into a site lighting reduction program."</i> The letter notes that the lighting issue has now been resolved through a combination of input from the CCC and Holcim's actions (consultation, studies, trials, and ultimately, wattage changes, timed on/off switches, height alternations and the construction of a light screen).	Compliant
SOC31	Land Management <ul style="list-style-type: none"> • Where appropriate, consult with neighbouring landholders when undertaking pest and weed management activities. 	Rehabilitation and Landscape Management Plan (September 2016)	It is not clear when it is "appropriate" to consult with neighbouring landholders or the mechanism for this consultation. However, there are no complaints regarding pest or weed management. Recommendation (REC26): The consultation section of the RLMP should explicitly state that consultation with neighbouring landholders will occur when undertaking pest and weed management activities.	Compliant
SOC32	Population Change (infrastructure and services) <ul style="list-style-type: none"> • Continue implementation of the community fund. 	Holcim Australia website Lynwood Quarry webpage https://www.holcim.com.au/lynwood-cif https://www.holcim.com.au/about-us/community-link/lynwood/our-community	The round 2 Community Investment Fund (CIF) dedicated to the Marulan and surrounding communities was closed for applications in 2017. Under "Our community", the website states that "First round applications will open on the 1 December 2014, and will close 27 January 2015." Recommendation: Refer to (REC22).	Compliant

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Unique ID	Commitments	Evidence	Comments and recommendations	Compliance
SOC33	<p><u>Land Use and Industry Diversity</u></p> <ul style="list-style-type: none"> Consider potential benefits to the local tourist industry when determining community contributions, in consultation with relevant community and business stakeholders as relevant throughout the life of operations. 	Site interviews.		Compliant
SOC34	<p><u>Trust and Reputation</u></p> <ul style="list-style-type: none"> Existing engagement to continue as appropriate, with a focus on respectful, honest and open communications. 	<p>Comments received from the Chair of the CCC (letter from Brendan Blakeley dated 30 November 2017) note regular CCC meetings, Holcim's willingness to address community concerns (ie Towrang site lighting impacts), and Holcim's community initiatives (ie Community Investment Fund).</p> <p>Holcim's newsletters for the following months: January 2016, May 2016, June 2016, August 2016, September 2016, October 2016, December 2016, April 2017, May 2017, June 2017. August 2017, September 2017, November 2017.</p>	<p>The generic Holcim news page, for all Holcim sites, are regularly updated (latest update dated 10/1/2018).</p> <p>Recommendation (REC27): Lynwood's information updates should be updated on the website.</p>	Compliant
SOC35	<ul style="list-style-type: none"> Continue to communicate regularly with nearby and interested stakeholders regarding: <ul style="list-style-type: none"> ongoing operations on site residents' experience of impacts such as dust, noise, blasting, traffic, heritage and impacts to water visual impacts, particularly with interested members of the Towrang community 	<p>https://www.holcim.com.au/about-us/community-link/lynwood/</p> <p>INX Community Complaint Reports and Environmental Reports.</p>	Holcim's 'Our Community' page on the website is regularly updated with information about the Community Investment Fund, CCC, CCC Meetings and issues/concerns raised by the community. Although as noted above, the site contains some outdated information.	Compliant
SOC36	<ul style="list-style-type: none"> Holcim Australia will periodically review the operation and membership of the CCC, in line with the 2007 Guidelines for establishing and operating Community Consultative Committees for Mining Projects, to ensure that membership is appropriate for the issues discussed and that matters discussed and minutes are distributed (for example via email) to all interested community stakeholders more widely 	Letter from the CCC Chair Brendan Blakeley dated 30 November 2017 (received during the agency consultation period)	Comments received from the Chair of the CCC (letter from Brendan Blakeley dated 30 November 2017) note "The CCC runs in accordance with the original conditions of approval. However, we have progressively aligned our practices with the Department of Planning and Environment's recently revised CCC Guidelines. This has included a summary report to the Department of Planning and Environment, as well as members signing forms to recommitment themselves to the CCC."	Compliant
SOC37	<ul style="list-style-type: none"> Utilise additional communication channels such as local newsletter, updates and local blogs. 	https://www.holcim.com.au/about-us/community-link/lynwood/	<p>The most recent media article on the website is from 18 May 2105.</p> <p>Recommendation (REC28): the "In the media" section of the website should be updated.</p>	Compliant
SOC38	<p><u>Monitoring</u></p> <ul style="list-style-type: none"> Undertake social monitoring as outlined in Table 6.14 of the EA (MOD 4). 	Letter from the CCC Chair Brendan Blakeley dated 30 November 2017 (received during the agency consultation period)	<p>Table 6.14 Monitoring strategies summarises the strategy for monitoring of the Modification Project's impacts over time and recommends the ongoing collection and analysis of social data.</p> <p>Agency consultation with the Chair of Lynwood Quarry's CCC (dated 30 November 2017) demonstrates that Holcim has engaged with the community in regards to visual and lighting impacts, and has as a result taken corrective action and closed the issue.</p>	Compliant
	Visual Amenity			
	The following measures will be implemented as part of the Modification Project to minimise visual impacts:			

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SOC39	<ul style="list-style-type: none"> • Amenity Bund – an approximately 12 metre high amenity bund (and 14 metres in spot locations, as required) will be constructed along the western boundary of the Granite Pit Area. This bund will be constructed as part of the initial establishment phases of the Granite Pit so that it is in place for the life of the quarry operations. The outer face of the bund will be revegetated (through direct seeding or tube stock) as quickly as possible so that trees, over time, will contribute to the overall visual screening of the quarry operations. 	<p>Rehabilitation and Landscape Management Plan (September 2016).</p> <p>Site observations.</p>	Section 3.5.1 of the RLMP.	Compliant
SOC40	<ul style="list-style-type: none"> • Lighting – there will be no fixed lighting in the Granite Pit Area. 	<p>Rehabilitation and Landscape Management Plan (September 2016).</p> <p>Site observations.</p>	Section 3.5.1 of the RLMP.	Compliant
SOC41	<ul style="list-style-type: none"> • Lighting – quarry operations on the surface including topsoil stripping, overburden extraction and overburden emplacement will be daytime operations only (consistent with current development consent conditions) and therefore do not have any potential to result in lighting impacts. 	<p>Rehabilitation and Landscape Management Plan (September 2016).</p> <p>INX Complaints Register.</p>	<p>Section 3.5.1 of the RLMP.</p> <p>No lighting complaints have been recorded.</p>	Compliant
SOC42	<ul style="list-style-type: none"> • Lighting – quarrying within the Granite Pit will occur in the evening period (up to 10 pm, consistent with current development consent conditions) but will be managed so that extraction activities are undertaken in areas that are not visible from the potential viewing locations to the west (i.e. on lower benches or on the western face of the quarry), with mobile lighting plant kept low and pointing down, facing away from western residences and kept to the minimum needed for operational safety. 	<p>Rehabilitation and Landscape Management Plan (September 2016).</p> <p>INX Complaints Register.</p>	<p>Section 3.5.1 of the RLMP.</p> <p>No lighting complaints have been recorded.</p>	Compliant
SOC43	<ul style="list-style-type: none"> • Lighting – a bund will be constructed along the western and southern faces of the haul road from the Granite Pit to the infrastructure area. The purpose of this bund will be to seek to screen the headlights of vehicles operating on the haul during the evening period (6pm to 10pm). The bunding will be approximately 5 metres high. 	<p>Rehabilitation and Landscape Management Plan (September 2016)</p> <p>Site observations.</p>	Section 3.5.1 of the RLMP.	Compliant
SOC44	<ul style="list-style-type: none"> • Overburden emplacement – Holcim Australia will seek to construct the outer edges of the overburden emplacement areas first, creating an approximate 5-10 metre high bund behind which overburden emplacement activities will continue. This will provide visual screening of ongoing emplacement activities and allow timely rehabilitation of the outer face of the emplacement area to minimise visual impacts (noting that once rehabilitated the emplacement areas will start to blend into the existing environment and not be as visually prominent). 	<p>Rehabilitation and Landscape Management Plan (September 2016)</p> <p>Site observations.</p>	Section 3.5.1 of the RLMP.	Compliant

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SOC45	<ul style="list-style-type: none"> Overburden emplacement – emplacement areas will be rehabilitated as soon as practicable after final shaping, with progressive rehabilitation to be undertaken over the life of the quarry so that the externally visible disturbed area is kept as small as practicable. Revegetation will be undertaken as discussed in Section 6.15 of the EA (MOD 4) to result in mixed grassland and woodland vegetation that will be similar in visual character to the surrounding natural landscape. 	Rehabilitation and Landscape Management Plan (September 2016) Site observations.	Section 3.5.1 of the RLMP. Vegetation re-establishment had not commenced at the site of the site inspection.	Compliant
SOC46	<ul style="list-style-type: none"> Overburden emplacement - the surface of the Southern Overburden Emplacement Area and the Lynwood Overburden Emplacement area will be shaped to have swales, small drainage hollows and a locally irregular landform to resemble, where practicable, the natural surrounding landform. 	Rehabilitation and Landscape Management Plan (September 2016) Site observations.	Section 3.5.1 of the RLMP.	Compliant
SOC47	<ul style="list-style-type: none"> Quarry operations – the upper western facing benches of the Granite Pit (which are in overburden material) will be shaped and rehabilitated progressively as the quarry progresses. These areas will be visible from a small number of elevated properties in Towrang and so will be rehabilitated as soon as practicable to reduce visibility. 	Rehabilitation and Landscape Management Plan (September 2016) Site observations.	Section 3.5.1 of the RLMP. These benches were being formed at the time of the site inspection and rehabilitation had not commenced.	Not triggered
SOC48	<ul style="list-style-type: none"> Maintenance – Holcim Australia will maintain the amenity bund and its vegetative cover so that it remains effective for the duration of the quarry operations. 	Rehabilitation and Landscape Management Plan (September 2016) Site observations.	Section 3.5.1 of the RLMP. The bund was being constructed at the time of the site inspection and rehabilitation had not commenced.	Not triggered
SOC49	<i>Note: as discussed in the EA, the priority for emplacement of overburden will be 1 - construction of haul roads to allow quarrying, 2 - construction of the visual bund, 3 - construction of the outer faces of the overburden emplacement areas.</i>	-		Note
Aboriginal Cultural Heritage				
SOC50	Holcim Australia will update the Aboriginal Cultural Heritage Management Plan (ACHMP) for Lynwood Quarry. Holcim Australia will implement the Aboriginal Cultural Heritage management actions detailed in Section 6.9.9 of the EA (MOD 4).	Aboriginal Heritage Management Plan, Caring for Country Final (July 2018)		Compliant*
Historic Heritage				
	The historic heritage management measures to be implemented for the Modification Project are as follows:			
SOC51	<ul style="list-style-type: none"> Blasting is to be designed so that vibration does not exceed 5 mm/s at the Lockyersleigh Homestead and outbuildings with blasts monitored to confirm compliance. 	Blast Management Plan (November 2016).	Blast monitor B5 is located at Lockyersleigh Homestead.	Compliant
SOC52	<ul style="list-style-type: none"> Subject to agreement of the landowner, an inspection will be undertaken to confirm the structural integrity of Lockyersleigh Homestead and associated outbuildings to confirm that a maximum ground vibration limit with a peak particle velocity of 5 mm/s is appropriate. 	A & R Engineering Design Pty Ltd condition report (structural integrity report) dated 22 June 2016.		Compliant

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Unique ID	Commitments	Evidence	Comments and recommendations	Compliance
SOC53	<ul style="list-style-type: none"> In the unlikely event that unexpected archaeological remains or potential heritage items not identified as part of this report are discovered during the Modification Project, all works in the immediate area will cease. The remains and potential impacts will be assessed by a qualified archaeologist or heritage consultant and, if necessary, the Heritage Branch, OEH notified in accordance with Section 146 of the Heritage Act 1977. 	-		Not triggered
SOC54	<ul style="list-style-type: none"> If potential human remains are located following any surface disturbance, all works will halt in the immediate area to prevent any further impacts to the remains. The NSW Police will be contacted immediately. 	-		Not triggered
	Gas Pipeline Hazards			
	The key technical control measures to be implemented as part of the Modification Project include:			
SOC55	<ul style="list-style-type: none"> pipelines will be designed in accordance with relevant standards 	Lynwood Quarry Extraction Area Modification - Specification - Utility Services Protection (10 May 2017)	<p>The specification shows that a number of participants are to be involved in the construction of the works (ie principal, superintendent, certifier, designer, contractor, ITA, and geotechnical engineer).</p> <p>Section 1.10 Standards and Codes of Practice states "All Works shall comply with all Codes, Standards, Acts and Regulations applicable in New South Wales."</p> <p>The report includes a number of construction, material, safety and monitoring specifications to keep on top of quality control.</p>	Compliant
SOC56	<ul style="list-style-type: none"> geotechnical assessment will be undertaken to determine soil stability at pipeline crossing location prior to construction activities 	Authorised third party works request form signed and dated 17 May 2017.	The key objective of the form was the "safe installation of protection slabbing works for crossing APA gas easement, to then allow Holcim haul road vehicles to access new development area. The form had been completed and signed/approved.	Compliant
SOC57	<ul style="list-style-type: none"> civil design of the haul road/pipeline crossing will be undertaken so that the installed road meets load bearing capacity requirements and relevant standards 	Lynwood Quarry Extraction Area Modification - Specification - Utility Services Protection (10 May 2017) Lynwood Easement Protection: Construction Methodology		Compliant
SOC58	<ul style="list-style-type: none"> use of appropriate equipment to minimise the impact on the pipes in the event of contact 	Lynwood Quarry Extraction Area Modification - Specification - Utility Services Protection (10 May 2017) Lynwood Easement Protection: Construction Methodology		Compliant
SOC59	<ul style="list-style-type: none"> use of process and design controls including limited excavation depths, buffer distances and designated crossings to limit potential for contact with or overstress of the pipes during haul road construction. 	Lynwood Quarry Extraction Area Modification - Specification - Utility Services Protection (10 May 2017) Lynwood Easement Protection: Construction Methodology		Compliant

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Unique ID	Commitments	Evidence	Comments and recommendations	Compliance
SOC60	<p>The key non-technical safeguards and procedures to be implemented as part of the Modification Project for works in the vicinity of the gas pipeline will include:</p> <ul style="list-style-type: none"> • assessment of process designs, site layout and design changes • procedural control including APA Group's Daily Permit System, site inductions and other procedures • operating procedures, including awareness and training • cessation of operations in adverse weather conditions and where practical covering of exposed pipelines • implementation of site speed limit, driver training, route selection and physical barriers where appropriate • provision of physical controls including fencing of site during construction • limiting access to authorised personnel only and implementation of security patrol if necessary • appropriate training and supervision of operations • provision of ongoing maintenance and operation procedures. 	<p>Lynwood Quarry Extraction Area Modification - Specification - Utility Services Protection (10 May 2017)</p> <p>Lynwood Easement Protection: Construction Methodology</p>		Compliant
	Greenhouse Gas and Energy			
SOC61	<p>As part of the Modification Project Holcim Australia will review opportunities for reducing energy consumption on an ongoing basis during the detailed design process and once the operation has commenced including:</p> <ul style="list-style-type: none"> • setting energy use and greenhouse emission reduction targets • using energy monitoring and auditing as a management tool • providing training on energy management to site personnel • monitoring the fuel efficiency of diesel equipment • considering the energy efficiency of new equipment when making purchasing decisions • using high efficiency electric motors. 	Site interviews.	<p>There are a number of energy-saving programs on site including automatic lights.</p> <p>Holcim reports to the Department of the Environment and Energy - National Pollution Inventory (NPI) with a list of all emissions leaving the site.</p>	Compliant
	Rehabilitation			
SOC62	<p>The key elements of the rehabilitation strategy for the Modification Project will include:</p> <ul style="list-style-type: none"> • the timely and progressive rehabilitation of disturbed areas 	<p>Rehabilitation and Landscape Management Plan (September 2016)</p> <p>Site observations.</p>	<p>Generally, the quarry footprint has been expanding. However, rehabilitation has started on disturbed areas that are unused.</p> <p>Section 3.3 of Rehabilitation and Landscape Management Plan (RLMP).</p>	Compliant
SOC63	<ul style="list-style-type: none"> • the surface of the Southern Overburden Emplacement Area and the Lynwood Overburden Emplacement area will be shaped to have swales, small drainage hollows and a generally irregular landform to resemble the natural surrounding landform 	<p>Rehabilitation and Landscape Management Plan (September 2016)</p> <p>Site observations.</p>	<p>Section 3.5 of RLMP.</p> <p>Process did not appear to be complete during the site inspection.</p>	Compliant
SOC64	<ul style="list-style-type: none"> • stripped topsoil will be placed in stockpiles in depths of up to approximately three metres and will seeded with a cover crop if they are to remain in place for longer than approximately six months 	<p>Rehabilitation and Landscape Management Plan (September 2016)</p> <p>Site observations.</p>	Section 3.3 of RLMP.	Compliant
SOC65	<ul style="list-style-type: none"> • shaped areas will be covered with topsoil where practicable 	<p>Rehabilitation and Landscape Management Plan (September 2016)</p> <p>Site observations.</p>	Section 3.3 of RLMP.	Compliant

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Unique ID	Commitments	Evidence	Comments and recommendations	Compliance
SOC66	<ul style="list-style-type: none"> • areas where topsoil has been replaced will be seeded with a native species and cover crop mix with intent of achieving mixed grassland and woodland native vegetation communities 	Rehabilitation and Landscape Management Plan (September 2016) Site observations.	Section 3.3 of RLMP.	Compliant
SOC67	<ul style="list-style-type: none"> • selected surface habitat features consisting of large rocks, logs and trees from clearing undertaken in the Modification Project Area will also be placed across the rehabilitated area, where practicable 	Rehabilitation and Landscape Management Plan (September 2016) Site observations.	Section 3.3 of RLMP.	Compliant
SOC68	<ul style="list-style-type: none"> • upon closure of the quarry, unless an alternative use of the quarry infrastructure is identified, the infrastructure will be removed and the areas containing the surface infrastructure will be recontoured. The reshaped areas will then be seeded with a native species and cover crop mix with the intent of achieving mixed grassland and woodland native vegetation communities 	Rehabilitation and Landscape Management Plan (September 2016)	Section 3.4 of RLMP.	Not triggered
SOC69	<ul style="list-style-type: none"> • upon closure of the quarry, the haul roads would also be removed and water management controls either removed or modified to assist in stabilisation of the final landform and to capture any sediment runoff from the rehabilitated areas. 	Rehabilitation and Landscape Management Plan (September 2016)	Compliant and sighted in Section 3.4 of RLMP.	Not triggered

Appendix B

EPL compliance register

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Environmental Protection Licence 12939 - Variation 4 August 2016					
Unique ID	Section	Conditions (as varied in 2016)	Evidence verified	Comments and recommendations	Compliance
	1	Administrative conditions			
	A1	What the licence authorises and regulates			
EPL1	A1.1	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. Scheduled activity/ fee based activity - crushing grinding or separating >2 000 000 T annual processing capacity Scheduled activity/ fee based activity - extractive activities - > 2 000 000 T annual capacity to extract, process or store	Sighted spreadsheet called <i>Lynwood Monthly Sales Confidential Report [Confidential]</i> which included the total annual amount of product transported from site.		Compliant
EPL2	A1.3				
	A2	Premises to which the licence applies			
EPL3	A2.1	The Licence applies to the following premises: Premises Details Lynwood Quarry 278 Stoney Creek Road MARULAN NSW 2579 LOT 10 DP 700579, LOT 112 DP 750029, LOT 230 DP 750029, LOT 294 DP750029, LOT 7001 DP 1025603, LOT 3 DP 1036993, LOT 4 DP 1036993, LOT 1 DP 1074107, LOT 3 DP 1074107, LOT 1 DP 1074819, LOT 2 DP 1107232, LOT 1 DP 1116876, LOT 2 DP 1116876, LOT 1 DP 1117910, LOT 1 DP 1140546 ALSO AS SHOWN IN THE DOCUMENT TITLED "FIGURE 1, REVISED MONITORING LOCATIONS", RECEIVED BY EPA 8 NOVEMBER 2016 AND HELD AS DOC16/565661.			Note
	A3	Information supplied to the EPA			
EPL4	A3.1	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.	Site observations.		Compliant
		In this condition the reference to "the licence application" includes a reference to:			

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Unique ID	Section	Conditions (as varied in 2016)	Evidence verified	Comments and recommendations	Compliance
EPL5		(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	-		Note
EPL6		(b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.	-		Note
	2	Discharges to air and water applications to land			
	P1	Location of monitoring/discharge points and areas			
EPL7	P1.1	The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point. [followed by a table titled Air with EPA identification no. type of monitoring options (dust monitoring) and location descriptions]	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017. Fortnightly monitoring results: - Environmental_Monitoring_171001-171015 - Environmental_Monitoring_171016-171031 - Environmental_Monitoring_171101-171115 - Environmental_Monitoring_171116-171130 - environmental_monitoring_171201-171215 - environmental_monitoring_171216-171231 - environmental_monitoring_180101-180115		Compliant
	3	Limit conditions			
	L1	Pollution of waters			
EPL8	L.1.1	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.	INX Incident Report 6 December 2016	Diesel overflow from locomotive whilst fuelling on 6 December 2016 resulted in diesel flowing to sedimentation dams. Pollution remained within site and actions appear appropriate.	Compliant
	L2	Waste			
EPL9	L2.1	The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.	Examples of invoices from Southern Oil and Southern Highlands Waste and Recycling for waste disposal.		Compliant

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Unique ID	Section	Conditions (as varied in 2016)	Evidence verified	Comments and recommendations	Compliance
EPL10	L2.2	This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence.	-		Note
	L3	Noise limits			
EPL11	L3.1	Noise generated at the premises must not exceed the noise limits presented in the table below: [followed by a table providing noise assessment criteria for day, evening and night periods]	Lynwood Quarry Annual Environment Review, September 2016. INX Incident Report 6 December 2016. Letter to Katrina O'Reilly and Margaret Kirton, DPE, dated August 2016	Table 6 'Historical comparison of noise monitoring' from the 2017 AER indicates that there has been only one exceedance since the last audit period - on 15 June 2016. INX Community complaint report - Dust and noise complaint, 27 November 2017. Consultation at the house was completed with highway noise believed to be the cause. Holcim has undertaken corrective action including notifying the Secretary. No further actions are recommended.	Non-compliant
EPL12		Note: The above locations refer to the respective noise assessment locations as indicated in the document titled "Figure 1 Revised Monitoring Locations", received by EPA 8 November 2016 (DOC16/565661).	-		Note
EPL13	L3.2	Noise from the development is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 meters of a dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the LAeq (15 minute) noise limits in condition L3.1. Noise from the development is to be measured at 1m from the dwelling façade to determine compliance with the LA1 (1 minute) in the above table. The noise emission limits identified in condition L3.1 apply under meteorological conditions of: <ul style="list-style-type: none"> • Wind speed up to 3m/s at 10m above ground level; or • Temperature inversion conditions of up to 3° C/100m and wind speed up to 2 m/s at 10m above ground level. 	Lynwood Quarry, Noise Management Plan, September 2016.		Compliant
	L4	Blasting			

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Environmental Protection Licence 12939 - Variation 4 August 2016					
Unique ID	Section	Conditions (as varied in 2016)	Evidence verified	Comments and recommendations	Compliance
EPL14	L4.1	The overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017. Fortnightly monitoring results: - Environmental_Monitoring_171001-171015 - Environmental_Monitoring_171016-171031 - Environmental_Monitoring_171101-171115 - Environmental_Monitoring_171116-171130 - environmental_monitoring_171201-171215 - environmental_monitoring_171216-171231 - environmental_monitoring_180101-180115	See Development Consent Schedule 3, Condition 7.	Compliant
EPL15	L4.2	The overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017. Fortnightly monitoring results: - Environmental_Monitoring_171001-171015 - Environmental_Monitoring_171016-171031 - Environmental_Monitoring_171101-171115 - Environmental_Monitoring_171116-171130 - environmental_monitoring_171201-171215 - environmental_monitoring_171216-171231 - environmental_monitoring_180101-180115	See Development Consent Schedule 3, Condition 7.	Compliant
EPL16	L4.3	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017. Fortnightly monitoring results: - Environmental_Monitoring_171001-171015 - Environmental_Monitoring_171016-171031 - Environmental_Monitoring_171101-171115 - Environmental_Monitoring_171116-171130 - environmental_monitoring_171201-171215 - environmental_monitoring_171216-171231 - environmental_monitoring_180101-180115	See Development Consent Schedule 3, Condition 8.	Compliant

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Environmental Protection Licence 12939 - Variation 4 August 2016					
Unique ID	Section	Conditions (as varied in 2016)	Evidence verified	Comments and recommendations	Compliance
EPL17	L4.4	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017. Fortnightly monitoring results: - Environmental_Monitoring_171001-171015 - Environmental_Monitoring_171016-171031 - Environmental_Monitoring_171101-171115 - Environmental_Monitoring_171116-171130 - environmental_monitoring_171201-171215 - environmental_monitoring_171216-171231 - environmental_monitoring_180101-180115	See Development Consent Schedule 3, Condition 8.	Compliant
	L4.5	To determine compliance with condition(s) L4.1 and L4.2:			
EPL18		a) When blasting is undertaken outside of the Granite Pit, airblast overpressure and ground vibration levels must be measured and electronically recorded at blast monitoring locations marked B1, B2 and B3 in Figure 1, Revised Monitoring Locations, received by EPA 8 November 2016 (DOC16/565661).	Blast Management Plan (November 2016). Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017. Fortnightly monitoring results: - Environmental_Monitoring_171001-171015 - Environmental_Monitoring_171016-171031 - Environmental_Monitoring_171101-171115 - Environmental_Monitoring_171116-171130 - environmental_monitoring_171201-171215 - environmental_monitoring_171216-171231 - environmental_monitoring_180101-180115	See Development Consent Schedule 3, Condition 7.	Compliant
EPL19		b) When blasting is undertaken within the Granite Pit, airblast overpressure and ground vibration levels must be measured and electronically recorded at blast monitoring locations marked B4, B5 and B6 in Figure 1, Revised Monitoring Locations, received by EPA 8 November 2016 (DOC16/565661).	Blast Management Plan (November 2016).	Section 6.2 monitoring locations of the BMP (dated November 2016) states that Blast locations for the granite pit are B4 - B6 (as in Figure 1). Blast data, which includes ground vibration and air overpressure is recorded in AER reports.	Compliant
EPL20		c) Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard AS 2187.2-2006.	Blast Management Plan (November 2016).	Section 6.1 monitoring equipment of BMP notes that "Instrumentation will meet Australian Standards and the specifications in Table 8."	Compliant
EPL21		Note: A breach of the licence will still occur where airblast overpressure or ground vibration levels from the blasting operations at the premises exceeds the limit specified in conditions L4.1 to L4.4 at any "noise sensitive locations" other than the locations identified in the above condition.	-		Note

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Environmental Protection Licence 12939 - Variation 4 August 2016					
Unique ID	Section	Conditions (as varied in 2016)	Evidence verified	Comments and recommendations	Compliance
	L5	Hours of operation			
	L5.1	The Applicant shall comply with the operating hours in the below table.			
EPL22		<p>Construction works Monday-Friday: 7am to 6pm Saturday: 8am to 1pm Sunday and Public Holidays: None</p> <p>Topsoil/overburden removal/emplacement Any day: 7am to 6pm</p> <p>Blasting Monday-Saturday: 9am to 5pm Sundays and Public Holidays: None</p> <p>Extraction Any day: 7am to 10pm</p> <p>Processing, (crushing, screening, stockpiling); loading, delivery, and distribution; maintenance Any day: Anytime</p>	Example Shift Change Over Reports	<p>AER March 2017 notes "all operations undertaken at Lynwood Quarry were undertaken as per the Schedule 3, Condition 5."</p> <p>Shift change over reports include details of start and finish times for: - Extraction from pit - Topsoil - Overburden removal - Emplacement - Drilling - FEL loading train</p> <p>Shift change over reports confirm that extraction is starting at 7:00am and finishing at or before 10:00pm. The change over reports also confirm that drilling is starting at 7:00am and finishing at 6pm.</p>	Compliant
EPL23		Note: The above table only relates to construction works that are audible at any residential receivers on privately owned land. Construction works that are inaudible at any residential receiver may be carried out at any time.	-		Note
	4	Operating conditions			
	O1	Activities must be carried out in a competent manner			
EPL24	O1.1	<p>Licensed activities must be carried out in a competent manner.</p> <p>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.</p>	Site observations.		Compliant
	O2	Maintenance of plant and equipment			
EPL25	O2.1	<p>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.</p>	<p>Sighted operation of equipment maintenance records (OEMs).</p> <p>Site observations.</p>		Compliant
	5	Monitoring and recording conditions			
	M1	Monitoring records			
EPL26	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.	Monitoring records provided in Excel format.		Compliant

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Environmental Protection Licence 12939 - Variation 4 August 2016					
Unique ID	Section	Conditions (as varied in 2016)	Evidence verified	Comments and recommendations	Compliance
EPL27	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.	Monitoring records provided in Excel format.	Pollution monitoring results are available from http://www.holcim.com.au/sustainability/environment/pollution-monitoring-data.html (viewed 29/01/18)	Compliant
EPL28	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.	Viewed on-site sampling records		Compliant
	M2	Requirement to monitor concentration of pollutants			
EPL29	M2.1	For each monitoring/discharge point or utilisation area specified below (by appoint 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.	Lynwood Quarry Air Quality Management Plan (October 2016)	Table 5.1 Lynwood Quarry Air Quality Monitoring Program (AQMP) in the Air Quality Management Plan (October 2016) notes air quality monitoring locations, parameters monitored, units of measure, averaging period, frequency and sampling method - which all correspond to the specifications outlined in M2.2 Air Monitoring Requirements.	Compliant
EPL30	M2.2	Air Monitoring Requirements [table summarising points and then pollutants to be measured, units of measure, frequency and sampling method]	Lynwood Quarry Annual Environment Review, September 2015. Lynwood Quarry Annual Environment Review, September 2016. Lynwood Quarry Annual Environment Review, March 2017. Fortnightly monitoring results: - Environmental_Monitoring_171001-171015 - Environmental_Monitoring_171016-171031 - Environmental_Monitoring_171101-171115 - Environmental_Monitoring_171116-171130 - environmental_monitoring_171201-171215 - environmental_monitoring_171216-171231 - environmental_monitoring_180101-180115		Compliant
EPL31		Note: For the purposes of the table(s) above Special Frequency 1 means the collection of samples over a 24 hour period, every 6 days.	-		Note

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Environmental Protection Licence 12939 - Variation 4 August 2016					
Unique ID	Section	Conditions (as varied in 2016)	Evidence verified	Comments and recommendations	Compliance
	M3	Testing Methods - concentration limits			
EPL32	M3.1	<p>Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:</p> <p>a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or</p> <p>b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or</p> <p>c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.</p> <p>Note: <i>The Protection of the Environment Operations (Clean Air) Regulation 2010</i> requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".</p>	<p>Lynwood Quarry Air Quality Management Plan (October 2016).</p> <p>Sighted DPE letter to Holcim dated 5 December 2016 approving Lynwood Quarry Air Quality Management Plan.</p>	<p>DPE letter to Holcim dated 5 December 2016 which notes that Holcim has consulted with EPA during the preparation of the AQMP. The EPA is generally satisfied with the air quality monitoring suite, and as such the Secretary approves the AQMP.</p>	Compliant
	M4	Recording of pollution complaints			
EPL33	M4.1	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.	INX Complaints Register		Compliant
EPL34	M4.2	<p>The record must include details of the following:</p> <p>a) the date and time of the complaint;</p> <p>b) the method by which the complaint was made;</p> <p>c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;</p> <p>d) the nature of the complaint;</p> <p>e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and</p> <p>f) if no action was taken by the licensee, the reasons why no action was taken.</p>	INX Complaints Register	The INX register is well maintained and appears to contain all complaints .	Compliant
EPL35	M4.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	INX Complaints Register		Compliant
EPL36	M4.4	The record must be produced to any authorised officer of the EPA who asks to see them.	-		Note

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Environmental Protection Licence 12939 - Variation 4 August 2016					
Unique ID	Section	Conditions (as varied in 2016)	Evidence verified	Comments and recommendations	Compliance
	M5	Telephone complaints line			
EPL37	M5.1	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.	Environmental or community enquiries phone number is featured on Holcim's website: http://www.holcim.com.au/about-us/community-link/lynwood/contact-details.html (viewed 16/10/18) Yellow Pages (viewed 16/10/18)	Lynwood Quarry Environment and Community Coordinator phone number and email provided on website. Yellow Pages lists "Lynwood Quarry Blasting and Complaints Hotline"	Compliant
EPL38	M5.2	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.	Environmental or community enquiries phone number is featured on Holcim's website: http://www.holcim.com.au/about-us/community-link/lynwood/contact-details.html (viewed 16/10/18) Yellow Pages (viewed 16/10/18)	Lynwood Quarry Environment and Community Coordinator phone number and email provided on website. Yellow Pages lists "Lynwood Quarry Blasting and Complaints Hotline"	Compliant
EPL39	M5.3	The preceding two conditions do not apply until 3 months after: a) the date of the issue of this licence	-		Note
	6	Reporting Conditions			
	R1	Annual Return Documents			
EPL40	R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: 1. a Statement of Compliance, 2. a Monitoring and Complaints Summary, 3. a Statement of Compliance - Licence Conditions, 4. a Statement of Compliance - Load based Fee, 5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan, 6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and 7. a Statement of Compliance - Environmental Management Systems and Practices. At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=12939&id=12939&option=licence&searchrange=general&range=POEO%20licence&prp=no&status=Issued		Compliant
EPL41	R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below.	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=12939&id=12939&option=licence&searchrange=general&range=POEO%20licence&prp=no&status=Issued		Compliant

Lynwood Quarry
Independent Environmental Audit - 2018

Environmental Protection Licence 12939 - Variation 4 August 2016					
Unique ID	Section	Conditions (as varied in 2016)	Evidence verified	Comments and recommendations	Compliance
EPL42	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.	-		Not triggered
EPL43	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) in relation to the revocation of the licence - the date from which notice revoking the licence operates.	-		Not triggered
EPL44	R1.5	The Annual Return for the reporting period must be supplied to the EPA via eConnect EPA or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=12939&id=12939&option=licence&searchrange=general&range=POEO%20licence&prp=no&status=Issued	Sighted EPA's records that note the following: 1. Annual Return for the period 15 December 2014 - 14 December 2015 was received by EPA on 4 February 2016, 2. Annual Return for the period 15 December 2015 - 14 December 2016 was received by EPA on 9 February 2017, and 3. Annual Return for the period 15 December 2016 - 14 December 2017 was received on 12 February 2018.	Compliant
EPL45	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.	Site observations.		Compliant
EPL46	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.	Site observations.		Compliant
EPL47	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.	-		Note

Lynwood Quarry
Independent Environmental Audit - 2018

Environmental Protection Licence 12939 - Variation 4 August 2016					
Unique ID	Section	Conditions (as varied in 2016)	Evidence verified	Comments and recommendations	Compliance
EPL48		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.	-	No issues were raised by EPA as part of consultation for th	Note
EPL49		Note: An application to transfer a licence must be made in the approved form for this purpose.	-		Note
	R2	Notification of environmental harm			
EPL50	R2.1	Notifications must be made by telephoning the Environment Line service on 131 555	-		Note
EPL51	R2.2	The licensee must provide written details of the notification to the EPA with in 7 days of the date on which the incident occurred.	See DA table regarding incidents.	No issues were raised by EPA as part of consultation for this audit	Compliant
EPL52		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.	-		Note
	R3	Written report			
EPL53	R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	Lynwood Quarry Annual Environment Review, September 2015.	See Development Consent Schedule 3, Condition 16.	Compliant
EPL54	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.	-		Note

Lynwood Quarry
Independent Environmental Audit - 2018

Environmental Protection Licence 12939 - Variation 4 August 2016					
Unique ID	Section	Conditions (as varied in 2016)	Evidence verified	Comments and recommendations	Compliance
EPL55	R3.3	The request may require a report which includes any or all of the following information: a) the cause, time and duration of the event; b) the type, volume and concentration of every pollutant discharged as a result of the event; c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and g) any other relevant matters.	-		Note
EPL56	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.	-		Note
	7	General conditions			
	G1	Copy of licence kept at the premises			
EPL57	G1.1	A copy of this licence must be kept at the premises to which the licence applies.	Site observations.		Compliant
EPL58	G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	-		Note

* Evidence provided outside of audit period.

Appendix C

Example consultation letter to agencies

17 November 2017

Louise Wakefield
Director Planning & Development
Goulburn Mulwaree Council

Via council@goulburn.nsw.gov.au

Re: Lynwood Quarry - Independent Environmental Audit

Dear Louise,

EMM Consulting Pty Limited (EMM) has been engaged by Holcim Australia Pty Ltd to undertake an independent environmental audit of the Lynwood Quarry located at Marulan in the Southern Tablelands region of NSW (the quarry). The appointment of the EMM audit team has been approved by the NSW Department of Planning and Environment (DPE).

The independent environmental audit is a requirement under Condition 11 of Schedule 5 of the development approval (DA) 128-5-2005 (21 December 2005). The audit will consider the quarry's compliance with:

- DA 128-5-2005;
- the project as described in the Environment Impact Statement (EIS), Environmental Assessment (EA) (Mod 1), EA (Mod 2), EA (Mod 3), EA (Mod 4) and EA (Mod 5), the Development Layout Plan and the Statement of Commitments;
- Environment Protection Licence (EPL) 12939 – Lynwood Quarry (as varied 21 December 2016); and
- any other associated permits and licences; and
- key environmental management plans, assessments or programs required under the approvals listed above.

Condition 11 (b) of DA 128-5-2005 states that the audit must include consultation with the relevant agencies and the Community Consultative Committee (CCC), which we believe are:

- Department of Primary Industries – Water (DPI Water);
- Department of Primary Industries – Fisheries (DPI Fisheries);
- NSW Environment Protection Authority (EPA);
- NSW Roads and Maritime Services (RMS);
- NSW Crown Lands and Water Division, Department of Primary Industries;
- NSW Office of Environment and Heritage (OEH);

- DPE - Division of Resources and Energy (DRE);
- WaterNSW;
- NSW Heritage Council; and
- Goulburn Mulwaree Council.

We seek your comment on the involvement that your agency has had with the quarry since the last audit on 22 October 2014, the compliance of the quarry with conditions relevant to your agency and any general comments you have on the quarry's general environmental performance.

We would appreciate any written comments by Friday 1 December 2017. I am also available to discuss any matters that you believe are relevant to this audit. My contact details are provided below.

Should you have any questions, please do not hesitate to contact me.

Yours sincerely



Dr Philip Towler
Associate Director

ptowler@emmconsulting.com.au

T: 02 9493 9500

D: 02 9493 9518

M: 0409 702 050

Appendix E

Agency consultation responses

Phil Towler

From: Megan Dawson <Megan.Dawson@planning.nsw.gov.au>
Sent: Friday, 24 November 2017 2:42 PM
To: Tania Amanovic
Cc: Phil Towler
Subject: RE: Lynwood Quarry - Independent Environmental Audit (DPE)

Hi Tania,

Thank you for your email. We do not have any specific comments, with the exception of reviewing how/if they co-ordinate blasting with nearby quarries, such as Gunlake. I understand that Gunlake notifies Holcim 24 hours prior to blasting but there is no reverse notification. Holcim do not have a requirement to do this but it could be considered best practice to avoid cumulative impacts.

Thanks, Megan

Megan Dawson

Team Leader
Resource Assessments | Planning Services
320 Pitt Street | GPO Box 39 | Sydney NSW 2001
T 02 9274 6391 E megan.dawson@planning.nsw.gov.au



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From: Tania Amanovic [mailto:tamanovic@emmconsulting.com.au]
Sent: Tuesday, 21 November 2017 11:18 AM
To: Megan Dawson <Megan.Dawson@planning.nsw.gov.au>
Cc: Phil Towler <ptowler@emmconsulting.com.au>
Subject: Lynwood Quarry - Independent Environmental Audit (DPE)

Dear Megan,

EMM Consulting Pty Limited (EMM) has been engaged by Holcim Australia Pty Ltd to undertake an independent environmental audit of the Lynwood Quarry.

Please find attached our letter seeking your comment on the compliance of Lynwood Quarry with the conditions of consent relevant to your agency and any general comments you have on the quarry's environmental performance.

We would appreciate any written comments by Friday 1 December 2017.

My contact details are as below should you have any questions.

Kind regards

Tania

Tania Amanovic | Environmental Scientist - Environmental Assessment & Management

T 02 9493 9500 | D 02 9493 9542 | F 02 9493 9599

Ground Floor, Suite 01, 20 Chandos Street, St Leonards NSW 2065
PO Box 21, St Leonards NSW 1590

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Phil Towler

From: Jillian Reynolds <jillian.reynolds@dpi.nsw.gov.au>
Sent: Friday, 8 December 2017 1:40 PM
To: Tania Amanovic
Cc: Allan Lugg
Subject: Re: Lynwood Quarry - Independent Environmental Audit (DPI-Fisheries)

Follow Up Flag: Follow up
Flag Status: Completed

Hi Tania,

I have just been advised of a typo in my previous response.

The final sentence should have read

The Department is concerned that the current Water Management Plan operating at the approved quarry has **not** demonstrated a neutral effect on all relevant water quality parameters as was intended.

Could you please make sure that this is recorded.

Thanks

Jillian Reynolds | Fisheries Manager

NSW Department of Primary Industries | Aquatic Ecosystems

4 Woollamia Road | PO Box 97 | Huskisson NSW 2540

T: 02 4428 3406 | M: 0429 918 575 | F: 02 4441 8961 | E: jillian.reynolds@dpi.nsw.gov.au

W: www.dpi.nsw.gov.au/fisheries

Conserve, Share, Provide

On 6 December 2017 at 14:06, Jillian Reynolds <jillian.reynolds@dpi.nsw.gov.au> wrote:

Hi Tania,

Sorry for the delayed response to your request.

The Departments key concern with the Lynwood Quarry relates to the degradation of downstream water quality and aquatic habitats resulting from sediment and pollutants leaving the quarry workings and passing into downstream waterways including Lockyersleigh Creek, Jaorimin Creek and the Wollondilly River.

Preliminary examinations of the surface water monitoring results available in the Annual Reports for the Lynwood Quarry have shown consistent incidents of Total Suspended Solid (TSS) levels exceeding ANZECC trigger values of 50mg/l (eg: 13 recorded TSS exceedances at SW5, including; 810mg/l (16 times the acceptable level) on 13/2/2012, 530mg/l on 16/4/2012, 140mg/l on 29/1/13 and 130mg/l on 20/4/2015.). Also of relevance is that surface water sampling site 5 (SW5) was located approximately 2km downstream of the approved quarry and has recorded 5 levels of exceedance during the 2014/15 period.

The Department is concerned that the current Water Management Plan operating at the approved quarry has demonstrated a neutral effect on all relevant water quality parameters as was intended.

Regards,

Jillian

Jillian Reynolds | Fisheries Manager

NSW Department of Primary Industries | Aquatic Ecosystems

4 Woollamia Road | PO Box 97 | Huskisson NSW 2540

T: 02 4428 3406 | M: 0429 918 575 | F: 02 4441 8961 | E: jillian.reynolds@dpi.nsw.gov.au

W: www.dpi.nsw.gov.au/fisheries

Conserve, Share, Provide

On 24 November 2017 at 12:48, Carla Ganassin <carla.ganassin@dpi.nsw.gov.au> wrote:

Hi Jillian,

Here's one from your patch, passing it on.

It was nice to catch up at Merimbula. Hope the meeting today went well.

Cheers,

Carla Ganassin | Fisheries Manager | Aquatic Ecosystems Unit

NSW Department of Primary Industries | Fisheries NSW

Block E, Level 3, 84 Crown Street, Wollongong NSW 2500

SEND MAIL TO: Locked Bag 1 | Nelson Bay NSW 2315

T: 02 4222 8342 | F: 02 4225 9056 | E: carla.ganassin@dpi.nsw.gov.au

W: www.dpi.nsw.gov.au

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PERMIT APPLICATION FORMS & FISH HABITAT PROTECTION POLICIES AT:

www.dpi.nsw.gov.au/fisheries/habitat/protecting-habitats/toolkit

EMAIL COMPLETED APPLICATIONS TO: ahp.central@dpi.nsw.gov.au

APPLICATION PROCESSING TIMES (from date received): 28 days for Permits & Consultations; 40 days for IDA Referrals

----- Forwarded message -----

From: **RecFish Licensing** <recfish.licensing@dpi.nsw.gov.au>

Date: 21 November 2017 at 10:38

Subject: Fwd: Lynwood Quarry - Independent Environmental Audit (DPI-Fisheries)

To: Carla Ganassin <carla.ganassin@dpi.nsw.gov.au>

Hi Carla,

I've been advised that you might possibly be the best person for dealing with this email? If not, would you know of someone who could help out?

Thanks for that.

Regards,

Recreational Licensing

NSW Department of Primary Industries

59 Berry Street | Nowra NSW 2541 | LMB 3020 | Nowra NSW 2541
T: 02 4424 7499 | F: 02 4424 7449 | E: recfish.licensing@industry.nsw.gov.au
W: www.dpi.nsw.gov.au
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----- Forwarded message -----

From: **Tania Amanovic** <tamanovic@emmconsulting.com.au>
Date: 20 November 2017 at 13:42
Subject: Lynwood Quarry - Independent Environmental Audit (DPI-Fisheries)
To: "recfish.licensing@dpi.nsw.gov.au" <recfish.licensing@dpi.nsw.gov.au>
Cc: Phil Towler <ptowler@emmconsulting.com.au>

Dear Customer Service

Could you please forward this email and attachment to the appropriate person at DPI Fisheries.

EMM Consulting Pty Limited (EMM) has been engaged by Holcim Australia Pty Ltd to undertake an independent environmental audit of the Lynwood Quarry. This is a letter seeking comment on the compliance of Lynwood Quarry with the conditions of consent relevant to your agency and any general comments you have on the quarry's environmental performance.

We would appreciate any written comments by Friday 1 December 2017.

My contact details are as below should you have any questions.

Kind regards

Tania

Tania Amanovic | Environmental Scientist - Environmental Assessment & Management

T 02 9493 9500 | D 02 9493 9542 | F 02 9493 9599

Ground Floor, Suite 01, 20 Chandos Street, St Leonards NSW 2065

PO Box 21, St Leonards NSW 1590

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Office of
Environment
& Heritage

DOC17/573304-2
DA 128-5-2005

Dr Philip Towler
Associate Director
EMM
ptowler@emmconsulting.com.au

Dr Mr Towler

Environmental audit of the Lynwood Quarry, Marulan, DA128-5-2005

Thank you for consulting the Office of Environment and Heritage (OEH) for this environmental audit.

I would appreciate if your audit included a focus on the following conditions that relate to our agency's role of protecting Aboriginal cultural heritage and biodiversity on site.

1. Whether the revised Aboriginal cultural heritage management plan (dated February 2017) has addressed and effectively implemented the management measures required under condition 35.
2. Whether the conservation measures for the Cultural heritage management zone and extension have been implemented and are adequate to conserve the heritage values (condition 35(d) and Appendix 6).
3. Whether the 'Rehabilitation and Landscape Management Plan' (condition 44) has been progressed. OEH provided comments on a draft version in March 2017, but does not know if these comments were incorporated in to a final plan, or whether the plan was finalised and implemented. This also includes the Riparian Area Management Plan under condition 45.
4. Whether the proponent has secured the biodiversity credits under condition 48A, by 31 May 2017 for the following five years. OEH would also like to know what biodiversity offsets have been secured, and where – including those required from the original approval which the proponent was securing through a voluntary conservation agreement.

You have also requested information about any recent engagements between OEH and Lynwood Quarry staff. OEH continues to have ongoing notifications and consultation on salvage requirements and management measures for the Aboriginal Heritage Impact Permit and associated variations.

I am aware that you have referred your request for comments to the OEH Heritage Division on matters relating to the Heritage Act 1977. Any follow up for these matters can be forwarded to the Heritage Division's central email address: heritagemailbox@environment.nsw.gov.au.

If you have any questions, please contact Suzie Lamb on 6229 7117 or by email susan.lamb@environment.nsw.gov.au.

Yours sincerely


4/12/17.

ALLISON TREWEEK
Senior Team Leader - Planning South East
Regional Operations Division



1 December 2017

Tania Amanovic
Environmental Scientist – Environmental Assessment & Management
EMM Consulting Pty Limited
Ground Floor, Suite 1 – 20 Chandos Street
ST LEONARDS NSW 2065

Your Reference: J17138_Letter to Agencies_DRE
Our Reference: OUT17/47951

Emailed: tamanovic@emmconsulting.com.au

Dear Ms Amanovic,

Re: Lynwood Quarry (DA 128-5-2005 MOD5) – Independent Environmental Audit.

Thank you for the opportunity to provide comment on the compliance of Lynwood Quarry operated by Holcim (Australia) Pty Ltd, with conditions of consent for DA 128-5-2005 Modification 5 and any general comments on the quarry's environmental performance. This is a response from the NSW Department of Planning & Environment (DPE) – Division of Resources & Geoscience, Geological Survey of New South Wales (GSNSW).

GSNSW provided comment to DPE on Modification 4 for the Lynwood Quarry and were satisfied that the resource for the proposed quarry had been adequately assessed. GSNSW notes Condition 13 of the Consolidated Consent includes the requirement to provide annual production data to the DRG.

DRG collects data on the quantity of construction materials produced annually throughout the State. Forms are sent to all operating quarries at the end of each financial year for this purpose. DRG notes that according to departmental records, no production data has been received for the 2016-2017 financial year to date. To satisfy the requirements of Condition 13, the quarry operator should provide the requested data to DRG – Royalties & Advisory Services at mineral.royalty@industry.nsw.gov.au.

GSNSW notes that Modification 5 sought to modify Condition 48A of DA 128-5-2005, in relation to the timeframe for the retirement of biodiversity credits and includes other amendments. DPE considered the proposed modifications to be of a minor administrative nature and did not seek comment from GSNSW. Modification 5 was approved on 29 May 2017.

GSNSW requests consultation in relation to any proposed biodiversity offsets to ensure there are no potential sterilisation impacts to resources.

Geoscience Information Services

The GSNSW has a range of online data related to mineral exploration, land use and general geoscience topics:

<http://www.resources.nsw.gov.au/geological/online-services>

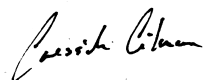
The location of current exploration and mining titles in NSW, explanations of mining and production titles and the roles of community and government in the decision making process for mining/resource projects may be accessed by the general public using the following online utilities:

<http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/geoscience/information/services/online-services/minview>

<http://www.commonground.nsw.gov.au/#/>

Queries regarding the above information, and future requests for advice in relation to this matter, should be directed to the GSNSW Land Use team at landuse.minerals@industry.nsw.gov.au.

Yours sincerely



Cressida Gilmore
Manager - Land Use

Phil Towler

From: Malcolm Hughes <Malcolm.Hughes@waternsw.com.au>
Sent: Friday, 1 December 2017 1:28 PM
To: Phil Towler
Cc: Tania Amanovic; Ravi Sundaram
Subject: FW: Lynwood Quarry - Independent Environmental Audit - Consultation with WaterNSW)

Dear Dr Towler

Thank you for consulting with WaterNSW regarding Lynwood Quarry's proposed Independent Environmental Audit. Please note the following in relation to WaterNSW's involvement since the quarry's last audit in 2014 and matters of interest to us regarding the quarry's operations and compliance:

- Since the since the last audit on 22 October 2014, WaterNSW has been involved in assessing the MOD 4 Environmental Assessment (between November 2015 and June 2016) and has reviewed the site's Water Management Plan (WMP) and provided comments in August 2016. WaterNSW notes that the previous Audit made a number of recommendations regarding the WMP. WaterNSW has not received any further communication from Holcim on the status of the WMP. WaterNSW is disappointed that Holcim has not provided advice on how it had addressed WaterNSW's comments nor apparently finalised the plan.
- The key areas of interest for WaterNSW in relation to the quarry operations and compliance relate to onsite sewage/ wastewater treatment and management, site water management including erosion and sediment controls to manage clean and dirty water runoff, and water quality leaving the site. WaterNSW requests that the audit clarify how the quarry has managed these matters including compliance with Lynwood Quarry's EPL 12939 in relation to water quality discharges from the site.

WaterNSW would like to be kept informed about the outcomes of the audit and would appreciate receiving a copy when finalized. Please contact Ravi Sundaram on 02 9865 2507 or Ravi.Sundaram@waternsw.com.au if you wish to discuss any of the above matters.

Regards

Malcolm Hughes

Malcolm Hughes
Manager Catchment Protection



Level 14, 169 Macquarie St, Parramatta NSW 2124
T: 9865 2520 M: 0427 466 934
malcolm.hughes@waternsw.com.au
www.waternsw.com.au

=====

Status : Closed Priority : Normal Mode: E-Mail

Category : Environmental Management - Sub Category: Customer Enquiry - Item: General

Account : Unknown

Contact Name : EMM Consulting Pty Limited PH: 0294939500 MOB:

Contact Email : tamanovic@emmconsulting.com.au

Description :

Dear Customer Service

Could you please forward this email and attachment to your Manager Environment and Planning Malcolm Hughes.

EMM Consulting Pty Limited (EMM) has been engaged by Holcim Australia Pty Ltd to undertake an independent environmental audit of the Lynwood Quarry. This is a letter seeking comment on the compliance of Lynwood Quarry with the conditions of consent relevant to your agency and any general comments you have on the quarry's environmental performance.

We would appreciate any written comments by Friday 1 December 2017.

My contact details are as below should you have any questions.

Kind regards

Tania

Tania Amanovic | Environmental Scientist - Environmental Assessment & Management

T 02 9493 9500 | D 02 9493 9542 | F 02 9493 9599

Ground Floor, Suite 01, 20 Chandos Street, St Leonards NSW 2065

PO Box 21, St Leonards NSW 1590

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File No: EF17/13200
Ref No: DOC17/573755

Dr Philip Towler
Associate Director EMM
PO BOX 21
ST LEONARDS NSW 1590
By email: ptowler@emmconsulting.com.au

Dear Mr Towler

RE: Lynwood Quarry (formerly known as the Marulan South Hard Rock Quarry) Part 3A (Development Application DA 128-5-2005)

I refer to your letter dated 17 November 2017 requesting advice on an Independent Environmental Audit for the Lynwood Quarry in Marulan. This audit is a requirement under condition 11 of the instrument of approval dated 21 December 2005 for the DA 128-5-2005 and seeks the advice as to whether consultation with the Heritage Council of NSW occurred for this project.

The Heritage Division has reviewed our files and can advise that the project required management of impacts to the State Heritage Register listed Town of Marulan (SHR #00127). The Heritage management conditions under that approval are specified in conditions 38 through to 42 of of DA 128-5-2005. This approval was issued through integrated development, rather than the typical mechanism of part 3A, which switched off separate approvals under the *Heritage Act 1977*.

Following approval of DA-128-5-2005, separate applications under the *Heritage Act 1977* were lodged for this project and included:

- i. A s60 application (no. 2006/s60/082) for the Old Marulan Township approved on 17 November 2006;
- ii. A s140 application to manage works in the vicinity of site NRMH9. However, this application was processed as an exception from the need for an excavation permit due to the minor nature of works. This exception to enable test excavation was endorsed on 28 November 2006.
- iii. S139(4) for archaeological excavation of site MRNH9 to conduct testing, endorsed 28 November 2006.
- iv. A s65a modification to the approved s60 application was sought as Application No. 2007/S65A/011, approved on 4 September 2007 for the removal of archaeological resources (salvage) to enable the construction of the traffic interchange.
- v. A s65a modification to the s60 application was sought as Application No. 2007/S65A/024, approved on 11 December 2007 to modify the nominated excavation directors.
- vi. A s57(2) exemption to enable test excavation inside the Hume Highway road reserve to understand the extent of the Woolpack Inn site, endorsed 9 March 2009.
- vii. A s65a modification to the s60 application was sought as Application No. 2009/S65A/13, approved on 22 October 2009 to allow excavation of the Woolpack Inn rear yard.
- viii. A s65a modification to the s60 application (2012/s65a/22), approved on 16 October 2012, to extend the timing for the final excavation report for the project to 30 September 2013.

The Applicant provided information to address condition 40(b) with the section 60 application (2006/s60/082), which was approved. The requirements prescribed historical archaeological test excavation for the Town of Marulan and several sites outside the curtilage of that SHR listed item. These results were reported as required by the conditions. The conditions also required:



- Two phases of archaeological investigation for the project including a phase of test excavation which was later modified under a s65a to allow the detailed salvage of remains due to the intersection works.
- Notifications of start and end of works for these stages of work
- The testing was to inform the final detailed design which should then have been incorporated into the salvage modification.
- The preparation of a draft interpretation plan for the Township of Marulan was prepared following results of the test excavation. It is unclear if this was resubmitted following the completion of the salvage works to incorporate those archaeological results.
- Details of the conservation *in situ* for a timber lined well MRNH8.
- The submission of several reports documenting the results of the archaeological program including at the end of the testing phase, weekly reports during the salvage excavation and the final comprehensive report at the completion of the archaeological salvage works. It is noted that this report was substantially delayed and not received until 10 June 2015, and originally due by 30 September 2013.

It is not clear from our records whether the final Interpretation Plan for the Township of Marulan, following the results of the archaeological salvage, was submitted in compliance with the conditions of this consent. We seek your clarification as our records are not clear on the receipt of any amended document. I also refer to a letter received from Mr Denis Gojak, the heritage consultant for the project, dated 19 September 2008 who advised that a permanent interpretative display at the Old Marulan township site was considered problematic because of 'traffic safety, security and privacy issues'. Our letter of 5 March 2009 identified that a museum display in association with the local historical society would then be a preferred outcome. I understand that a permanent museum within the town of Marulan has not yet been secured but that investigations in partnership with Goulburn-Mulwaree Council are ongoing. This matter does not appear to have been progressed since the time and an update on that interpretation plan would be appropriate.

I draw your attention to some matters of non-compliance, including a delay in supplying the final excavation report. Whilst works took place in 2007-2009, the final report was not provided until June 2015. A modification for this DA (Mod 4 expansion) was also referred to the Heritage Council of NSW for comments on 18 November 2015. Advice was provided regarding an item known as *Lockyersleigh Homestead (LEP listed heritage item I033)* suggesting the need for a structural integrity report and vibration monitoring. I seek your advice on whether a requirement for same was conditioned as part of the project approvals.

If you have any questions regarding the above matter please contact Felicity Barry, Senior Historical Archaeologist, at the Heritage Division, Office of Environment and Heritage on 9995 6914 or at Felicity.Barry@environment.nsw.gov.au.

Yours sincerely

Tim Smith OAM
Director Operations
Heritage Division
Office of Environment & Heritage
As Delegate of the NSW Heritage Council
11 December 2017

Phil Towler

From: Louise Wakefield <Louise.Wakefield@goulburn.nsw.gov.au>
Sent: Monday, 4 December 2017 3:13 PM
To: Tania Amanovic
Subject: RE: Lynwood Quarry - Independent Environmental Audit (GM Council)


Good Afternoon

Council has a very positive working relationship with the Manager's at Lynwood and we have had no compliance issues in relation to the Quarry.

I can be contacted on the number below if you require any further details.


Kind regards
Louise

Louise Wakefield
Director Growth Strategy & Culture

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From: Tania Amanovic [mailto:tamanovic@emmconsulting.com.au]
Sent: Friday, 17 November 2017 5:38 PM
To: Council <Council@goulburn.nsw.gov.au>
Cc: Phil Towler <ptowler@emmconsulting.com.au>
Subject: Lynwood Quarry - Independent Environmental Audit (GM Council)

Dear Customer Service

Could you please forward this email and attachment to the Council's Director Planning & Development Ms Louise Wakefield.

EMM Consulting Pty Limited (EMM) has been engaged by Holcim Australia Pty Ltd to undertake an independent environmental audit of the Lynwood Quarry. This is a letter seeking comment on the compliance of Lynwood Quarry with the conditions of consent relevant to your agency and any general comments you have on the quarry's environmental performance.

We would appreciate any written comments by Friday 1 December 2017.

My contact details are as below should you have any questions.

Kind regards

Tania

Tania Amanovic | Environmental Scientist - Environmental Assessment & Management

T 02 9493 9500 | **D** 02 9493 9542 | **F** 02 9493 9599

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30 November 2017

Dr Philip Towler
Associate Director
EMM Consulting



Via: ptowler@emmconsulting.com.au

Dear Dr Towler

Lynwood Quarry Independent Environmental Audit

As Independent Chair, it is my pleasure to provide the following overview of the Lynwood Quarry Community Consultative Committee (CCC) and matters of interest that have arisen since the quarry's last audit in October 2014.

The CCC runs in accordance with the original conditions of approval. However, we have progressively aligned our practices with the Department of Planning and Environment's recently revised CCC Guidelines. This has included a summary report to the Department of Planning and Environment, as well as members signing forms to recommitment themselves to the CCC.

Meetings: 2014 – 2017

The following table outlines meetings since the last audit, including date and number of attendees. Meeting notes can be found on the [Holcim Lynwood Quarry website](#).

#	Date	Number of attendees
10	3 November 2014	6
11	2 February 2015	7
12	10 June 2015	7
13	3 August 2015	6
14	13 August 2015*	7
15	26 February 2016	5
16	28 October 2016	8
17	28 April 2017	9
18	27 October 2017	8

*This was an extraordinary meeting

Overview of matters of interest

The committee is working well and acting as an important conduit for community issues and communicating the environmental compliance for the construction and operations of the quarry. This sentiment is also held by members, who appreciate the opportunity to provide feedback to Holcim's project team and management. Holcim's commitment to community and stakeholder engagement beyond the CCC forum is viewed very favourably by CCC members.



Holcim always provides the CCC with a thorough update on the quarry, including any milestones, planning updates, construction works, environmental performance, site operations and community relations activities.

Since the quarry's last audit, the CCC's major areas of interest has included:

- » site lighting impacts
- » the extraction area modification
- » community programs
- » timely feedback on meeting notes (extraordinary meeting).

Site lighting

Members of the Towrang community first raised concerns in relation to visual impacts of the quarry's site lighting in 2014. An additional workshop regarding site lighting was held in November 2014 with interested residents. Following this, Holcim and the Towrang Progress Association jointly appointed Webb Australia as the lighting consultant to develop a report, which fed directly into a site lighting reduction program.

The site lighting issue has now been resolved through a combination of input from the CCC and Holcim's actions (consultation, studies, trials, and ultimately, wattage changes, timed on/off switches, height alternations and the construction of a light screen). The Towrang community has since thanked Holcim for their efforts in minimising this impact. Another CCC member noted Holcim has gone above and beyond what is required of them in the Development Approval.

Extraction area modification

In June 2015, Holcim announced it was seeking to enter an extraction area modification process to change the site layout. The purpose was to allow access to a newly identified granite resource area within the broader land ownership area.

The CCC continues to receive updates on the extraction area modification, in addition to the broader community consultation undertaken by Holcim. There have been no major issues noted by CCC members in relation to the modification.

Holcim in the community

Holcim has a structured program of providing grants to support community groups throughout the region – the Community Investment Fund. The CCC assisted in establishing eligibility criteria for receiving grants and an independent process for assessing applications. The committee continues to play a key role in promoting this program broadly throughout the area.

If you have any questions or require any further information, please do not hesitate to contact me on 02 9387 2600 or via email.

Yours sincerely

Brendan Blakeley
Director
brendan@elton.com.au



