

Lynwood Quarry Independent Environmental Audit

Prepared for Holcim Australia Pty Limited | 8 October 2012



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Lynwood Quarry

Final

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Signature



Signature



Date 8 October 2012

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1 Introduction

EMGA Mitchell McLennan Pty Limited (EMM) was commissioned to undertake an independent environmental audit of the Holcim Australia Pty Limited (Holcim) Lynwood Quarry facility located at Marulan in the Southern Tablelands region of New South Wales (NSW).

1.1 Audit objectives

This independent environmental audit is required under Condition 6 of Schedule 5 of development consent DA 128-5-2005 (the consent), which was issued by the Minister for Planning on 21 December 2005 for *Lynwood Hard Rock Quarry and Associated Infrastructure* (DP&I 2011a). This development approval was most recently updated on 19 August 2011.

The objectives of the audit are to meet the requirements of Condition 6, which comprise:

By the end of December 2011, the end of December 2014, and every 5 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:

- (a) be conducted by a suitably qualified, experienced, and independent person whose appointment has been endorsed by the Director-General;*
- (b) be consistent with ISO 19011:2002 - Guidelines for Quality and/ or Environmental Systems Auditing, or updated versions of this guideline;*
- (c) assess the environmental performance of the development, and its effects on the surrounding environment;*
- (d) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;*
- (e) review the adequacy of any strategy/plan/program required under this consent; and, if necessary,*
- (f) recommend measures or actions to improve the environmental performance of the development, and/or any strategy/plan/program required under this consent.*

1.2 Audit criteria and scope

Audit criteria are the policies, procedures or requirements against which an action will be compared. In this case, the audit criteria are the conditions in DA 128-5-2005 and Environment Protect Licence (EPL) 12939 (as varied 11 April 2011). The development approval requires that the development is generally in accordance with:

- *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 2011a); and*

- 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 2011a).

This audit has been prepared in accordance with the Australian/New Zealand Guidelines for Quality and/or Environmental Systems Auditing (AS/NZS 19011:2003).

The audit generally covers activities undertaken up to the date of the site inspection on 23 April 2012. However, actions taken by Holcim to address draft audit recommendations provided on 26 July 2012 and 21 September 2012 have been noted and non-compliances have been amended accordingly.

2 Audit method

2.1 Opening meeting

An audit opening meeting was held at Holcim's Chatswood office (Tower B, Level 8, 799 Pacific Highway) between approximately 10.00 am and 12.00 pm on Tuesday 13 March. The meeting was attended by the following:

- Alan Massoud, Holcim, Lynwood Quarry Project Director;
- Suzannah Mitchell, Holcim, Lynwood Quarry Environment and Community Coordinator;
- George Poljack, Holcim, environmental representative;
- Philip Towler, EMM, lead auditor; and
- Mark Roberts, EMM, assistant auditor.

The scope of the audit was confirmed at the meeting, the audit plan (see Appendix A) reviewed and site inspection arrangements made.

2.2 Site inspection

A full day site inspection was undertaken by the lead auditor and assistant auditor on 23 April 2012. They were escorted by Susannah Mitchell. The site inspection included interviews with site personnel, a review of the environmental files (electronic and hardcopies), requests for further documentation held on site and an inspection of the entire project site.

2.3 Closing meeting

A closing meeting was held at Holcim's Chatswood office on 21 September 2012. The meeting was attended by Alan Massoud, Scott Carter (Holcim, National Environment Manager), Suzannah Mitchell, Rachel Heath (Holcim, Planning and Development Manager, NSW Aggregates), Philip Towler and Mark Roberts. The draft audit report findings and recommendations were discussed. It was agreed that Holcim would provide some additional evidence regarding two of the recommendations.

3 Audit team roles and responsibilities

3.1 Holcim audit team

Alan Massoud is the Project Director for the Lynwood Quarry development. In this role, Alan is responsible for overseeing all aspects of the project, including compliance.

Suzannah Mitchell is the Environment and Community Coordinator for Lynwood Quarry. In this role, she is responsible for implementing management plans and ensuring compliance with the conditions of the development approval.

George Poljack is the Environmental Representative for the Rooty Hill project that is running parallel to Lynwood. He also works closely with the Lynwood team on compliance matters.

Alan Massoud, Suzannah Mitchell and George Poljack attended the audit opening meeting. S. Mitchell assisted with the site inspection and provision of documents.

3.2 EMM audit team

The lead auditor and audit report author was Dr Philip Towler. Philip has 16 years experience in managing environmental programs, including expertise in project management, conducting environmental audits and due diligence reviews, the preparation of environmental and social impact assessments and environmental management plans for mining projects around Australia and internationally. Philip has been approved as a compliance auditor by the NSW Department of Planning and Infrastructure.

Paul Mitchell reviewed the audit report. Paul is a highly experienced planner and environmental scientist. Paul's recent independent audit experience includes independent audits of the Galong Limestone kiln and quarry, Stockton Quarry, Dunmore Quarry (Boral) and Seaham Quarry (Minter Ellison). Paul has been approved as a compliance auditor by the NSW Department of Planning and Infrastructure.

Mark Roberts and Elizabeth Robertson provided support to the lead auditor.

3.3 Independence of the EMM audit team

Philip, Paul, Mark and Elizabeth are independent of Holcim. The accepted test of this is that the person has not undertaken work for the organisation in question for the prior five years and there is no other contractual association. This is the case for all audit team members.

4 Audit context

4.1 Site management

The Lynwood Quarry is currently under construction with operations yet to start. The site is managed by BMD Group (BMD) who is doing all of the major earthworks for the later installation of infrastructure by another contractor and is preparing the quarry faces. BMD implements all environmental works.

Holcim overview BMD's work. Holcim has a full-time Environmental and Community Coordinator onsite, Suzannah Mitchell. Environmental management includes:

- a weekly environmental site inspection and completion of a environmental checklist;
- maintenance of an 'environmental issues' list that records issues, corrective actions to be taken by BMD, status of these actions and issue close-out;
- a fortnightly meeting between Holcim and BMD; and
- a Holcim monthly environmental compliance meeting.

There are overlapping environmental management plans for the site. There are Holcim environmental management plans that are approved by DP&I. There are also BMD procedures (labelled a 'Environmental Management Sub Plan') that are approved by Holcim and that provide detailed actions and responsibilities that are applied on the site by BMD. The audit considered both levels of environmental management plans and found that the Environmental Management Sub Plans contained the measures in the plans approved by DP&I.

4.2 Planning

A development application and accompanying environmental impact statement for the quarry was lodged to the former Department of Infrastructure, Planning and Natural Resources in May 2005. The application was lodged under Part 4 of the *NSW Environmental Planning and Assessment Act 1979* (EP&A Act) and qualified as the following types of development:

- State Significant Development, as the then Minister for Urban Affairs and Planning declared under Section 76A(7) of the EP&A Act that extractive industries of a resource greater than 5 million tonnes and/or will have an extraction rate greater than 200,000 tonnes per annum are State significant. The approval authority for State Significant Development was the Minister;
- Designated Development, as the proposal was for a quarry which fell under Schedule 3 of the EP&A Act, that is, product would be more than 30,000 cubic metres per year, and/or more than 2 ha would be disturbed and/or development would occur within 40 m of a waterway. Designated Development must be assessed by way of an environmental impact statement; and
- Integrated Development, as other approvals under Section 91 of the EP&A Act were required.

The application was modified in January 2009 and again in January 2011.

4.3 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 a hard rock quarry approximately 2 km north. The Hume Highway runs along the eastern boundary.

4.4 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 north of the site and smaller patches across the site.

4.5 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) (Goulburn Mulwaree Council 2012). The district had a population of 3,851 in 2006, which was an increase of 326 (8.5%) from 2001.

4.6 Project status

Construction was approximately 65% complete at the time of the audit site inspection. The status of the quarry's built components was as follows:

- capping of the southern pad and the northern pad earthworks were almost complete;
- the in-ground section of the Johnniefields pipeline was complete and the above ground section was almost complete;
- the water supply pumps had been delivered and tested, and the pump house was almost complete;
- the embankments for Dams 1, A and E were complete and the spillways of Dams 1 and A were approximately 50% complete;
- site access road earth works were complete and the sub base and base pavement layers were almost complete;
- the Hume Highway interchange bridge deck, barriers and approach slabs were complete; and
- the haul road bridge was open to heavy vehicles (from July 2011).

A view across the quarry area with the infrastructure area in the background is provided in Photograph 4.1



Photograph 4.1 **View across quarry to haul road bridge and infrastructure area (23/4/12)**

5 Audit results

Compliance of the project with the conditions listed in Section 1.2 is detailed in the audit table in Appendix B. The audit table provides:

- condition identification numbers for all items;
- the activity/requirement being assessed;
- the evidence used to verify the compliance assessment;
- the results, that is:
 - Compliance (C): adequate and appropriate implementation against current departmental approval or conditions, or compliance with commitments made;
 - Observation (O): a finding which is not likely to significantly affect the operation, which does not strictly relate to the compliance audit but which could lead to performance improvement;
 - Non-compliance: an inadequacy in the design and/or implementation against current approvals, licence conditions or management commitments. There are two sub-categories of non-compliance:
 - Category 1 (NC1) - a total absence of planning or implementation of a required operations element which presents an immediate risk or an isolated lapse in control in the implementation of an operations element which will lead to a significant risk;
 - Category 1 - Addressed (NC1-A) - as above, except that the item has been addressed since the site inspection (23 April 2012);
 - Category 2 (NC2) - an isolated lapse or absence of control in the implementation of an operations element which may not be of significant risk;
 - Category 2 - Addressed (NC2-A) - as above, except that the item has been addressed since the site inspection (23 April 2012);
 - Not applicable (NA).
- Comments, including any observations.

A summary of the conditions where a non-compliance or observation as recorded is given below.

5.1 Category 1 non-compliance

There was one Category 1 non-compliance as described below.

5.1.1 Incident reporting

While not a requirement of the Project Approval or EPL conditions, an environmental incident register is maintained on site. As of 23 April 2012, it contained 11 incidents from 4 April 2011 to 20 March 2012. Of these, eight related to dust, one was a small fire and two related to a water discharge on 20 March 2012. For each incident, the register describes: date, time, issue, description, actions and resolution.

The environmental incident register contains entries for “Unauthorised off site water discharge observed at interchange onto private land” at 10:00 and 11:00 (an incident was recorded for each hour) on 20 March 2012. For both incidents, the recorded actions were “BMD directed to cease pumping, and o [sic] prepare incident report – BMD given 2 working days to prepare”. This issue had not been resolved four weeks later at the time of the audit site inspection and no incident reports were available. Insufficient information was contained in the register to determine whether the potential pollutants in the water discharged offsite or if the volume was sufficient to cause (or threatened to cause) material harm to the environment.

Completed report forms (numbers H019 and INCO20REVB) describing these incidents were provided to EMM on 22 August 2012. These provide a description of the incidents and proposed corrective actions. The reports are inconsistent (eg dates do not match those in the incident register) and do not provide quantitative estimates of water discharge (eg “There was minimal spillage into the adjacent property”). The reports appear to have been completed well after the incidents occurred. The incident reports are not closed out.

Changes to the duty to notify provisions of the *Protection of the Environment Operations Act 1997* came into effect on 6 February 2012. This includes the requirement to notify relevant authorities immediately of pollution incidents that cause or threaten material harm to the environment¹.

While there is little evidence that these incidents caused or threatened material harm to the environment, there is no certainty this did not occur. This has been classified as Category 1 non-compliance as mechanisms to immediately determine the seriousness of the discharges were not implemented.

Recommendation 1 (NC1): incident reports for the offsite discharge of water on 20 March 2012 are closed out.

Recommendation 2 (NC1-A): procedures are established to immediately determine whether an incident could cause or threaten material harm to the environment and to allow immediate reporting to the relevant authorities. A Lynwood Quarry Pollution Incident Response Management Plan (LYN-01.05.04), 2 August 2012, has been prepared to address this recommendation.

Recommendation 3 (NC1): incident reports are prepared within 24 hours of an incident occurring and are closed out as soon as possible.

¹ Details are provided on the EPA/OEH website: <http://www.environment.nsw.gov.au/licensing/Dutytonotify.htm>.

5.2 Category 2 non-compliances and addressed non-compliances

5.2.1 General environmental conditions

General environmental conditions are provided in the Project Approval and EPL. The Project Approval (DA 128-5-2005, Schedule 2, Condition 1) states:

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.

Licensed activities must be carried out in a competent manner.

While EPL 12939 Condition O1.1 states:

Activities must be carried out in a competent manner.

This includes:

- (a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

These conditions were considered during the audit site inspection on 23 April 2012. The audit found that the site was generally well ordered and maintained. Small amounts of old rubbish remained on the site and small amounts of litter were observed (foreground of Photograph 4.1 and Photograph 5.1).

Recommendation 4 (NC2): remaining rubbish is removed from the site and no rubbish is left outside areas designated rubbish areas. It is understood that this has been completed however it cannot be verified without a further site inspection.



Photograph 5.1 Rubbish that has not been cleared from the site (23/4/12)

Some of the line strung between posts marking environmental features (eg heritage management areas) had broken and needed repair. However, these areas remained clearly demarcated.

Recommendation 5 (NC2): lines marking environmental areas are regularly repaired.

Soil, overburden and waste concrete appeared to be mixed in a stockpile on the north of the Hume Highway intersection construction site (Photograph 5.2).

Recommendation 6 (NC2): soil, overburden and waste concrete are stockpiled separately. It is understood that the soil has been used onsite and the concrete has been disposed since the site inspection however this cannot be verified without a further site inspection.



Photograph 5.2 **Mixed soil, overburden and waste concrete stockpile south of the Hume Highway intersection construction site (23/4/12)**

A topsoil stockpile approximately 5 m high was observed south of the Infrastructure Area (Photograph 5.3). The Rehabilitation and Landscape Management Plan specifies that topsoil stockpiles should be no more than 3 m high.

Recommendation 7 (NC2-A): that the soil in any topsoil stockpiles greater than 3 m high is used as soon as possible or, if this is not possible, that the stockpiles are reformed with a maximum height of 3 m. The stockpile height has been reduced to 2.5 m since the site inspection (Photograph 5.4).



Photograph 5.3 **Soil stockpile south of the Infrastructure Area (23/4/12)**



Photograph 5.4 Soil stockpile south of the Infrastructure Area provided by Holcim (14/9/12)

There was heavy rain in the week prior to the inspection with of 44 mm of rain falling at Marulan on 18 to 19 April (the median total rainfall at Marulan in April is 35 mm). There had been two working days to repair fences and sediment control structures and this had not been completed (see Photograph 5.5).

Recommendation 8 (NC2): all site fences are repaired as soon as possible.



Photograph 5.5 Fencing damaged during heavy rain and surface flows (23/4/12)

The site environmental management system was generally well kept and presented. Hard and electronic copies of the documents requested during the audit were generally clearly filed and quickly accessed.

5.2.2 Specific conditions

The Category 2 non-compliances and specific conditions that are listed in Appendix B are summarised in Table 5.1. This includes recommendations to address these non-compliances.

Table 5.1 Category 2 non-compliances

Condition number	Condition	Finding and recommendation
Provision of information to agencies		
DA 128-5-2005, Schedule 3, Condition 1(a)	<p>Prior to carrying out any development, or as otherwise agreed by the Director-General, the Applicant shall:</p> <p>(a) engage an independent registered surveyor:</p> <ul style="list-style-type: none"> • survey the boundaries of the approved limit of extraction; and • submit a survey plan of these boundaries to the Department; 	<p>There is no evidence that the surveys have been sent to DP&I.</p> <p>Recommendation 9 (NC2): determine whether the survey was submitted to DP&I. If not, the survey should be submitted.</p>
DA 128-5-2005, Schedule 3, Condition 53	<p>The Applicant shall (to the satisfaction of the Director-General):</p> <p>(a) monitor the amount of waste generated by the development;</p>	<p>There is no correspondence to or from Director-General about satisfaction with waste matters.</p> <p>Recommendation 10 (NC2): the waste management plan is provided to the Director-General.</p>
DA 128-5-2005, Schedule 3, Condition 56	<p>The Applicant shall secure the development to ensure public safety to the satisfaction of the Director-General.</p>	<p>The site inspection indicated that the construction site is generally appropriately secured but there is no correspondence from Director-General regarding public safety.</p> <p>Recommendation 11 (NC2): a letter explaining site security is provided to the Director-General.</p>
DA 128-5-2005, Schedule 5, Condition 10 (h)	<p>forward a copy of the minutes of each [community consultative committee] CCC meeting, including a response to any recommendations from the CCC, to the Director-General within a month of the CCC meeting.</p>	<p>There was no evidence that minutes of each CCC meeting have been sent to the Director-General.</p> <p>Recommendation 12 (NC2): the minutes of each CCC meeting are sent to the Director-General.</p>

Monitoring and reporting

DA 128-5-2005, Schedule 3, Condition 53(a)	The Applicant shall (to the satisfaction of the Director-General): (a) monitor the amount of waste generated by the development;	Waste docketts are prepared on site. The documents provide an indication of the quantity of waste (eg, "ute load") but no waste description is recorded. There is no waste register. The 2010/11 Annual Environmental Monitoring Report (AEMR) references the Lynwood Quarry Construction Works Waste Management Plan but this could not be located. Recommendation 13 (NC2): a waste register is established recording waste types and volumes generated by the project.
DA 128-5-2005, Schedule 3, Condition 12	The Applicant shall 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. Table 6: Long term impact assessment criteria for particulate matter: Total suspended particulate (TSP) matter	TSP concentrations are not provided in the 2010/11 AEMR. It is stated in Lynwood Quarry Air Quality Monitoring Program (Rev 2) that TSP will be calculated as 2.5 times the PM ₁₀ concentration. Recommendation 14 (NC2): calculated TSP concentrations are presented in future AEMRs.
EPL 12939 Condition L6.1	Noise generated at the premises must not exceed the noise limits presented in the table on page 10 of the Environment Protection Licence.	EPL 12939 does not specify the frequency of noise monitoring. However, the Lynwood Quarry Noise Monitoring Program (Rev 2) Section 5 specifies that unattended noise monitoring will occur for one week on a quarterly basis. The 2010/11 AEMR states that noise monitoring was not conducted from the start of construction (November 2010) to June 2011. Noise monitoring was undertaken between 22 and 29 November 2011. The resultant raw noise monitoring data includes levels above noise limits. However, the weather and other noises sources will need to be investigated to determine whether these noise levels are exceedances of the noise limits. No subsequent monitoring has been undertaken. Recommendation 16 (NC2): noise monitoring is undertaken at the frequency specified in the Noise Monitoring Program. Recommendation 17 (NC2): noise data are analysed within two weeks of collection to determine if exceedances have occurred.

Management plans

DA 128-5-2005, Schedule 3, Condition 21 (b)	The Water Balance shall:	The Lynwood Quarry Water Management Plan (Rev 2) does not describe how to reduce water use, only describing how to recycle water.
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	(b) describe measures to minimise water use by the development.	Recommendation 18 (NC2): the next version of the Water Management Plan includes measures to minimise water use.
DA 128-5-2005, Schedule 3, Condition 22 (b)	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 19 (NC2): the next version of the Water Management Plan identifies activities that could cause soil erosion and generate sediment.
Access to information		
DA 128-5-2005, Schedule 5, Condition 11(a)	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): (a) provide a copy of the relevant document/s to the Council, relevant agencies and the CCC;	No evidence was sighted to confirm that this has occurred. However, the CCC meeting notes for June and October 2011 are available on the Lynwood Quarry website. Recommendation 20 (NC2): confirm that all plan/strategy/programs required under this consent have been provided to the Council and relevant agencies.
DA 128-5-2005, Schedule 5, Condition 11 (c)	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): (c) put a copy of the relevant document/s on the Applicant's website;	At the time of the site inspection, the Lynwood Quarry website contained some management plans (Rev 1). However, it did not include all of the management plans, the most recent plans, or the AEMR. Recommendation 21 (NC2-A): the most recent management plans are provided on the website. The missing management plans were placed on the website in September 2012. Recommendation 22 (NC2-A): the AEMR is provided on the website once approved by DP&I. The AEMR was placed on the website in September 2012.
DA 128-5-2005, Schedule 5, Condition 12 (a) and (b)	During the life of the development, the Applicant shall (to the satisfaction of the Director-General): (a) make a summary of monitoring results required under this consent publicly available at the quarry and on its website; and (b) update these results on a regular basis (at least every 3 months),	The Lynwood Quarry website does not provide a summary of monitoring results. The AEMR provides a summary of monitoring results to July 2011. However, this is not in a form that can be updated every three months. Recommendation 23 (NC2-A): the results of monitoring undertaken as part of the conditions of DA 128-5-2005 (and subsequent modifications) and EPL 12939 are provided on the project website. The 2012 monthly monitoring results have been placed on Holcim's website. However, they are not on the Lynwood Quarry project page. Recommendation 24 (O): a link to the monitoring results is provided on the

website project page and these monitoring results are updated regularly (at least quarterly).

Archaeological investigation

DA 128-5-2005, 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.**

It is understood that Holcim will be requesting an extension to this period. However, there was no evidence that this has occurred.

Recommendation 25 (NC2): approval is sought from OEH to extend the period for completion of the final excavation report to December 2012.

Incident register

Not specified

Maintenance of an environmental incident register is not mandated in the Project Approval or EPL conditions and is not described in the Lynwood Quarry Environmental Management Strategy (Rev 2). However, it is good practise for a site to maintain an incident register.

There is a site environmental incident register. However, it does not contain all incidents that are known to have occurred on site. In August to September 2011, areas of Aboriginal significance outside of the approved footprint were disturbed. Correspondence between Holcim and OEH indicates that these issues were satisfactory resolved. However, they should be recorded in the environmental incident register.

Recommendation 26 (NC2): the Environmental Management Strategy is updated to include the requirement for an incident register and specifying the information to be contained in the register.

Recommendation 27 (NC2-A): the site environmental incident register is updated to include all past environmental incidents or is replaced by a corporate incident register. The site incident register was merged with the corporate incident register after the site inspection.

Further recommendations regarding incident reporting are provided in Section 5.1.1.

5.3 Observations

Observations made during the audit and corresponding recommendations are provided in Table 5.2.

Table 5.2 Observations

Condition number	Condition	Finding and recommendation
Environmental investigations		
DA 128-5-2005, Schedule 3, Condition 4(a)	During the development, the Applicant shall: (a) investigate ways to reduce the noise generated by the development;	This investigation has not been undertaken and documented. However, the timeframe for this investigation are not specified in the conditions. Recommendation 28 (O): an investigation into potential noise reduction is undertaken.
DA 128-5-2005, Schedule 3, Condition 53(b)	The Applicant shall (to the satisfaction of the Director-General): (b) investigate ways to minimise waste generated by the development;	There was no evidence that showed waste minimisation investigations have taken place. However, the consent does not provide a timeframe for this to be completed. Recommendation 29 (O): an investigation into waste minimisation is undertaken and reported to the Director-General.
DA 128-5-2005, Schedule 3, Condition 13(b)	During the development, the Applicant shall: (b) ensure that all plant and equipment complies with the standard of concentration prescribed in the Protection of the Environment Operations (Clean Air) Regulation 2002.	Plant and equipment must be cleared for use on site through “pre-site plant acceptance” forms before being moved onto the site. However, there was no evidence of ongoing monitoring or reporting. Recommendation 30 (O): plant and equipment audits should be undertaken regularly to ensure that emissions continue to comply with the standard of concentration prescribed in the Protection of the Environment Operations (Clean Air) Regulation 2002.
EPL 12939 Condition M3.1	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.	Monitoring data are recorded as required in EPL 12939 (Condition M2.1). Electronic copies of laboratory reports that include analytical methods are held on site. To allow collated monitoring data to be used effectively in the future, analytical methods should be recorded with the data. Recommendation 31 (O): to allow collated monitoring data to be used effectively in the future, analytical methods should be recorded with the data.
Access to information		

Table 5.2 Observations

Condition number	Condition	Finding and recommendation
DA 128-5-2005, Schedule 5, Condition 11(b)	<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>	<p>Public access to the quarry is limited but quarry contact details are on the Lynwood Quarry 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 32 (O): that Holcim request that this condition that be removed based on the availability of these documents on the website (Schedule 5 Condition 11(c)).</p>
Archaeological investigation		
DA 128-5-2005, Appendix 7, Condition 9(a)	<p>Throughout the archaeological excavation works and post-excavation analysis, the 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>The work 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>Recommendation 33 (O): that the website addressing the archaeological works (see Condition 9(d)) is considered to address this requirement.</p>
Monitoring and reporting		
EPL 12939, Condition 5 M1.3	<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>	<p>Sample times for surface water and groundwater samples are recorded on the laboratory reports but not in the collated monitoring data.</p> <p>Recommendation 15 (O): the time that all samples are collected is recorded with the collated monitoring data to allow improved future interrogation of the data, eg correlation of water quality with rainfall observations.</p>
Complaints line		
EPL 12939 Condition M5.2	<p>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.</p>	<p>While not listed on the website as a "complaints line", the phone number on the website is prominent and obviously the appropriate place to register a complaint.</p> <p>It is less obvious that the "Lynwood Quarry Blasting Hotline" listed in the Yellow Pages is the appropriate number to register a complaint.</p> <p>Recommendation 34 (O): when the "Lynwood Quarry Blasting Hotline" listing</p>

Table 5.2 Observations

Condition number	Condition	Finding and recommendation
		is updated in the Yellow Pages, broadening its title for example to, "Lynwood Quarry Blasting and Complaints Hotline". The Yellow Pages listing was updated in September 2012.

6 Audit summary

An independent environmental audit of the Lynwood Quarry was undertaken to meet Condition 6 of Schedule 5 of development approval DA 128-5-2005. The audit criteria were the conditions in DA 128-5-2005 and EPL 12939 (as varied 11 April 2011). Audit evidence was collected during a site inspection on 23 April 2012 and some documents were provided by Holcim after the inspection.

It is concluded that construction activities are nearly all in compliance with the conditions of DA 128-5-2005 and EPL 12939.

There was one Category 1 non-compliance (NC1) from poor reporting of two off-site water discharges on 20 March 2011. While there is little evidence that these incidents caused or threatened material harm to the environment, there is no certainty this did not occur. Three recommendations were made in relation to this non-compliance, of which the first is yet to be addressed the second has been addressed and the third is an action that needs to be ongoing:

Recommendation 1 (NC1): incident reports for the offsite discharge of water on 20 March 2012 are closed out.

Recommendation 2 (NC1-A): procedures are established to immediately determine whether an incident could cause or threaten material harm to the environment and to allow immediate reporting to the relevant authorities. A Lynwood Quarry Pollution Incident Response Management Plan (LYN-01.05.04), 2 August 2012, has been prepared.

Recommendation 3 (NC1): incident reports are initially completed within 24 hours of an incident occurring and are closed out as soon as possible.

A number of recommendations are made regarding Category 2 non-compliances (NC2). These are related to:

- removal of rubbish;
- fencing and demarcation of environmental areas;
- stockpile management;
- provision of documents and reports to various agencies;
- maintenance of a waste register;
- recording of monitoring data;
- inclusion of additional information in management plans;
- inclusion of reports and data on the project website; and
- extending the period to provide the final archaeological excavation report.

It is relevant to note that the adoption of these recommendations is not mandatory. Several of them have already been addressed and, if adopted, the remainder could be implemented over the next twelve months.

References

BMD constructions 2011, *Contractors Environmental Management Plan (CEMP) - Main Works*, Revision C, Report Prepared for Holcim (Australia) Pty Ltd.

Holcim (Australia) Pty Ltd 2011a, Holcim Lynwood DA128-5-2005; DA 128-5-2005 Modification 1 AND DA 128-5-2005 Modification 2. Letter to the Director-General Planning 17 June 2011. [Accompanying application for DA-128-5-2005 MOD 3].

Holcim (Australia) Pty Ltd 2011b, *Controlled Activity Application (Works on Waterfront Land)*. Report prepared for Lynwood Quarry.

Department of Planning (DoP) 2009, *Assessment Report Section 96 (1A) Modification – Lynwood Quarry Marulan*.

Department of Planning (DoP) 2011, *Assessment Report Lynwood Quarry Site Infrastructure and Construction Route Modification*.

Department of Planning and Infrastructure (DP&I) 2011a, *Development Consent, Lynwood hard rock quarry and associated infrastructure*. August.

Department of Planning and Infrastructure (DP&I) 2011b, *Assessment Report Lynwood Quarry Independent Environmental Audit and AEMR Modification*.

Umwelt (Australia) Pty Ltd, 2005, *Environmental Impact Statement*. Report prepared for Readymix Holdings Pty Ltd. [Accompanying DA-128-5-2005].

Umwelt (Australia) Pty Ltd, 2009, *Statement of Environmental Effects Proposed Minor Modifications to Lynwood Quarry, Marulan*. Report prepared for CEMEX Australia Pty Ltd. [Accompanying application for DA-128-5-2005 MOD 1].

Umwelt (Australia) Pty Ltd 2010, *Environmental Assessment Proposed Modifications to Lynwood Quarry, Marulan*. Report prepared for Holcim (Australia) Pty Ltd.

Umwelt (Australia) Pty Ltd 2011a, Response to Submissions - Modification to Lynwood Hard Rock Quarry (DA- DA-128-5-2005 Mod 2). Letter to the Director-General Department of Planning 10 January 2011.

Umwelt (Australia) Pty Ltd 2011b, *Lynwood Quarry Annual Review*. Report prepared for Holcim (Australia) Pty Ltd.

Goulburn Mulwaree Council (Council) (accessed 15/6/12), *Community Profile: Rural North - Household Income Percentiles*, <http://profile.id.com.au/Default.aspx?id=339&pg=121&gid=160&type=enum>.

Appendix A

Audit plan

Lynwood Quarry

Independent Environmental Audit | Audit Plan

Prepared for Holcim Australia Pty Ltd | 12 March 2012

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Lynwood Quarry

Draft Report

Report J11047RP1 | Prepared for Holcim Australia Pty Ltd | 12 March 2012

Prepared by	Philip Towler	Approved by	Paul Mitchell
Position	Associate Director	Position	Director
Signature		Signature	
Date	12 March 2012	Date	1 February 2012

This Report has been prepared in accordance with the brief provided by the Client and has relied upon the information collected at or under the times and conditions specified in the Report. All findings, conclusions or recommendations contained within the Report are based only on the aforementioned circumstances. Furthermore, the Report is for the use of the Client only and no responsibility will be taken for its use by other parties.

Document Control

Version	Date	Prepared by	Reviewed by
V0	5/1/12	P. Towler	
V1	1/2/12	P. Towler	P. Mitchell
V2	12/3/12	P. Towler	

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1 Introduction

EMGA Mitchell McLennan Pty Limited (EMM) has been commissioned to undertake an independent environmental audit of the Holcim Australia Pty Limited (Holcim) Lynwood Quarry facility located at Marulan in the Southern Tablelands region of New South Wales (NSW).

This audit plan has been prepared in accordance with the Australian/New Zealand Guidelines for Quality and/or Environmental Systems Auditing (AS/NZS 19011:2003).

1.1 Audit objectives

This independent environmental audit is required under Condition 6 of Schedule 5 of Development Consent DA 128-5-2005 issued by the Minister for Planning on the 21 December 2005 for the proposed development of 'Lynwood hard rock quarry and associated infrastructure'. This Development Consent was most recently updated on 19 August 2011.

The objectives of the audit are to meet the requirements of Condition 6:

By the end of December 2011, the end of December 2014, and every 5 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:

- (a) be conducted by a suitably qualified, experienced, and independent person whose appointment has been endorsed by the Director-General;*
- (b) be consistent with ISO 19011:2002 - Guidelines for Quality and/ or Environmental Systems Auditing, or updated versions of this guideline;*
- (c) assess the environmental performance of the development, and its effects on the surrounding environment;*
- (d) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;*
- (e) review the adequacy of any strategy/plan/program required under this consent; and, if necessary,*
- (f) recommend measures or actions to improve the environmental performance of the development, and/or any strategy/plan/program required under this consent.*

1.2 Audit criteria and scope

Audit criteria are the policies, procedures or requirements against which an action will be compared. In this case, the proposed audit criteria are the conditions in: *Development Consent for the Lynwood Hard Rock Quarry and Associated Infrastructure*, DA 128-5-2005 (DP&I, 2011a) and Environment Protect Licence 12939 (as varied 11 April 2011). The Development Consent requires that the development is generally in accordance with:

- *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, 2011a); and
- 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, 2011a).

The audit will cover activities undertaken up to the date of the site inspection.

2 Audit activities

The audit activities are described below. They will be confirmed at the audit opening meeting.

2.1 Opening meeting

An audit opening meeting will be held at Holcim's Chatswood office.

Date: Tuesday 13 March

Time: 10.00 am

Attendees:

- Alan Massoud, Holcim, Project Director
- Suzannah Mitchell, Holcim, Environment and Community Coordinator
- Scott Carter, Holcim, National Environmental Manager
- George Poljack, Environmental Representative
- Philip Towler, EMM, Lead Auditor

Agenda:

- Introductions (all)
- Outline audit plan (PT)
- Confirm audit scope (PT)
- Project organisation chart (Holcim)
- Description of project status (Holcim)
- Outline of environmental issues (Holcim): Holcim's views on, and responses to, environmental issues at the site. These should include issues raised by neighbours, agencies or other stakeholders.
- Plan site inspection (including areas to be visited) and interviews (PT)
- Audit timing:
 - Interviews (Chatswood)
 - Site inspection and interviews
 - Closing meeting
 - Draft audit report

- Final audit report

2.2 Audit interviews

Audit interviews will be scheduled at Holcim's Chatswood office or at the Lynwood quarry on the day of the site inspection.

Interviews with the following personnel are envisaged:

- Project director
- Senior project manager
- Community and environment manager
- Key contractors

Interviews will be between 15 and 60 minutes and will include discussion of the interviewee's understanding of their responsibilities, general environmental management of the site and specific environmental responsibilities or issues.

2.3 Data collection and verification

Reports currently available to EMM are listed in Table 2.1.

Table 2.1 Available reports

Author	Date	Title
Michael Hood, Landscape and Aboriginal Heritage Protection, Department of Environment and Climate Change	7-Jun-09	Aboriginal Heritage Impact Permit # 1100264 - Modification to Consent
Dimitri Young, NSW Government Department of Environment, Climate Change and Water	12-May-11	Variation of Aboriginal Heritage Impact Permit
Umwelt (Australia) Pty Ltd	May-05	Environmental Impact Statement
Umwelt (Australia) Pty Ltd	Jan-09	Statement of Environmental Effects Proposed Minor Modifications to Lynwood Quarry, Marulan
Umwelt (Australia) Pty Ltd	Oct-10	Environmental Assessment Proposed Modifications to Lynwood Quarry, Marulan
Paul Commons, Lynwood Project Director	Jun-11	Letter to David Kitto, Re: Holcim Lynwood DA128-5-2005 Modification 1 and DA 128-5-2005 Modification 2
Umwelt (Australia) Pty Ltd	Sep-11	Lynwood Quarry Annual Review 2010/2011
Suzannah Mitchell, Environmental and Community Coordinator Lynwood Quarry	30-Sep-11	Letter to David Kitto, Re: Lynwood Quarry Annual Review
Umwelt (Australia) Pty Ltd	Jun-11	Lynwood Quarry Rehabilitation and Landscape Management Plan, Revision 2
Umwelt (Australia) Pty Ltd	Jun-11	Construction Traffic Management Plan, Lynwood Quarry, Marulan NSW, Revision 2
Umwelt (Australia) Pty Ltd	Jun-11	Caring for Country, Lynwood Quarry, Marulan
Umwelt (Australia) Pty Ltd	Jun-11	Aboriginal Heritage Management Plan
Umwelt (Australia) Pty Ltd	Jun-11	Lynwood Quarry, Environmental Management

Table 2.1 Available reports

Author	Date	Title
		Strategy, Revision 2
Umwelt (Australia) Pty Ltd	Jun-11	Lynwood Quarry, Noise Monitoring Program, Revision 2
Umwelt (Australia) Pty Ltd	Jun-11	Lynwood Quarry, Blast Management Program, Revision 2
Umwelt (Australia) Pty Ltd	Jun-11	Lynwood Quarry, Air Quality Management Program, Revision 2
Umwelt (Australia) Pty Ltd	Jun-11	Lynwood Quarry, Environmental Monitoring Program, Revision 2
Umwelt (Australia) Pty Ltd	Jun-11	Lynwood Quarry, Water Management Plan, Revision 2
Umwelt (Australia) Pty Ltd	Jun-11	Lynwood Quarry, Surface Water Monitoring Program, Revision 2
Umwelt (Australia) Pty Ltd	Jun-11	Lynwood Quarry, Ground Water Monitoring Program, Revision 2
Excel Document	June 2010 - August 2011	Lynwood Quarry Monitoring Mastersheet
Not provided	No date	Lynwood Quarry External Audit - Overview of Maximum Disturbance Boundary Incursions
Not provided	No date	Lynwood Quarry External Audit - Reported Incident #1
Not provided	No date	Lynwood Quarry External Audit - Reported Incident #2
David Zerafa, Senior Licensing Officer, NSW Office of Water	15-Jun-11	Letter to Richard Savage, Re: Controlled Activity Approval - 10 ERM 2011/0446
Holcim (Australia) Pty Ltd	Feb-11	Controlled Activity Application (Works on Waterfront Land), Lynwood Quarry
BMD constructions	1-Jul-11	Clearing and Grubbing Management Plan (Rev C) - Interchange
BMD constructions	1-Jul-11	Environmental Management Sub Plan (EMSP) - Fire Precaution (Rev B)
BMD constructions	1-Jul	EMSP - Air Quality and Dust Management (Rev B)
BMD constructions	1-Jul-11	Contractor's Environmental Management Plan (CEMP) - Interchange
BMD constructions	1-Jul-11	EMSP - Noise (Rev C)
BMD constructions	1-Jul-11	Soil and Water Management (SWMP) - Interchange (Rev D)
BMD constructions	Sep-07	Corporate Environmental Policy
BMD constructions	22-Feb-11	EMSP - Noise (Rev B)
BMD constructions	22-Feb-11	EMSP - Heritage (Rev B)
BMD constructions	22-Feb-11	EMSP - Waste (Rev B)
BMD constructions	20-Jan-11	Traffic Management Plan, Lynwood Quarry
BMD constructions	22-Feb-11	EMSP - Air Quality (Rev B)
BMD constructions	14-Mar-11	Contractor's Environmental Management Plan (CEMP) - Main Works (Rev C)
BMD constructions	22-Feb-11	EMSP - Riparian Areas (Rev B)
BMD constructions	22-Feb-11	EMSP - Blasting and Vibration (Rev B)

Table 2.1 Available reports

Author	Date	Title
BMD constructions	22-Feb-11	EMSP - Surface and Groundwater (Rev B)
BMD constructions	2-Feb-11	EMSP - Rehabilitation and Landscaping (Rev A)
BMD constructions	2-Feb	EMSP - Visual Impact (Rev A)
BMD constructions	2-Feb-11	EMSP - Dangerous Goods (Rev A)
Paul Morey, Project Manager, BMD constructions	14-Mar-11	Letter to Merv Eagle, Re: Lynwood Quarry Development, Contractor's Environmental Management Plan
		Letter to John de Groote, Re: Environmental Management Plan (Main Works) Revision B Comments
Kevin Moore, APP Corporation	15-Mar-11	
Suzannah Mitchell, via email	17-Jun-11	Draft project wide environmental risk assessment
Suzannah Mitchell, via email	17-Jun-11	Interchange CEMP - Holchim Revision Comments
John Merrell, Associate at Umwelt	10-Jan-11	Letter to Kane Winwood, Re: Response to Submissions - Modification to Lynwood Hard Rock Quarry
John Cotterill, Technical Director Acoustics at Heggies Pty Ltd	29-Nov-10	Letter to John Merrell, Re: Construction Traffic Noise Assessment

These reports will be reviewed to determine whether they address specific conditions, eg requirements for management plans.

2.4 Site inspection

A site inspection will be undertaken by the lead auditor in January (or February if required) 2012. The timing of the inspection will be agreed at the opening meeting.

It is envisaged that the site inspection will take approximately two to three hours and encompass all project areas. Interviews with site personnel will be undertaken on the same day.

The lead auditor will be escorted around the site by Suzannah Mitchell.

2.5 Closing meeting

A closing meeting will be held with Holcim personnel in Holcim's Chatswood office. This will provide initial feedback and an opportunity to discuss opportunities to address any identified issues.

2.6 Reporting

The audit report will contain the following sections:

1. Introduction:
 - audit objectives;
 - audit criteria and scope;
 - audit method;

- audit team roles and responsibilities;
 - acknowledgments;
2. Audit context:
- planning;
 - environmental;
 - social;
 - project status;
 - compliance audit which will be in tabular format (see Appendix A) and provide:
 - condition numbers in DA 128-5-2005 (DP&I, 2011a);
 - the condition being assessed;
 - the evidence used to verify the compliance assessment;
 - the compliance results, that is:
 - Compliance (C): adequacy and appropriateness of implementation against current Departmental Approval or Conditions, or compliance with commitments made;
 - Observation (O): a finding which is not likely to significantly affect the operation, which do not strictly relate to the scope of the audit of compliance and which could lead to performance improvement;
 - Non Compliance: an inadequacy in the design and/or implementation against current Departmental approvals, licence conditions or management commitments. There are two subcategories of non-compliance:
 - Category 1 (NC1) - a total absence of planning or implementation of a required operations element which presents an immediate risk or an isolated lapse in control in the implementation of an operations element which will lead to a significant risk; or
 - Category 2 (NC2) - an isolated lapse or absence of control in the implementation of an operations element which may not be of significant risk; and
 - Comments, including any observations.
3. Additional observations; and
4. Recommendations.

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3 Audit team roles and responsibilities

3.1 Holcim audit team

Alan Massoud is the Project Director for the Lynwood Quarry development. In this role, Alan is responsible for overseeing all aspects of the project, including compliance.

Scott Carter is Holcim's National Environmental Manager. In this role, he focuses on high level environmental planning and strategy for Holcim Australia and implementation and continual improvement of the national Safety, Health and Environment (SHE) system.

Suzannah Mitchell is the Environment and Community Coordinator for Lynwood Quarry. In this role, she is responsible for implementing management plans and ensuring compliance with the conditions of consent.

George Poljack is the Environmental Representative for the Rooty Hill project that is running parallel to Lynwood. He also works closely with the Lynwood team on compliance matters.

3.2 EMM audit team

The lead auditor and audit report author will be Dr Philip Towler. Philip has 15 years experience in managing environmental programs, including expertise in project management, conducting environmental audits and due diligence reviews, the preparation of environmental and social impact assessments and environmental management plans for mining projects around Australia and internationally. Philip has been approved as a compliance auditor by the NSW Department of Planning and Infrastructure.

Paul Mitchell will review the audit report prior to submission. Paul is a highly experienced planner and environmental scientist. Paul's recent independent audit experience includes independent audits of the Galong Limestone kiln and quarry, Stockton Quarry, Dunmore Quarry (Boral) and Seaham Quarry (Minter Ellison). Paul has been approved as a compliance auditor by the NSW Department of Planning and Infrastructure.

Mark Roberts and Elizabeth Robertson will provide support to the lead auditor.

3.3 Independence of the EMM audit team

Philip, Paul, Mark and Elizabeth are independent of Holcim. The accepted test of this is that the person has not undertaken work for the organisation in question for the prior five years and there is no other contractual association. This is the case for all audit team members.

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References

BMD constructions 2011, *Contractors Environmental Management Plan (CEMP) - Main Works*, Revision C, Report Prepared for Holcim (Australia) Pty Ltd.

Holcim (Australia) Pty Ltd 2011a, Holcim Lynwood DA128-5-2005; DA 128-5-2005 Modification 1 AND DA 128-5-2005 Modification 2. Letter to the Director General Planning 17 June 2011. [Accompanying application for DA-128-5-2005 MOD 3].

Holcim (Australia) Pty Ltd 2011b, *Controlled Activity Application (Works on Waterfront Land)*. Report prepared for Lynwood Quarry.

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Umwelt (Australia) Pty Ltd, 2009, *Statement of Environmental Effects Proposed Minor Modifications to Lynwood Quarry, Marulan*. Report prepared for CEMEX Australia Pty Ltd. [Accompanying application for DA-128-5-2005 MOD 1].

Umwelt (Australia) Pty Ltd 2011a, Response to Submissions - Modification to Lynwood Hard Rock Quarry (DA- DA-128-5-2005 Mod 2). Letter to the Director General Department of Planning 10 January 2011.

Umwelt (Australia) Pty Ltd 2011b, *Lynwood Quarry Annual Review*. Report prepared for Holcim (Australia) Pty Ltd.

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Appendix B

Audit table

**Lynwood Quarry
Independent Environmental Audit - 2012**

DA 128-5-2005 (including Modification 1 (21/12/05) , Modification 2 (22/3/11) and Modification 3 (17/6/11)) and EPL 12939

Section	Condition	Evidence verified	Compliance	Comments and recommendations
SCHEDULE 2 GENERAL ADMINISTRATIVE CONDITIONS				
Obligation to Minimise Harm to the Environment				
1	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.	Audit observations	NC2 and NC2-A	<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 audit inspection, the site was generally well maintained and tidy.</p> <p>Small amounts of rubbish were observed on site. Recommendation: remaining rubbish is removed from the site and no rubbish is left outside areas designated rubbish areas. It is understood that this has been completed however it cannot be verified without a further site inspection.</p> <p>Some silt fences required maintenance. Recommendation: all site fences are inspected weekly or after heavy rain and are repaired as soon as possible.</p> <p>Soil, overburden and waste concrete appeared to be mixed in a stockpile on the north of the intersection construction site. Recommendation: soil, overburden and waste concrete are always stockpiled separately. It is understood that the soil has been used onsite and the concrete has been disposed since the site inspection however this cannot be verified without a further site inspection.</p> <p>A topsoil stockpile approximately 5 m high was observed south of the Infrastructure Area. The Rehabilitation and Landscape Management Plan specifies that topsoil stockpiles should be no more than 3 m high. Recommendation: that the soil in any topsoil stockpiles greater than 3 m high is used as soon as possible and if this is not possible, that the stockpiles are reformed with a maximum height of 3 m. The 5 m high stockpile has been reduced to 2.5 m since the site inspection (Photograph 5.4 in the report).</p>
Terms of Approval				
2	The Applicant shall carry out the development generally in accordance with the:	-	-	
	(a) DA-128-5-2005;		C	Development general in accordance with DA.
	(b) EIS for the Proposed Lynwood Quarry Marulan, Volumes 1 to 4, dated May 2005;	Audit observations	C	Development general in accordance with EIS (as later modified)
	(c) Modification Application DA-128-5-2005 MOD 1 and the accompanying SEE titled "Proposed Minor Modifications to Lynwood Quarry, Marulan", dated January 2009; and	Audit observations	C	Development general in accordance with SEE (as later modified)
	(d) Modification Application DA 128-5-2005 MOD 2 and the accompanying EA titled <i>Environmental Assessment Proposed Modifications to Lynwood Quarry, Marulan</i> , dated October 2010, prepared by Umwelt (Australia) Pty Limited, including the response to submissions dated January 2011; and	Audit observations	C	Development general in accordance with EA (as later modified)
	e) Modification Application DA 128-5-2005 MOD 3 and the accompanying letter titled Holcim Lynwood DA 128-5-5-2005 Modification 1 and DA 128-5-2005 Modification 2, dated June 17 2011, prepared by Holcim (Australia) Pty Ltd; and	Audit observations	C	Development general in accordance with letter
	f) Conditions of this consent.	Audit observations	-	Development general in accordance with consent. Specific conditions described below.
3	If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of the approval shall prevail to the extent of any inconsistency.	-	-	
4	The Applicant shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:	-	-	

**Lynwood Quarry
Independent Environmental Audit - 2012**

Section	Condition	Evidence verified	Compliance	Comments and recommendations
	(a) any reports, plans or correspondence that are submitted in accordance with this development consent; and	-	-	
	(b) the implementation of any actions or measures contained in these reports, plans or correspondence.	-	-	
4A	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.	Sighted letter from Director-General DP&I approving management plans (4/4/2012)	C	The Director-General required amendments to Water Management Plan and Rehabilitation and Landscape Management Plan, which are underway.
Limits on Approval				
5	With respect to quarry operations, this consent shall lapse on 1 January 2038. Note: The conditions of this consent require the Applicant to carry out certain activities beyond the period of approval for the extracting, processing and transporting extractive material on the site.	NA - milestone not reached	NA	2010 EA section 1: seeks approval for a 30 year Quarry period but does not specify the exact date when this quarry period will end.
6	Prior to the commissioning of the proposed Hume Highway Interchange, the Applicant shall not transport any product from the site by road, except for use in construction of the interchange and associated works.	NA - milestone not reached	NA	2010 EA: "traffic movements have increased in the 15 to 18 month construction period prior to the commissioning of the Hume Highway interchange, from 18 vehicle trips per day to 30 vehicle trips per day. The increase in heavy vehicles, for this period, is necessary to allow the concurrent scheduling of site mobilisation and interchange works" p. 6
7	The Applicant shall not transport more than 5 million tonnes of product from the site in a year.	NA - milestone not reached	NA	2005 EIS: section 3.4.2: states that production will reach 5 Mtpa. 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 Mtpa. by rail and 1.5 Mtpa. 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.
8	The Applicant shall not transport more than 1.5 million tonnes of product from the site in a year by road.	NA - milestone not reached	NA	2005 EIS: section 3.5.3 states that they plan to transport most product by train but are seeking approval to transport up to 1.5 Mtpa. by truck to local and regional markets.
Structural Adequacy				
9	The Applicant shall 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	C	
Demolition				
10	The Applicant shall ensure that all demolition work is carried out in accordance with AS 2601-2001: <i>The Demolition of Structures</i> , or its latest version.	No demolition was underway during the audit	NA	
Protection of Public Infrastructure				
11	The Applicant shall:			

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	(a) repair, or pay all reasonable costs associated with repairing any public infrastructure that is damaged by the development; and	NA - circumstance has not arisen	NA	2011, Lynwood Quarry Annual Review 2010/2011: section 2.2 lists construction work that has occurred at the site and, so far, it does not appear that public infrastructure has been relocated or damaged. 2005 EIS: section 3.5.4: Readymix proposes that the costs of construction of an interchange type intersection at South Marulan Road are shared by other industrial users of the intersection. 2005 EIS: section 3.8 states that Readymix will be upgrading the existing fence in some areas to improve security. 2005 EIS: section 7.2.2.1 states that minor upgrades will need to take place along the construction access routes and that "Readymix will contribute to the repair of any pavement damage that has occurred during the construction phase."
	(b) relocate, or pay all reasonable costs associated with relocating any public infrastructure that needs to be relocated as a result of the development.	Sighted letter from Paul Morey to M. Eagle (9/3/11) advising of Telstra telephone line relocation works and start dates.	C	No public infrastructure has been relocated.
Operation of Plant and Equipment				
12	The Applicant shall ensure that all plant and equipment at the site, or used in connection with the development are:	-		
	(a) maintained in a proper and efficient condition; and	No site observations indicated that equipment was poorly maintained but no maintenance records were available.	C	
	(b) operated in a proper and efficient manner.	Sighted operator competency forms (eg 28/3/2011)	C	
SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS				
GENERAL EXTRACTION AND PROCESSING PROVISIONS				
Identification of Boundaries				
1	Prior to carrying out any development, or as otherwise agreed by the Director-General, the Applicant shall:	-	-	
	(a) engage an independent registered surveyor:	Sighted Southern Cross Surveyors invoice (18/8/2010)	C	
	• survey the boundaries of the approved limit of extraction; and	Sighted boundary survey plan	C	
	• submit a survey plan of these boundaries to the Department;	No letter to DP&I was viewed	NC2	Recommendation: determine whether the survey was submitted to DP&I. If not, the survey should be submitted.
	(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. Note: The limit of extraction is shown conceptually on the plan in Appendix 2, and in more detail in the EIS.	Majority of site boundaries were inspected. They were either fenced or marked with signs	C	
Development in the Riparian Zone (Incorporates DWE GTA)				
2	The Applicant shall not carry out any development in the riparian zone of Joarimin, Lockyersleigh or Marulan Creek without the written approval of DWE. Any such development shall be carried out in accordance with an approved Riparian Area Management Plan (see conditions 44 and 45).	Majority of riparian zones were inspected. They were fenced and marked with signs.	C	The Riparian Area Management plan is contained within the 2011 Rehabilitation and Landscape Management Plan (Rev 2). Appendix 3: Lockyersleigh Creek RAMP Appendix 4: Joarimin Creek Management Plan. 2009 SEE: Modifications reduce the impact on the riparian areas of Lockyersleigh Creek and Joarimin Creek by retaining more natural land and "no longer requiring diversion of secondary flow paths of Joarimin Creek" p. 1

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NOISE (Incorporates DECC GTA)				
Noise Limits				
3	The Applicant shall ensure that the noise generated by the operation of the development does not exceed the sound pressure level (noise) limits specified in Table 1.	-	-	2005 EIS: section 5.9.1.3 states that "noise modelling results found that the proposed Quarry is predicted to meet all project specific noise criteria"
	Table 1: Operational Noise Limits	NA - milestone not reached	NA	2010 EIS: section 6.6.3, the Noise Impact Statement predicts that the proposed modifications will comply with the consent noise criteria "at all sensitive receiver locations." 2011 Annual Review 2010/2011: section 3.10 states that yet to be published noise monitoring data (August 2011) will judge noise compliance against the criteria in the development consent.
	Noise Assess Location -- Day(Laeq-15 minutes)/Evening(LAeq(15 minutes)/Night(LAeq-15 minutes)/Night(LA1-1 minute): 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	NA - milestone not reached	NA	
	Notes: <ul style="list-style-type: none"> • For more information on the noise impact assessment locations see Appendix 3. • 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 metres of a dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise limits in Table 1, unless otherwise stated. • However, noise from the development is to be measured at 1 m from the dwelling façade to determine compliance with the LA1 (1 minute) in Table 1. • Where it can be demonstrated that direct measurement of noise from the development is impractical, the OEH may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable. • The noise limits in Table 1 apply under the following meteorological condition: <ul style="list-style-type: none"> - wind speed up to 3m/s at 10 m above ground level; or - temperature inversion conditions of up to 30C/100 m and wind speed up to 2 m/s at 10 m above ground level. 	-	-	
Noise Mitigation Measures				
4	During the development, the Applicant shall:	-	-	
	(a) investigate ways to reduce the noise generated by the development;	Documents confirming that this has been undertaken are not available.	O	2005 EIS: section 5.9.1.3 discusses 13 ways of reducing noise in initial noise modelling. The timeframe for this investigation are not specified in the conditions. Recommendation: an investigation into potential noise reduction is undertaken.

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	(b) implement all reasonable and feasible noise mitigation measures on the site; and	Sighted incident register - no complaints have been received.	C	2010 EA: section 6.6.4 states that "The Quarry has been designed to incorporate a range of noise management measures" and outlines additional noise management measures that are an outcome of the proposed modifications.
	(c) report to the Director-General each year on these investigations and the implementation of any new noise mitigation measures on the site in the AEMR.	Viewed 2010/11 AEMR	C	2011 Annual Review 2010/2011: section 3.10.1 states that noise monitoring was not conducted in the period of 2010/2011. Noise modelling, however, of predicted construction noise did take place in the time period. No mention of implementation of new noise mitigation measures.
Operating Hours				
5	The Applicant shall comply with the operating hours in Table 2:	-	-	
	Table 2: Operating Hours			
	Activity			
	Construction works Monday-Friday: 7am to 6pm Saturday: 8am to 1pm Sunday and Public Holidays: None	Sighted incident register - no complaints have been received. Works commence at 0700.	C	2011 Annual Review 2010/2011: section 3.10.1 states that "construction works were undertaken in accordance with the operating hours specified in Condition 5 of Schedule 3 of the Lynwood Quarry Development Consent."
	Topsoil/ overburden removal /emplacement; drilling Any day: 7am to 6pm	Sighted incident register- no complaints have been received. Works commence at 0700.	C	
	Blasting Monday-Saturday: 7am to 6pm Sunday and Public Holidays: None	Sighted blast design and evaluation reports, blast risk notification form (eg 22/2/2012). Sighted incident register- no complaints have been received.	C	
	Extraction Any day: 7am to 10pm	NA - milestone not reached	NA	
	Processing (crushing, screening, stockpiling); loading, delivery, and distribution; maintenance Any day: Anytime	NA - milestone not reached	NA	
	<i>Notes:</i> • 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 RTA.	-	-	
Monitoring				
6	Prior to carrying out any development, the Applicant shall prepare (and following approval implement), a Noise Monitoring Program for the development, in consultation with OEH, and to the satisfaction of the Director-General. This program should include a combination of attended and unattended noise monitoring, and a noise monitoring protocol for evaluating compliance with the noise limits in this consent.	Sighted letter from Director-General DP&I approving management plans (4/4/2012), ALS noise monitoring invoice (eg 14/4/2011)	C	
BLASTING AND VIBRATION (Incorporates DECC GTA)				
Airblast Overpressure Criteria				
7	The Applicant shall 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.	-	-	2011 Annual Review 2010/2011: section 3.9: No Blasting was undertaken in the period of 2010/2011
	Table 3: Airblast overpressure impact assessment criteria			
	Airblast overpressure level (dB(Lin Peak) 115 (5% of the total number of blasts over a period of 12 months) 120	Viewed blast monitoring summary for monitor 3 (closest residence) (13/06/12)	C	2005 EIS section 5.9.2.3 states that "the assessment of blasting impact on residential receivers predicted that airblast and ground vibration will comply with the ANZECC/DEC criteria at all surrounding residential receivers for each stage of the development."

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
Ground Vibration Impact Assessment Criteria				
8	The Applicant shall 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.	-	-	2005 EIS section 5.9.2.3 states that "the assessment of blasting impact on residential receivers predicted that airblast and ground vibration will comply with the ANZECC/DEC criteria at all surrounding residential receivers for each stage of the development."
	Table 4: Ground vibration impact assessment criteria for residences on privately-owned land			
	Peak particle velocity (mm/s) of 5 (5% of the total number of blasts over a period of 12 months) 10	Viewed blast monitoring summary for monitor 3 (closest residence) (13/06/12)	C	One exceedance on 10/1/12 which will need to be reported and potential sources described in the 2011/12 AEMR.
	Table 5: Ground vibration impact assessment criteria on infrastructure			2005 EIS section 5.9.2.3 predicted that ground vibration levels at years 1, 5, 10, 15, 20 and 30 will be below the level likely to cause impact on the nearby natural gas pipeline, proposed drinking water holding tank and the Main Southern Railway. They will, however, still control MIC values when blasting near the railway. Section 5.9.2.2 says that they have adopted the criterion of 25mm/s for this project.
	Peak particle velocity (mm/s) of 25: Main Southern Railway Line Reservoir	Viewed blast monitoring summary for monitor 3 (closest residence) (13/06/12)	C	
	Peak particle velocity (mm/s) of 100: Gas Pipeline	Viewed blast monitoring summary for monitor 3 (closest residence) (13/06/12)	C	
	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.	No agreement with ARTC has been required	NA	
Operating Conditions				
9	During the development, the Applicant shall implement best blasting practice to: (to the satisfaction of the Director-General.)	Sighted letter sent to David Kitto on 30/9/11 regarding blasting and attached blast management plan	C	EMSP - Blasting and Vibration (Rev B): Summarises blast responsibilities as outlined in the Development consent but does not state how these responsibilities will specifically be achieved.
	(a) ensure that no flyrock leaves the site;	Blast management plan	C	
	(b) protect the safety of people, property, and livestock;	Blast management plan	C	2007 Environmental Monitoring Program: Appendix 2, section 4 states that blast monitoring will occur at 3 locations: the closest residence to the quarry, a reference point near the Main Southern Railway and north-west of the quarry near the gas pipeline. 2007 Environmental Monitoring Program section 5.9.2.1 "proposed Blasting Practice" briefly discusses firing technique but does not specifically discuss protection of people, property and livestock
	(c) minimise the dust and fume emissions from blasting on the site,	Blast management plan	C	2005 EIS section 7.2.6.2: Blast design will be determined for each blast in accordance with a review of weather conditions to control the blasting and dust impacts.
Public Notice				
10	During the development, the Applicant shall:	-	-	2011 Lynwood Quarry Annual Review 2010/2011 section 3.9 states that no blasting has been undertaken yet, but Lynwood Quarry does plan to comply with these conditions prior to any blasting.
	(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;	Sighted commencement of blasting notification letter (eg 1/11/2011)	C	
	(b) operate a blasting hotline, or alternative system agreed to by the Director-General, to enable the public to get up-to-date information on blasting operations at the development; and	Sighted blasting hotline in Yellow Pages	C	

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	(c) keep the public informed about this hotline (or any alternative system), to the satisfaction of the Director-General.	Sighted letter sent to David Kitto on 30/9/11 regarding blasting and hotline	C	
Monitoring				
11	Prior to carrying out the development, the Applicant shall develop and implement a Blast Monitoring Program for the development, in consultation with OEH, and to the satisfaction of the Director-General. This program must monitor the impact of blasting on both residences and the infrastructure specified in Tables 4 and 5.	Sighted letter from DP&I (Howard Reed) (6/9/2007)	C	Umwelt (Australia) Pty Ltd 2007, Lynwood Quarry Environmental Monitoring Program, Report prepared for Rinker Australia Pty Ltd
AIR QUALITY (Incorporates DECC GTA)				
Impact Assessment Criteria				
12	The Applicant shall 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.	-	-	2005 EIS Appendix 5. Pages 16 - 18 provides predictions of air quality at 8 locations for 7 years in the 30 year period. 2005 EIS section 5.8.5 of the main text found that only one vacant property may be potentially dust affected.
Table 6: Long term impact assessment criteria for particulate matter				
	Total suspended particulate (TSP) matter	Not recorded in 2011 AEMR. Stated in air quality monitoring program (Rev 2) that TSP will be calculated as 2.5 x PM10 concentration	NC2	Recommendation: calculated TSP concentrations are presented in future AEMRs.
	Particulate matter < 10 µm (PM10)	No annual average PM10 concentration available as AEMR reports less than 12 months of data	NA	
Table 7: Short term impact assessment criteria for particulate matter				
	Particulate matter < 10 µm (PM10)	Sighted Umwelt monitoring data	C	Monitoring is ongoing
Table 8: Long term impact assessment criteria for deposited dust				
	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.	No annual average dust deposition available as AEMR reports less than 12 months of data	NA	
Operating Conditions (Incorporates DECC GTA)				
13	During the development, the Applicant shall:	-	-	
	(a) minimise the emission of dust from the site; and	While there are large exposed areas in construction areas, these appear to be minimised and areas that are not required for construction have generally been marked and remain uncleared	C	2005 EIS section 5.8.4 lists the operations dust control methods which will be adopted including the main control method which is buffer land to the east of the quarry. section 7.2.5 further outlines proposed engineering and operational dust controls.
	(b) ensure that all plant and equipment complies with the standard of concentration prescribed in the Protection of the Environment Operations (Clean Air) Regulation 2002.	Sighted pre-site plant acceptance forms for plant and equipment being moved onto the site. However, there was no evidence of ongoing monitoring or reporting.	O	2005 EIS section 5.8.1: Their air quality goals relate to the Approved Methods and Guidance for the Modelling of Air Pollutants in NSW (EPA, 2001). Recommendation: plant and equipment audits should be undertaken regularly to ensure that they continue to comply with the standard of concentration prescribed in the Protection of the Environment Operations (Clean Air) Regulation 2002.
Monitoring				
14	Prior to carrying out any development, the Applicant shall prepare, and subsequently implement, an Air Quality Monitoring Program for the development, in consultation with OEH, and to the satisfaction of the Director-General. This program must include an air monitoring protocol for evaluating compliance with the air quality impact assessment criteria in this consent.	Sighted letter from Director-General DP&I approving air quality monitoring program (4/4/2012).	C	2007, Lynwood Quarry Environmental Monitoring Program Appendix 3. 2010 EA section 6.5.4 states that the Air Quality Monitoring Program was subsequently approved by the Director-General.
METEOROLOGICAL MONITORING (Incorporates DECC GTA)				
15	Prior to carrying out the development, the Applicant shall establish a permanent meteorological station at a location approved by OEH, and to the satisfaction of the Director-General. The meteorological station shall monitor the parameters in Table 9.	Meteorological station has been installed.	C	2005 EIS section 5.3: a meteorological monitoring station was installed in the project area in June 2004. "The station records temperature, wind speed, wind direction and sigma-theta in 10-minute periods and also records rainfall... A meteorological station will be retained on the site for the duration of the project."

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	Table 9: Meteorological Station Monitoring Requirements			
	Parameter / Units of Measure Wind speed @10m / m/s Wind direction @ 10m / Degrees Sigma Theta @ 10m / Degrees Temperature @ 2m / K Temperature @ 10m / K Total Solar Radiation @ 10m / W/m ² Rainfall / mm Siting Note: Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales, DECC (EPA) 2001.	Sighted weather station monitoring parameters in Environmental Monitoring Program (Rev 2)	C	
Pollution of Waters				
16	Except as may be expressly provided by a License, the Applicant shall comply with section 120 of the Protection of the Environment Operations Act 1997 during the carrying out of the development.	NA - no recorded discharges.	NA	<i>section 120 Prohibition of pollution of waters</i> <i>(1) A person who pollutes any waters is guilty of an offence.</i> <i>(2) In this section: pollute waters includes cause or permit any waters to be polluted.</i> See comments regarding DA 128-5-2005, Schedule 5, Condition 5
Water Discharge Limits				
17	Except as may be expressly provided by a License, the Applicant shall ensure that any controlled discharge from the controlled discharge points at Sediment Dams A to F comply with the limits in Table 10.	No recorded discharges	NA	2005 EIS Appendix 8, section 4.4.2.2
Table 10: Surface Water Discharge Limits				
	Pollutant: Unit of measure: 100 Percentile concentration limit	No recorded discharges	NA	
	Total Suspended Solids: mg/L: 50	No recorded discharges	NA	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."
	pH: 6.5-8.5	No recorded discharges	NA	
	Oil & Grease: mg/L: 10 or none visible.	No recorded discharges	NA	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."
	Note: For more information on the location of Sediment Dams A to F see Appendix 4.	-	-	
Sediment Dams				
18	The Applicant shall ensure that:	-	-	2005 EIS section 5.6.2.2 discusses briefly the dams, but not these criteria. 2010 EA: These conditions were modified slightly in section 7.2
	(a) Sediment Dams A, B, E, and F are capable of treating the 90th percentile 5 day rainfall event; and	Sighted letter from GHD to Holcim on 21/5/12 which states that the dams are designed <i>Blue Book</i> standards	C	Umwelt (Australia) Pty Ltd 2011, Lynwood Quarry Rehabilitation and Landscape Management Plan (Rev 2): Sediment Dam F mentioned on page 10 of Appendix 3 but this criteria is not addressed. 2005 EIS Appendix 8, section 4.4.2.2 says that Type D/F sediment dams have been designed for a 90th percentile 5 day rainfall event (type D/f dams are the A, B, E, F dams. Dam A equates to a 98th percentile predicted weekly maximum run off.
	(b) Sediment Dams C, D and E are capable of treating the 1:20 year ARI Critical Duration Storm Event.	Sighted letter from GHD to Holcim on 21/5/12 which states that the dams are designed <i>Blue Book</i> standards	C	2005 EIS - See Appendix 8 section 4.4.2.2 of Appendix 8 days that "All catch drains...will be constructed to convey peak discharges during a 1 in 20 year ARI event at less than erosive velocities."

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	Notes: • For more information on the location of Sediment Dams A to F see Appendix 4; • Dams must be designed to be in accordance with ' <i>Managing Urban Stormwater: Soils and Construction (the Blue Book)</i> ', 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 <i>Blue Book</i> standards	C	2005 EIS section 5.6.2.2 says that the Lynwood Quarry water management system has been designed to achieve the key outcomes of the Managing Urban Stormwater book.
Operating Conditions				
19	The Applicant shall:	-	-	
	(a) ensure that the water collected in the Sediment Dams is pumped to the supply dams as soon as practicable;	Sighted provisions in Water Management Plan (Rev 2)	C	2005 EIS section 5.6.2.2: "the sediment control dams will generally be kept in a drawn down state by the transfer of water to these water storage dams, ensuring they retain sufficient treatment capacity."
	(b) ensure that the accumulated sediment in all the Sediment Dams is kept below 30% of their design capacity;	Audit observations Sighted Water Management Plan (Rev 2)	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	C	2005 EIS section 3.5.5 states that "the workshop will have a bunded storage area for oil, waste oil, coolant and other necessary chemicals." Also, "the fuel tanks will be bunded."
	(d) not use any flocculants on site for water pollution control treatment without the written approval of OEH.	No flocculent used onsite to date	C	2005 EIS section 4.4.2.2, Appendix 8: states that Flocculants will be used but it does not say whether they have gained approval from the OEH.
	<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>	-	-	
19A	The Applicant shall 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 Director-General.	NA - milestone not reached	NA	
Management and Monitoring				
20	Prior to carrying out any development, the Applicant shall prepare (and following approval implement) a Water Management Plan for the development, in consultation with the I&I, DECCW and Sydney Catchment Authority, and to the satisfaction of the Director-General. This plan must include:	Sighted letter from Director-General DP&I approving management plans (4/4/2012). Amendments will be made post audit	C	Umwelt (2011) Water Management Plan (Rev 2), Report prepared for Holcim (Australia) Pty Ltd.
	(a) a Water Balance;	Sighted Water Management Plan (Rev 2)	C	Umwelt (2011) Water Management Plan (Rev 2), section 3
	(b) an Erosion and Sediment Control Plan;	Sighted Erosion and Sediment Control Plan revs A and B, Water Management Plan (Rev 2)	C	Umwelt (2011) Water Management Plan (Rev 2), section 4
	(c) a Surface Water Monitoring Program;	Sighted Surface Water Monitoring Program (Rev 2)	C	Umwelt (2011) Water Management Plan (Rev 2) Appendix 2: Lynwood Quarry Surface Water Monitoring Program (Rev 2)
	(d) a Ground Water Monitoring Program; and	Sighted Groundwater Management Program	C	Umwelt (2011) Water Management Plan (Rev 2) Appendix 3: Lynwood Quarry Groundwater Monitoring Program (Rev 2).
	(e) a Surface and Ground Water Response Plan to address any potential adverse impacts associated with the development.	Sighted Water Management Plan (Rev 2)	C	Umwelt (2011) Water Management Plan (Rev 2) section 6.
21	The Water Balance shall:	-	-	
	(a) include details of all water extracted (including water make), dewatered, transferred, used and/or discharged by quarry; and	Sighted Water Management Plan (Rev 2)	C	Table 1.1 in section 1.2 outlines how these development conditions have been addressed in the report.
	(b) describe measures to minimise water use by the development.	Sighted Water Management Plan (Rev 2)	NC2	Umwelt (2011) Water Management Plan (Rev 2) does not describe how to reduce water use, only describing how to recycle water. Recommendation: the next version of the Water Management Plan includes measures to minimise water use.
22	The Erosion and Sediment Control Plan shall:	-	-	
	(a) be consistent with the requirements of the Landcom's <i>Managing Urban Stormwater: Soils and Construction manual</i> ;	Sighted letter from Director-General DP&I approving management plans (4/4/2012).	C	

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	(b) identify activities that could cause soil erosion and generate sediment;	Sighted Water Management Plan (Rev 2)	NC2	The Water Management Plan (Rev 2) (Umwelt 2011) does not describe activities which could cause erosion and sedimentation. Recommendation: the next version of the Water Management Plan identifies activities that could cause soil erosion and generate sediment.
	(c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;	Sighted Water Management Plan (Rev 2)	C	
	(d) describe the location, function, and capacity of erosion and sediment control structures; and	Sighted Water Management Plan (Rev 2)	C	
	(e) describe what measures would be implemented to maintain (and if necessary decommission) the structures over time.	Sighted Water Management Plan (Rev 2)	C	A brief description of maintenance is provided.
23	The Surface Water Monitoring Program shall include:	-	-	
	(a) detailed baseline data on surface water flows and quality in Joarimin Creek, Lockyersleigh Creek, and Marulan Creek;	Sighted Water Management Plan (Rev 2)	C	
	(b) surface water impact assessment criteria;	Sighted letter from Director-General DP&I approving management plans (4/4/2012).	C	
	(c) a program to monitor surface water flows and quality;	Sighted Water Management Plan (Rev 2)	C	
	(d) a protocol for the investigation of identified exceedances of the surface water impact assessment criteria; and	Sighted Water Management Plan (Rev 2)	C	
	(e) a program to monitor the effectiveness of the Erosion and Sediment Control Plan.	Sighted Water Management Plan (Rev 2)	C	
	<i>Note: Monitoring of surface flows to be completed by visual assessment.</i>	-	-	
24	The Ground Water Monitoring Program shall include:	-	-	
	(a) detailed baseline data on ground water levels, flows, and quality, based on statistical analysis;	Sighted Groundwater Management Program	C	
	(b) groundwater impact assessment criteria for monitoring bores;	Sighted Groundwater Management Program	C	
	(c) a program to monitor regional ground water levels and quality; and	Sighted Groundwater Management Program	C	
	(d) a protocol for the investigation of identified exceedances of the groundwater impact assessment criteria.	Sighted Groundwater Management Program	C	
	<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>	Sighted email from S. Mitchell (Holcim) (14/6/12) which confirms sampling methods	C	
Review and Reporting				
25	Each year from the date of this consent, the Applicant shall:	-	-	
	(a) review, and if necessary update, the Water Management Plan; and	Sighted letter from Director-General DP&I approving management plans (4/4/2012).	C	Annual Review 2010/2011 section 3.1 states that copies of the revised Water Management Plan were provided to the DP & I in June 2011
	(b) report the results of this review in the AEMR, including: • details of the review for each sub-plan; • the results of monitoring; and • details of the measures undertaken/proposed to address any identified issues.	Sighted Annual Environmental Management Report 2011	C	Annual Review 2010/2011 section 3.5
TRAFFIC AND TRANSPORT (Incorporates RTA, Council and Department of Lands GTAs)				
Construction Traffic				
26	The Applicant shall ensure that:	-	-	
	(a) construction traffic on the temporary construction access is kept to a minimum;	Construction traffic movements are restricted during peak traffic hours in the BMD Traffic Management Plan (Rev A)	C	2005 EIS section 7.2.2.1 "Construction access along Stoney Creek Road will be limited to the minimum necessary for construction of the rail overpass." 2010 EA: This condition has been slightly altered in section 7.2

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	(b) no construction traffic uses the temporary construction access once the proposed bridge over the Main Southern Railway Line has been commissioned;	Bridge has been commissioned and temporary construction access road has been gated and locked	C	2005 EIS section 3.3.1: "Construction traffic along Stoney Creek Road will be minimal and will only occur until the rail overpass is completed."
	(c) all other traffic uses the construction site access prior to the commissioning of the proposed Hume Highway Interchange; and	Access road used as other access option, Stoney Creek Rd, is now locked	C	
	(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);	Sighted BMD and Holcim traffic management plans	C	2010 EA "heavy vehicles will be limited from accessing the Project Area via George Street outside of school zone times... wherever practicable, unless they are done under escort." p. 7
	(e) heavy vehicle construction traffic using George Street does not exceed 40kph; and	40 kph road signs on traffic control plans in BMD and Holcim traffic management plans. Signs observed during audit inspection	C	
	(f) no traffic uses the construction site access once the proposed Hume Highway Interchange has been commissioned.	NA - milestone not reached	NA	2005 EIS section 7.2.2.2: "all access to the project area during the operational phase will be via the Hume Highway interchange."
	<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>	Sighted BMD and Holcim traffic management plans	C	
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	C	2005 EIS Appendix 6: section 4.2.4 2011 Construction Traffic Management Plan (Rev 2) section 2.6
28	Prior to carrying out any development, the Applicant shall prepare (and following approval implement) a Construction Traffic Management Plan for the development, in consultation with the RTA, Council and the Department of Lands, and to the satisfaction of the Director-General. 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.	Sighted letter from Director-General DP&I approving construction traffic management plan (4/4/2012), letter from Goulburn-Mulwara Council (3/11/2010), letter from RTA (27/10/2010)	C	2011 Construction Traffic Management Plan (Rev 2): a) section 2.5 and Appendix 2 b) Maintenance section 2.6 Noise and safety impacts section 3 Community Consultation section 2.4.1 and Table 2.1 on page 6
Hume Highway Interchange				
29	The Applicant shall:	-	-	
	(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,	Sighted RTA Major Works Authorisation Deed Private Financing of Construction March 2008 (211396379-1)	C	2011 Construction Traffic Management Plan (Rev 2): A separate management plan will be provided for the highway interchange and is therefore not covered in the CTMP document, p.1
	(b) close the existing median and proclaimed access point on the Hume Highway, to the satisfaction of the RTA.	NA - milestone not reached	NA	2010 EA The interchange is still under construction but has re-scheduled the construction of the interchange to bring its completion forward six to nine months. p.7
	<i>Notes:</i> • <i>The design of these works shall be in accordance with relevant RTA standards and specifications:</i> - <i>geometric road design in accordance with RTA Road Design Guide;</i> - <i>pavement design in accordance with the AUSTRROADS Pavement Design Guide;</i> - <i>bridge design in accordance with Australian Standard AS5100; and</i> - <i>grade separated interchange in accordance with NAAASRA (AUSTRROADS) Grade Separated Interchanges – A Design Guide.</i>	-	-	

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	• 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.	No disputes or non payments	NA	
	• 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 Director-General if requested to assist in levying costs on any such developments.	NA - milestone not reached	NA	2005 EIS section 3.5.4 outlines contribution plan but not whether these details have been provided to the D-G
30	Prior to carrying out any development in the Hume Highway road reserve, the Applicant shall prepare a Traffic Management Plan for the proposed development in the road reserve to the satisfaction of the RTA.	Sighted Appendix R of BMD interchange CEMP	C	
Crown Roads/Land				
31	The Applicant shall not carry out any development on Crown roads or land without the written approval of the Department of Lands.	Sought through RTA- sighted approval #211396379-1 (S. Liganarachi, RTA Project Manager 10/6/2011)	C	2005 EIS section 4.2.8: proponent will seek Department of Lands approval to close down a small number of Crown road reserves in the project area. "Readymix will also seek the approval of the Department of Lands to construct the interchange on the parcel of Crown land in the south of the project area."
32	The Applicant shall ensure that all loaded vehicles entering or leaving the site are covered at all times.	Sighted BMD Traffic Management Plan Rev 1	C	2005 EIS section 7.2.2.1: "All product trucks leaving the site during the construction phase will have their loads covered."
33	The Applicant shall 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.	No mud observed on sealed roads	C	2005 EIS section 3.5.3: "Trucks will exit the site via a wheel wash to limit mud or dirt tracking as the trucks leave the site."
ABORIGINAL HERITAGE (Incorporates DECC GTAs)				
Consent to Destroy				
34	The Applicant may damage, deface or destroy the Aboriginal objects in Table 10 with the written approval of the OEH.	-	-	2005 EIS section 7.2.7 outlines what proponent plans to do with the different Aboriginal sites.
	Table 10: Aboriginal Sites	-	-	
	Aboriginal Site AHISM#	-	-	
	MQ2 51-6-0060	-	-	
	MRN5 51-6-0246	-	-	
	MRN7 51-6-0248	-	-	
	MRN25 51-6-0266	-	-	
	MRN26 51-6-0267	-	-	
	MRN27 51-6-0268	-	-	
	MRN28 51-6-0269	-	-	
	MRN31 51-6-0272	-	-	
	MRN32 51-6-0273	-	-	
	MRN33 51-6-0274	-	-	
	MRN35 51-6-0276	-	-	
	MRN36 51-6-0277	-	-	
	MRN37 51-6-0278	-	-	
	MRN48 51-6-0289	-	-	
	MRN52 51-6-0293	-	-	
Cultural Heritage Management Zone				
35	The Applicant shall implement the proposed Cultural Heritage Management Zone to the satisfaction of the Director-General.	Sign-posted and cordoned-off cultural heritage management zones were observed during the audit inspection	C	2005 EIS section 5.10.1.6: "A number of sites will be conserved as part of a Cultural Heritage Management Area (refer to Figure 5.26)." section 7.2.7: "the area containing sites MRN8 to 14 and MRN21 and 22 will be conserved as a Cultural Heritage Management Zone."
Management and Monitoring				

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
36	Prior to carrying out any development, the Applicant shall prepare (and following approval implement) an Aboriginal Heritage Management Plan for the development, in consultation with representatives of the relevant Aboriginal community groups, and to the satisfaction of the OEH and the Director- General. This plan must:	Sighted letter from Director-General DP&I approving management plans (4/4/2012). No correspondence from OEH	C	Umwelt (2011) Caring for Country, Lynwood Quarry, Marulan Aboriginal Heritage Management Plan section 1.2 has Table 1.1 which outlines the sections of the report which address these development criteria.
	(a) be prepared by a suitably qualified and experience archaeologist;	Prepared by T. Adams, Umwelt	C	
	(b) include a Sub-surface Testing and Salvage Program to adequately determine the Aboriginal heritage of the locations described in Table 10;	Completed Sighted Aboriginal Heritage Management Plan (Rev 2)	C	Umwelt (2011), Caring for Country, Lynwood Quarry, Marulan Aboriginal Heritage Management Plan section 1.2: "Aboriginal cultural heritage subsurface testing and salvage program has been completed"
	(c) include a Conservation Management Plan that describes the measures that would be carried out to:	Sighted Aboriginal Heritage Management Plan (Rev 2)	C	
	• implement the proposed Cultural Heritage Management Zone (shown conceptually in Appendix 8); and	Sighted Aboriginal Heritage Management Plan (Rev 2)	C	Umwelt (2011) Caring for Country, Lynwood Quarry, Marulan Aboriginal Heritage Management Plan section 1.1: "Those sites located within the Cultural Heritage Management Zone (CHMZ) will be set aside for conservation in perpetuity."
	• protect the Aboriginal objects on the site that would be preserved in situ;	Sighted Aboriginal Heritage Management Plan (Rev 2)	C	
	(d) include a Monitoring Program for all ground disturbing works (see condition 37); and	Sighted Aboriginal Heritage Management Plan (Rev 2)	C	
	(e) describe the measures that would be implemented if any new Aboriginal objects or skeletal remains are discovered during the development.	Sighted Aboriginal Heritage Management Plan (Rev 2)	C	
37	Unless the OEH approves otherwise, the Applicant shall 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 Aboriginal objects not listed in Table 10, then the Applicant shall immediately cease work in the area and notify the OEH.	Sighted Stage 2B Report - Preliminary Results of Subsurface Testing of PAD5 and Monitoring of Works in PADs 2, 3 and 4 in Compliance with AHIP 1100264	C	Umwelt (2011) Caring for Country, Lynwood Quarry, Marulan Aboriginal Heritage Management Plan section 1.2: "The subsurface testing of ATUs [Archaeological Terrain Units] was endorsed by the DECC and the relevant Aboriginal Parties as a suitable alternative to ongoing monitoring of ground disturbing works. Thus Condition 37 has been satisfied."
	<i>Notes:</i> • This monitoring only relates to topsoil stripping, not quarrying operations. • For safety reasons, topsoil stripping may be undertaken before the commencement of development.	-	-	
HERITAGE (Incorporates NSW Heritage Council GTAs.)				
Old Marulan Township				
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.	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)	C	
39	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.	Sighted Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak, 2006).	C	Holcim Australia 2010, Archaeological Investigation into Old Marulan Township, viewed 10 January 2012, < http://www.holcim.com.au/en/editorials/archaeological-investigation-into-old-marulan-township.html > A detailed report on the archaeological investigation into the Old Marulan Township is expected to be available in late 2009.
	<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>	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).	C	

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
40	In seeking this approval, the Applicant shall submit the following information to the NSW Heritage Council:	-	-	
	(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;	Sighted 2005 non indigenous archaeology assessment, Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak, 2006).	C	
	(b) an Archaeological Assessment of the area to be impacted by the proposed interchange, that includes the:	-	-	EIS 2005, Non-Indigenous Archaeology Assessment (Appendix 12 of the EIS) does not discuss the interchange specifically but the project area generally. Old Marulan township is discussed briefly in section 2.3.10. section 4.5 says that the interchange location is unlikely to change as this is position has been developed alongside the RTA. Need more specific information
	• nomination of an Excavation Director and archaeology team which will be approved by the Director of the NSW Heritage Office;	Sighted S65_2009_65A_13	C	
	• assessment of the significance of the archaeological remains to be impacted within the development area,	Sighted Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak, 2006).	C	EIS 2005, Non-Indigenous Archaeology Assessment (Appendix 12 of the EIS) sections 3.2, 3.3 and 4.5 states that there is potential to impact upon the heritage values at the "State level to a rare degree within the SHR limits of the Old Marulan Township."
	• plans and details of the location and depth of excavation works and assessment of the exact impact on potential archaeological remains;	Sighted Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak, 2006).	C	
	• identification of research themes and identification of both site specific and general research questions,	Sighted Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak, 2006).	C	
	• 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,	Sighted Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak, 2006).	C	EIS 2005, Non-Indigenous Archaeology Assessment (Appendix 12 of the EIS) Table 5.2: they will seek an excavation permit for the are within the SHR limits of Old Marulan Town but will undertake a surface inspection in the meantime. "It is recommended that the disturbance footprint of the proposed interchange within the SHR limits be fenced."
	• details of the proposed post-excavation methodology; and	Sighted Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak, 2006).	C	
	• details of the Interpretation Plan for the entire Old Marulan Township precinct.	Sighted Old Marulan County Argyle: A research design and archaeological compliance program for work by Readymix (Gojak, 2006).	C	
Operating Conditions				
41	The Applicant shall ensure that:	-	-	
	(a) the development does not have any impact on: • the archaeological remains within the former Lot 1, DP210885;	Sighted application to vary S 65A no 2007/S65/11. Confirmed by Heritage Branch 7/9/09.	C	EIS 2005, Non-Indigenous Archaeology Assessment (Appendix 12 of the EIS)
	• heritage items MRNH1, MRNH2, and MRNH3;	Sighted letter from Heritage Branch_SheepDipMRNH1_ArtefactPolicy_20090907a_ltr LTR_CWC_Cess Pit_Old Marulan_August 2011.	C	EIS 2005, Non-Indigenous Archaeology Assessment (Appendix 12 of the EIS) Table 7.1 states that the site of MRNH1 will be repaired and then fenced and/or covered. MRNH2 will be fenced and/or covered and MRNH 3 will be fenced.
	• 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;	Audit inspection.	C	

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	(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.	C	
	(c) the movement of machines across archaeologically sensitive areas is kept to a minimum.	Areas are well flagged and movements outside of quarry are confined to formed roadways.	C	
Archaeological Field Work/Excavations				
42	The Applicant shall 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				
43	The Applicant shall (to the satisfaction of the Director-General):			
	(a) rehabilitate the site in a manner that is generally consistent with the concept final landform in Appendix 8); and	NA - milestone not reached.	NA	
	(b) implement the proposed Habitat Management Area (shown conceptually in Appendix 9),	A habitat management area has been established to the east of the quarry.	C	EIS 2005, Ecology Assessment (Appendix 9 of the EIS) section 5.2.2 and Figure 5.1.
Rehabilitation and Landscape Management Plan				
44	Within 6 months of this consent, the Applicant shall prepare (and following approval implement) a Rehabilitation and Landscape Management Plan for the development, in consultation with OEH, NOW and Council, and to the satisfaction of the Director-General. This plan must:	Sighted letter from Director-General DP&I approving management plans (4/4/2012).	C	Lynwood Quarry Rehabilitation and Landscape Management Plan (Rev 2) section 1.1, Table 1.1 details the report sections that cover these criteria. Page 176 (last page of document) states that "the Director-General has approved these Management Plans in accordance with Conditions 44 and 45".
	(a) describe in general the short, medium, and long-term measures that would be implemented to:	-	-	
	• rehabilitate the site;	Sighted Rehabilitation and Landscape Management Plan (Rev 2).	C	
	• implement the Habitat Management Area;	Sighted Rehabilitation and Landscape Management Plan (Rev 2).	C	
	• manage the remnant vegetation and habitat on the site; and	Sighted Rehabilitation and Landscape Management Plan (Rev 2).	C	
	• landscape the site to mitigate any visual impacts of the development;	Sighted Rehabilitation and Landscape Management Plan (Rev 2).	C	
	(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 Director-General;	Sighted Rehabilitation and Landscape Management Plan (Rev 2).	C	
	(c) describe in detail the measures that would be implemented over the next 5 years to rehabilitate and manage the landscape on the site;	Sighted Rehabilitation and Landscape Management Plan (Rev 2).	C	
	(d) describe how the performance of these measures would be monitored over time; and	Sighted Rehabilitation and Landscape Management Plan (Rev 2).	C	
	(a) set completion criteria for the rehabilitation of the site.	Sighted Rehabilitation and Landscape Management Plan (Rev 2).	C	
45	The Riparian Area Management Plan/s must be prepared by a suitably qualified hydrologist; whose appointment has been approved by the Director-General, and include:	Sighted letter from Director-General DP&I approving management plans (4/4/2012).	C	Lynwood Quarry Rehabilitation and Landscape Management Plan (Rev 2) section 1.1, Table 1.1 details the report sections that cover these criteria. Page 176 (last page of document) states that "the Director-General has approved these Management Plans in accordance with Conditions 44 and 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;	Sighted Rehabilitation and Landscape Management Plan (Rev 2).	C	
	(b) detailed designs of the proposed works, including any proposed stabilization, scour protection, and/or enhancement works (including representative cross and longitudinal sections);	Sighted Rehabilitation and Landscape Management Plan (Rev 2).	C	

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	(c) a description of the measures that would be implemented in the event of flooding during construction/rehabilitation.	Sighted Rehabilitation and Landscape Management Plan (Rev 2).	C	
	(d) details of proposed staging of the works;	Sighted Rehabilitation and Landscape Management Plan (Rev 2).	C	
	(e) completion criteria for the rehabilitation of the riparian area;	Sighted Rehabilitation and Landscape Management Plan (Rev 2).	C	
	(f) a protocol for monitoring the performance of the rehabilitation over time.	Sighted Rehabilitation and Landscape Management Plan (Rev 2).	C	
46	Within 3 months of the Independent Environmental Audit (see Condition 7 in Schedule 5), the Applicant shall update the Rehabilitation and Landscape Management Plan to the satisfaction of the Director-General.	NA - milestone not reached.	NA	
Rehabilitation Bond				
47	Within 3 months of the first Independent Environmental Audit (see Condition 7 in Schedule 5), the Applicant shall lodge a rehabilitation bond for the development with the Director-General. The sum of the bond shall be calculated at \$2.50/m2 for the total area to be disturbed in each 5 year period, or as otherwise directed by the Director-General.	NA - milestone not reached.	NA	
	Notes: <ul style="list-style-type: none"> • If the rehabilitation is completed to the satisfaction of the Director-General, the Director-General will release the rehabilitation bond. • If the rehabilitation is not completed to the satisfaction of the Director-General, the Director-General will call in all or part of the rehabilitation bond, and arrange for the satisfactory completion of the relevant works. 	-	-	
48	Within 3 months of each Independent Environmental Audit (see Condition 7 in Schedule 5) after the lodgement of the rehabilitation bond, the Applicant shall review, and if necessary revise the sum of the bond to the satisfaction of the Director-General. This review must consider:	NA - milestone not reached.	NA	
	(a) the effects of inflation;	NA - milestone not reached.	NA	
	(b) any changes to the total area of disturbance; and	NA - milestone not reached.	NA	
	(c) the performance of the rehabilitation against the completion criteria of the Rehabilitation and Landscape Management Plan.	NA - milestone not reached.	NA	
VISUAL IMPACT				
Visual Amenity				
49	The Applicant shall minimise the visual impacts of the development to the satisfaction of the Director-General.	Sighted letter from Director-General DP&I approving management plans (4/4/2012).	C	2005 EIS section 5.11.2: "The visibility of the quarry infrastructure will be relatively low from most viewing locations, with views only likely to be possible from one residence to the south and from trains using the Main Southern Railway." 2005 EIS 5.11.4: Readymix is willing to undertake on-site measures to minimise adverse visual impacts from the one isolated residence. Also, the emplacement areas (to be constructed during the initial years) will provide screening of the remainder of the project area.
Lighting Emissions				
50	The Applicant shall take all practicable measures to prevent and/or minimise any off-site lighting impacts from the development.	No lighting has been installed to date.	NA	2005 EIS section 5.11.4: "the additional lighting impacts resulting from the quarry are not considered to be significant." Mobile equipment headlights: "impact will be no greater than the existing impacts from the transport corridors and township and will be seen from assessment point 7. Fixed lighting: views will be limited to assessment point 7 and will be "limited to the minimum required for operational needs and safety." 2005 EIS section 7.2.9: outlines further controls that will be implemented to minimise lighting impacts.

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
51	All external lighting associated with the development shall comply with <i>Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting</i> .	Lighting design is yet to be completed.	NA	
Advertising				
52	The Applicant shall not erect or display any advertising structure(s) or advertisements on the site without the written approval of the Director-General.	No advertising signage observed.	C	
WASTE MANAGEMENT				
53	The Applicant shall (to the satisfaction of the Director-General):	No correspondence to or from Director General about satisfaction with waste matters.	NC2	Recommendation: the waste management plan is provided to the Director General.
	(a) monitor the amount of waste generated by the development;	Sighted waste docket (26/5/12), generic quantity (eg, "ute load") and no waste description recorded. No waste register was available.	NC2	Unable to locate the Lynwood Quarry Construction Works Waste Management Plan as mentioned in the AEMR section 3.16. Recommendation: a waste register is established recording waste volumes and types generated by the project.
	(b) investigate ways to minimise waste generated by the development;	There was no evidence that showed waste minimisation investigations have taken place.	O	The consent does not provide a timeframe for this to be completed. Recommendation: undertake a waste minimisation investigation in a form that the results can be submitted to the Director-General.
	(c) implement reasonable and feasible measures to minimise waste generated by the development; and	Site recycling area observed.	C	
	(d) report on waste management and minimisation in the AEMR.	Sighted Lynwood Quarry Annual Review 2010/2011.	C	Lynwood Quarry Annual Review 2010/2011 Section 3.16.
54	The Applicant shall 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 Wastes</i> (OEH) guideline, or its successor.	Sighted BMD Waste Management Plan Rev B.	C	2005 EIS Section 7.2.10 outlines how wastes will be managed.
EMERGENCY AND HAZARDS MANAGEMENT				
Dangerous Goods				
55	The Applicant shall 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.
Safety				
56	The Applicant shall secure the development to ensure public safety to the satisfaction of the Director-General.	The site audit inspection indicated that the construction site is generally appropriately secured. There is no correspondence from Director General regarding public safety.	NC2	2005 EIS Section 3.8: "Prior to the commencement of operations, Readymix will install fencing around the quarry and infrastructure areas in order to ensure site security." Recommendation: a letter explaining site security is provided to the Director General.
NOTIFICATION OF LANDOWNERS				
57	The Applicant shall:	-	-	
	(a) ensure that the development is suitably equipped to respond to any fires on-site; and	Sighted BMD Emergency Procedures Manual - Fire Rev 1, there are water carts on sites and fire extinguishers in vehicles and buildings.	C	2005 EIS Section 5.12.2.3 outlines the on-site fire fighting equipment and fire control measures. The discussion mostly pertains to bushfires rather than industrial fires.
	(b) assist the rural fire service and emergency services as much as possible if there is a fire on-site.	A fire was lit onsite by an arsonist - RFS was informed and fire was quickly brought under control.	C	2005 EIS Section 5.12.2.4: "Fire awareness training will also be covered during the Lynwood Quarry induction, which all readymix employees and contractors will be required to have completed prior to commencing work at the site."
PRODUCTION DATA				
58	The Applicant shall:	-	-	
	(a) provide annual production data to the DRE using the standard form for that purpose; and	NA - milestone not reached.	NA	
	(b) include a copy of this data in the AEMR.	NA - milestone not reached.	NA	
QUARRY EXIT STRATEGY				
59	At least 5 years prior to the cessation of quarry operations, the Applicant shall prepare a Quarry Exit Strategy for the development, in consultation with the NOW and Council, and to the satisfaction of the Director-General. This plan must:	NA - milestone not reached.	NA	2005 EIS Section 3.11.2 briefly discusses the conceptual decommissioning plan.

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
	(a) define the objectives and criteria for quarry closure;	NA - milestone not reached.	NA	2005 EIS Section 3.11.2: Readymix is seeking to extend the planned quarry approval period, but if this does not occur, then the quarry will be decommissioned and closed at the end of year 30.
	(b) investigate options for the future use of the site, including any final void/s;	NA - milestone not reached.	NA	2005 EIS Section 3.11.2.3: native habitat and some parts for managed grazing and the potential for the void to be a water storage void, recreational rock climbing or army training area. These uses could change if permission is granted to extend quarry life beyond 30 years.
	(c) describe the measures that would be implemented to minimise or manage the ongoing environmental effects of the development; and	NA - milestone not reached.	NA	
	(d) describe how the performance of these measures would be monitored over time.	NA - milestone not reached.	NA	
NOTIFICATION OF LANDOWNERS				
1	If the results of monitoring required in Schedule 3 identify that impacts generated by the development are greater than the relevant impact assessment criteria in Schedule 3, then the Applicant shall notify the Director-General and the affected landowners and/or existing or future tenants (including tenants of quarry owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the development is complying with the criteria in Schedule 3.	Circumstance has not arisen.	NA	
INDEPENDENT REVIEW				
2	If a landowner (excluding quarry owned properties) considers that the operations of the quarry are exceeding the impact assessment criteria in Schedule 3, then he/she may ask the Applicant in writing for an independent review of the impacts of the development on his/her land.	Circumstance has not arisen.	NA	
	If the Director-General is satisfied that an independent review is warranted, the Applicant shall within 3 months of the Director-General advising that an independent review is warranted:	Circumstance has not arisen.	NA	
	(a) consult with the landowner to determine his/her concerns;	Circumstance has not arisen.	NA	
	(b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct monitoring on the land, to determine whether the development is complying with the relevant criteria in Schedule 3, and identify the source(s) and scale of any impact on the land, and the development's contribution to this impact; and	Circumstance has not arisen.	NA	
	(c) give the Director-General and landowner a copy of the independent review.	Circumstance has not arisen.	NA	
3	If the independent review determines that the quarrying operations are complying with the relevant criteria in Schedule 3, then the Applicant may discontinue the independent review with the approval of the Director-General.	Circumstance has not arisen.	NA	
4	If the independent review determines that the quarrying operations are not complying with the relevant criteria in Schedule 3, and that the quarry is primarily responsible for this non-compliance, then the Applicant shall:	Circumstance has not arisen.	NA	
	(a) implement all reasonable and feasible measures, in consultation with the landowner, to ensure that the development complies with the relevant criteria; and	Circumstance has not arisen.	NA	
	(b) conduct further monitoring to determine whether these measures ensure compliance; or	Circumstance has not arisen.	NA	
	(c) secure a written agreement with the landowner to allow exceedances of the relevant criteria in Schedule 3,	Circumstance has not arisen.	NA	
	to the satisfaction of the Director-General.	Circumstance has not arisen.	NA	
	If the additional monitoring referred to above subsequently determines that the quarrying operations are complying with the relevant criteria in Schedule 3, then the Applicant may discontinue the independent review with the approval of the Director-General.	Circumstance has not arisen.	NA	

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	If the Applicant is unable to finalise an agreement with the landowner, then the Applicant or landowner may refer the matter to the Director-General for resolution.	Circumstance has not arisen.	NA	
	If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 10).	Circumstance has not arisen.	NA	
5	If the landowner disputes the results of the independent review, either the Applicant or the landowner may refer the matter to the Director-General for resolution.	Circumstance has not arisen.	NA	
	If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 10).	Circumstance has not arisen.	NA	
SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING				
ENVIRONMENTAL MANAGEMENT STRATEGY (Incorporates DECC GTA)				
1	Prior to carrying out any development, the Applicant shall prepare (and following approval implement), an Environmental Management Strategy for the development to the satisfaction of the Director-General. This strategy must:	Sighted letter from DP&I (19/4/2007).	C	Umwelt (2011) Environmental Management Strategy (Rev 2) Table 1.1 on page 3 outlines how the document fulfils these development criteria.
	(a) provide the strategic context for environmental management of the development;	Sighted letter from DP&I (19/4/2007).	C	
	(b) identify the statutory requirements that apply to the development;	Sighted letter from DP&I (19/4/2007).	C	
	(c) describe in general how the environmental performance of the development would be monitored and managed during the development;	Sighted letter from DP&I (19/4/2007).	C	
	(d) describe the procedures that would be implemented to:	Sighted letter from DP&I (19/4/2007).	C	
	• keep the local community and relevant agencies informed about the operation and environmental performance of the development;	Sighted letter from DP&I (19/4/2007).	C	
	• receive, handle, respond to, and record complaints;	Sighted letter from DP&I (19/4/2007).	C	
	• resolve any disputes that may arise during the course of the development;	Sighted letter from DP&I (19/4/2007).	C	
	• respond to any non-compliance;	Sighted letter from DP&I (19/4/2007).	C	
	• manage cumulative impacts; and	Sighted letter from DP&I (19/4/2007).	C	
	• respond to emergencies; and	Sighted letter from DP&I (19/4/2007).	C	
	(e) describe the role, responsibility, authority, and accountability of the key personnel involved in environmental management of the development.	Sighted letter from DP&I (19/4/2007).	C	
2	Within 3 months of the completion of each Independent Environmental Audit (see Condition 7 below), the Applicant shall review, and if necessary update, the Environmental Management Strategy to the satisfaction of the Director-General.	Sighted letter from DP&I (19/4/2007).	C	
ENVIRONMENTAL MONITORING PROGRAM				
3	Prior to carrying out any development, the Applicant shall prepare an Environmental Monitoring Program for the development, in consultation with the relevant agencies, and to the satisfaction of the Director-General. This program must consolidate the various monitoring requirements in schedule 3 of this consent into a single document.	Sighted letter from DP&I (Howard Reed) (3/8/2007).	C	Umwelt (2010) Environmental Monitoring Program, Revision 2.
4	Within 3 months of the completion of each Independent Environmental Audit (see Condition 7 below), the Applicant shall review, and if necessary update, the program to the satisfaction of the Director-General.	NA - milestone not reached.	NA	
INCIDENT REPORTING				

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
5	Within 7 days of detecting an exceedance of the limits/performance criteria in this consent or an incident causing (or threatening to cause) material harm to the environment; the Applicant shall report the exceedance/incident to the Department (and any relevant agency). The report must:	Incident reports were prepared regarding disturbance of areas of Aboriginal significance outside of the approved footprint in August to September 2011. Correspondence between Holcim and OEH indicates that these issues were satisfactory resolved. Unauthorised offsite water discharges on 20 March 2012 are reported in the site Environmental Incident Register. No incident reports are available. It is not known if they caused (or threatened to cause) material harm to the environment.	NC1	The duty to notify provisions of the Protection of the Environment Operations Act 1997 came into effect on 6 February 2012. These changes include that relevant authorities must be notified immediately of pollution incidents that cause or threaten material harm to the environment. These changes are described on the EPA (OEH) website: http://www.environment.nsw.gov.au/licensing/Dutytonotify.htm . Recommendation: incident reports for the offsite discharge of water on 20 March 2012 are completed. Recommendation: procedures are established on site to immediately determine whether an incident could cause or threaten material harm to the environment and to allow immediate reporting to the relevant authorities.
	(a) describe the date, time, and nature of the exceedance/incident;	NA - no incidents reported to the Department.	NA	
	(b) identify the cause (or likely cause) of the exceedance/incident;	NA - no incidents reported to the Department.	NA	
	(c) describe what action has been taken to date; and	NA - no incidents reported to the Department.	NA	
	(d) describe the proposed measures to address the exceedance/incident.	NA - no incidents reported to the Department.	NA	
ANNUAL REPORTING				
6	By the end of September 2011, and annually thereafter, the applicant shall review the environmental performance project to the satisfaction of the Director-General. This review must:	Awaiting written response. Verbal response provided by DP&I (G. Mobayed).	C	AEMR 2010/2011 Table 1.1 in section 1.2.1 outlines how the document fulfils these development criteria.
	(a) describe the development (including any rehabilitation) that was carried out in the past financial year, and the development that is proposed to be carried out over the next financial year;	NA - milestone not reached.	NA	AEMR 2010/2011 Section 2 covers the past and proposed future operations. Only construction and earthworks activities have been undertaken with quarrying expected to commence in 2013. Section 5 states that there has been limited opportunities for rehabilitation but some activities have been undertaken. Section 6 further states proposed developments and activities.
	(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; 	NA - milestone not reached.	NA	
	(c) identify any non-compliance over the past financial year, and describe what actions were (or are being) taken to ensure compliance;	NA - milestone not reached.	NA	
	(d) identify any trends in the monitoring data over the life of the project;	NA - milestone not reached.	NA	
	(e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and	NA - milestone not reached.	NA	
	(f) describe what measures will be implemented over the next financial year to improve the environmental performance of the project.	NA - milestone not reached.	NA	
INDEPENDENT ENVIRONMENTAL AUDIT				
7	By the end of December 2011, the end of December 2014, and every 5 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:		C	Audit commissioned in September 2011.
	(a) be conducted by a suitably qualified, experienced, and independent person whose appointment has been endorsed by the Director-General;		C	Dr Philip Towler, the lead auditor, was approved by DP&I to undertake the audit.
	(b) be consistent with <i>ISO 19011:2002 - Guidelines for Quality and/ or Environmental Systems Auditing</i> , or updated versions of this guideline;	Audit report.	C	Audit is consistent with ISO 19011:2002 - Guidelines for Quality and/ or Environmental Systems Auditing.

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
	(c) assess the environmental performance of the development, and its effects on the surrounding environment;	Audit report.	C	
	(d) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;	Audit report.	C	
	(e) review the adequacy of any strategy/plan/program required under this consent; and, if necessary,	Audit report.	C	
	(f) recommend measures or actions to improve the environmental performance of the development, and/or any strategy/plan/program required under this consent.	Audit report.	C	
8	Within 6 weeks of completing each Independent Environmental Audit, the Applicant shall submit a copy of the audit report to the Director-General, together with its response to any recommendations in the audit report.	NA - milestone not reached.	NA	
8A	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	NA - milestone not reached.	NA	
COMMUNITY CONSULTATIVE COMMITTEE				
9	Prior to carrying out any development, the Applicant shall establish a Community Consultative Committee. The CCC shall:	CCC has been established, minutes viewed eg 27/6/11.	C	2010 EA The CCC is mentioned briefly in section 4.1.2 but it only says that it will be established but gives no more details. No mention found yet in the EIS.
	(a) be comprised of: • 2 representatives from the Applicant, including the person responsible for environmental management at the quarry; • 1 representative from Council (if available); and • at least 3 representatives from the local community, whose appointment has been approved by the Director-General;	Sighted approval letter from DP&I (David Kitto) (11/11/2010).	C	
	(b) be chaired by an independent chairperson, whose appointment has been approved by the Director-General;	Sighted approval letter from DP&I (David Kitto) (11/11/2010).	C	
	(c) meet at least twice a year;	Sighted CCC minutes from 27/6/11 and 10/10/11.	C	
	(d) review the Applicant's performance with respect to environmental management and community relations;	Sighted CCC minutes from 27/6/11 and 10/10/11.	C	
	(e) undertake regular inspections of the quarry operations;	NA - milestone not reached.	NA	
	(f) review community concerns or complaints about the quarry operations, and the Applicant's complaints handling procedures; and	Sighted CCC minutes from 27/6/11 and 10/10/11.	C	
	(g) provide advice to: • the Applicant on improved environmental management and community relations, including the provision of information to the community and the identification of community initiatives to which the Applicant could contribute; • the Department regarding the conditions of this consent; and • the general community on the performance of the quarry with respect to environmental management and community relations.	Sighted CCC minutes from 27/6/11 and 10/10/11.	C	
	<i>Notes</i> • The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent. • The membership of the CCC shall be reviewed on a regular basis (every 3 years). • If possible, an alternate member should be appointed for each of the representatives from the local community.	-	-	
10	The Applicant shall, at its own expense:	-	-	
	(a) ensure that 2 of its representatives attend CCC meetings;	Sighted CCC minutes from 27/6/11 and 10/10/11.	C	

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
	(b) provide the CCC with regular information on the environmental performance and management of the development;	Sighted CCC minutes from 27/6/11 and 10/10/11.	C	
	(c) provide meeting facilities for the CCC;	Sighted CCC minutes from 27/6/11 and 10/10/11.	C	
	(d) arrange site inspections for the CCC, if necessary;	Sighted CCC minutes from 10/10/11.	C	
	(e) take minutes of the CCC meetings;	Sighted CCC minutes from 27/6/11 and 10/10/11.	C	
	(f) make these minutes available to the public;	Viewed website (http://www.holcim.com.au/en/about-us/community-link/lynwood-quarry/community-information-sheets.html) on 8/6/12.	C	
	(g) respond to any advice or recommendations the CCC may have in relation to the environmental management or community relations; and	Sighted CCC minutes from 27/6/11 and 10/10/11.	C	Notes from previous CCC meeting are discussed at each meeting.
	(h) forward a copy of the minutes of each CCC meeting, including a response to any recommendations from the CCC, to the Director-General within a month of the CCC meeting.	There was no evidence that minutes of each CCC meeting have been sent to the Director-General.	NC2	Recommendation: the minutes of each CCC meeting are sent to the Director-General.
ACCESS TO INFORMATION				
11	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):	-	-	
	(a) provide a copy of the relevant document/s to the Council, relevant agencies and the CCC;	No evidence was sighted to confirm that this has occurred.	NC2	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. Recommendation: confirm that all plan/strategy/programs required under this consent have been provided to the Council and relevant agencies.
	(b) ensure that a copy of the relevant document/s is made publicly available at the quarry; and;	Sighted http://www.holcim.com.au/en/about-us/community-link/lynwood-quarry/community-information-sheets.html (17/7/12).	O	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. Recommendation: that Holcim request that this condition be removed based on the availability of these documents on the website (Condition 11(c)).
	(c) put a copy of the relevant document/s on the Applicant's website;	The Lynwood Quarry website http://www.holcim.com.au/en/lynwood-quarry.html (viewed 17/7/12).	NC2-A	The Lynwood Quarry website contains some management plans (Rev 1). However, it does not include all of the management plans, the most recent plans, or the AEMR. The missing management plans and AEMR were placed on the website in September 2012. Recommendation: the most recent management plans are provided on the website. Recommendation: review the website monthly to ensure that the most recent documents and versions of documents are available. Recommendation: the AEMR is provided on the website once approved by DP&I.
12	During the life of the development, the Applicant shall (to the satisfaction of the Director-General):	-	-	

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
	(a) make a summary of monitoring results required under this consent publicly available at the quarry and on its website; and	The Lynwood Quarry website http://www.holcim.com.au/en/lynwood-quarry.html (viewed 17/7/12).	NC2-A and O	Once approved by DP&I and added to the project website, the AEMR will provide a 12 month summary of monitoring results. However, this is not in a form that can be updated every three months. The monitoring results have since been placed on Holcim's website. However, they are not on the Lynwood Quarry project page. Recommendation: the results of monitoring undertaken as part of the conditions of DA 128-5-2005 (and subsequent modifications) and EPL 12939 are provided on the project website. The 2012 monthly monitoring results have been placed on Holcim's website. However, they are not on the Lynwood Quarry project page. Recommendation: a link to the monitoring results is provided on the website project page and these monitoring results are updated regularly (at least quarterly).
	(b) update these results on a regular basis (at least every 3 months),	The Lynwood Quarry website http://www.holcim.com.au/en/lynwood-quarry.html (viewed 17/7/12).	NC2-A	The monitoring results for each month of 2012 have been placed on Holcim's website. Recommendation: once posted, monitoring results are updated regularly (at least quarterly).
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.			
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.	Sighted LTR_Old Marulan_Sign off_Dec 2010.	C	
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.	Inspection was conducted on 22/12/07, will be documented in the final report, there has been no request to access any relics from the site.	C	
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).	C	
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.	Circumstance has not arisen.	C	
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'.	Sighted Old Marulan Archaeological Letter to DECC, S65_2009_65A_11 (27/10/10).	C	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.
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.	C	

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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.	It was not possible to determine whether this occurred during archaeological excavations. However, there is no evidence to suggest that it did not.	C	
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).	C	
9	Throughout the archaeological excavation works and post-excavation analysis, the Applicant must ensure that:	-	-	
	(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.	O	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. Recommendation: that the website addressing the archaeological works (see Condition 9(d)) is considered to address this requirement.
	(b) A local public information program is implemented including press releases to ensure the public is informed about the project and its outcomes,	Sighted http://www.holcim.com.au/en/about-us/community-link/lynwood-quarry/archaeological-investigation-into-old-marulan-township.html (17/7/12).	C	
	(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).	C	Offered but limited interest. Marulan historical society volunteers visited site each day.
	(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,	Sighted http://www.holcim.com.au/en/about-us/community-link/lynwood-quarry/archaeological-investigation-into-old-marulan-township.html (17/7/12).	C	
	(e) The progress on the archaeological works on site is systematically video recorded,	Sighted Old Marulan Archaeological_Letter to DECC (27/10/10).	C	Details will be provided in the final excavation report which is planned to be submitted by December 2012.
	(f) The services of a conservator must be utilised for conservation of significant artefacts,	Sighted Old Marulan Archaeological_Letter to DECC (27/10/10).	C	Sydney Artefact Conservation held on retainer but not needed.
	(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.	C	No return correspondence from Heritage Branch.
	(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.	C	
	(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.	Sighted Old Marulan Archaeological_Letter to DECC (27/10/10).	C	

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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.	C	
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.	C	
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.	NA - milestone not reached.	NA	Will be provided in conjunction with the final excavation report which is planned to be submitted by December 2012.
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.	NA - milestone not reached.	NA	Details will be provided in the final excavation report which is planned to be submitted by December 2012.
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).	C	At present artefacts are conserved at a secure facility in Pertersham.
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.	C	
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.	Old Marulan Archaeological_Letter to DECC (27/10/10).	O	Artefact catalogue will be provided in the final excavation report which is planned to be submitted by December 2012.
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).	C	
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.	Interview with T. Adams (6/6/12).	NC2	It is understood that Holcim will be requesting an extension to this period. However, evidence that this has occurred was not viewed. Recommendation: approval is sought from OEH to extend the period for completion of the final excavation report to December 2012.

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
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.	NA - milestone not reached.	NA	Final excavation report which is planned to be submitted by December 2012.
20	The Applicant must ensure that the information presented in a final excavation report includes the following:	-	-	
a	(a) An executive summary,	NA - milestone not reached.	NA	
b	(b) Due credit to the client paying for the excavation on the title page,	NA - milestone not reached.	NA	
c	(c) An accurate site location and site plan,	NA - milestone not reached.	NA	
d	(d) Historical research, references, and bibliography,	NA - milestone not reached.	NA	
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,	NA - milestone not reached.	NA	
f	(f) Detailed response to research questions,	NA - milestone not reached.	NA	
g	(g) Nominated repository for the items,	NA - milestone not reached.	NA	
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	NA - milestone not reached.	NA	
i	(i) Details of how this information about this excavation has been publicly disseminated.	NA - milestone not reached.	NA	
	Environmental Protection Licence 12939 - Variation 11 April 2011			
	Administrative conditions			
A1	What the licence authorises and regulates			
A1.1	This licence authorises the carrying out of the scheduled development work listed below at the premises listed in A2. Construct infrastructure (roads, bridges, dams, processing plant) associated with the Lynwood Quarry approval.	-	-	
A1.2	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.	-	-	
A1.3	The licensee must not carry on any scheduled activities until the scheduled development works are completed, except as elsewhere provided in this licence.	Site observations.	C	
A2	Premises to which the licence applies			
A2.1	"The Licence applies to the following premises: Premises Details" Lynwood Quarry 278 Stoney Creek Road MARULAN NSW 2579 LOT 112 & 230 DP 750029, LOT 1 DP 1074819, LOT 1 DP 1117910, LOT 4 DP 1036993, LOT 2 DP 1116876	-	-	
A4	Information supplied to the EPA			
A4.1	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.	Audit observations.	C	See Schedule 2, condition 2.

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
	In this condition the reference to "the Licence application" includes a reference to:	-	-	
	(a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and	-	-	
	(b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.	-	-	
2	Discharges to air and water applications to land			
P1	Location of monitoring/discharge points and areas			
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.	-	-	
	Limit conditions			
L1	Pollution of waters			
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.	NA - no discharges have been recorded to date.	NA	See comments regarding DA 128-5-2005, Schedule 5, Condition 5.
L.5	Waste			
L.5.1	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.	There was no evidence of waste being received at the site.	C	
L5.1.1	This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence.	-	-	
L.6	Noise limits			
L.6.1	Noise generated at the premises must not exceed the noise limits presented in the table on page 10 of the Environment Protection Licence.	Viewed noise monitoring results from 22-29/11/2011. Viewed incident register- no noise complaints registered.	O	EPL 12939 does not specify the frequency of noise monitoring. However, the Noise Monitoring Program (Rev 2) Section 5 (June 2011) specifies that unattended noise monitoring will occur for one week on a quarterly basis. AEMR 2010/2011 section 3.10.1 states that noise monitoring was not conducted from the start of construction (November 2010) to June 2011. 22-29 November 2011 raw noise monitoring data includes levels above noise limits. However, the weather and other noises sources will need to be investigated to determine whether these noise levels are exceedences of the noise limits. Recommendation: noise monitoring is undertaken at the frequency specified in the Noise Monitoring Program. Recommendation: noise data is analysed within two weeks of collection to determine if exceedences have occurred.
L6.2	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 L6.1. Noise from the development is to be measured at 1m from the dwelling facade to determine compliance with the LA1 (1 minute) in the above table. The noise emission limits identified in condition L6.1 apply under meteorological conditions of: • 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.	Viewed noise monitoring results from 22-29/11/2011 and Noise Monitoring Program (Rev 2).	C	The Noise Monitoring Program (Rev 2) requires that noise monitoring is undertaken at residences closest to the quarry at the locations described in this licence condition.
L7	Hours of operation			

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L7.1	The Applicant shall comply with the operating hours in the table on page 11 of the Environment Protection Licence. Note: The 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.	Viewed incident register- no noise complaints registered.	C	
L8	Blasting limits			
L8.1	The airblast overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time at any noise sensitive locations 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.	Viewed blast monitoring summary for monitor 3 (closest residence) (13/06/12).	C	
L8.2	The airblast overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) at any noise sensitive locations 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.	Viewed blast monitoring summary for monitor 3 (closest residence) (13/06/12).	C	
L8.3	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time at any sensitive locations. 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.	Viewed blast monitoring summary for monitor 3 (closest residence) (13/06/12).	C	
L8.4	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec at any noise sensitive locations 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.	Viewed blast monitoring summary for monitor 3 (closest residence) (13/06/12).	C	One exceedance on 10/1/12 will need to be reported and potential sources described in the 2011/12 AEMR.
L8.5	To determine compliance with condition(s) L6.1 and L6.2: a) Airblast overpressure and ground vibration levels must be measured and electronically recorded at the blast monitoring location marked "B3" on Figure 1 in the document titled 'Lynwood Quarry Blast Monitoring Program' dated May 2007, received by DECC 8 July 2008.1 b) Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard AS 2187.2-2006. 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 L7.1 to L7.4 at any "noise sensitive receiver locations" other than the locations identified in the above condition.	Viewed blast monitoring summary for monitor 3 (closest residence) (13/06/12).	C	
4	Operating conditions			
O1	Activities must be carried out in a competent manner			
O1.1	Licensed activities must be carried out in a competent manner. This includes: (a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	Site observations.	NC2	See DA 128-5-2005 Schedule 2, condition 1.
O2	Maintenance of plant and equipment			
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: (a) must be maintained in a proper and efficient condition; and (b) must be operated in a proper and efficient manner.	No maintenance records are available.	C	See DA 128-5-2005 Schedule 2, condition 2.
5	Monitoring and recording conditions			
M1	Monitoring records			
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Monitoring records provided in Excel format.	C	

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
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.	Viewed noise monitoring results for 22-29/11/11, PM10, surface water, ground water, dust deposition.	C	
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 Umwelt monitoring data (24/4/2012).	NC2	Sample times for surface water and groundwater samples were not recorded. Recommendation: all sample times are recorded with monitoring data.
M2	Requirement to monitor concentration of pollutants discharged			
M2.1	For each monitoring/discharge point or utilisation area specified in the table on page 13 of the Environment Protection Licence (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns.	Viewed Umwelt monitoring data (24/4/2012).	C	
M3	Testing Methods - concentration limits			
M3.1	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place. Note: The Protection of the Environment Operations (Clean Air) Regulation 2002 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".	Viewed Umwelt monitoring data (24/4/2012).	O	Data recorded as required in M2.1 but no methods recorded. Recommendation: sampling methods are recorded with monitoring data.
M4	Recording of pollution complaints			
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.	Sighted complaints register.	C	
M4.2	The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.	Sighted complaints register.	C	
M4.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	NA - milestone not reached.	NA	

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
M4.4	The record must be produced to any authorised officer of the EPA who asks to see them.	Hardcopy available for viewing by EPA officer.	C	
M5	Telephone complaints line			
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.	The Lynwood Quarry website http://www.holcim.com.au/en/lynwood-quarry.html (viewed 17/7/12) Yellow Pages (viewed 17/7/12).	C	Lynwood Quarry Environment and Community Coordinator phone number and email provided on website. Yellow Pages lists "Lynwood Quarry Blasting Hotline"
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.	The Lynwood Quarry website http://www.holcim.com.au/en/lynwood-quarry.html (viewed 17/7/12) Yellow Pages (viewed 17/7/12).	O	While not listed on the website as a "complaints line", the phone number on the website is prominent and obviously the appropriate place to register a complaint. It is less obvious that the "Lynwood Quarry Blasting Hotline" is the appropriate number to register a complaint. The Yellow Pages listing was updated with the below recommendation in September 2012. Recommendation: when the "Lynwood Quarry Blasting Hotline" listing is updated in the Yellow Pages, its title is broadened to "Lynwood Quarry Blasting and Complaints Hotline". The Yellow Pages listing was updated in September 2012.
M5.3	Conditions M5.1 and M5.2 do not apply until 3 months after: a) the date of the issue of this licence or b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.	-	-	
6	Reporting Conditions			
R1	Annual Return Documents			
	What documents must an Annual Return contain			
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: a) a Statement of Compliance; and b) a Monitoring and Complaints Summary. A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before 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.	Sighted December 2011 EPL 12939 Annual Return.	C	
	Period covered by annual return			
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below. Note: The term "reporting period" is defined in the dictionary at the end of the licence. Do not complete the Annual Return until after the end of the reporting period.	Sighted December 2011 EPL 12939 Annual Return.	C	
R1.3	Where this licence is transferred from the licensee to a new licensee: a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period. Note: An application to transfer a licence must be made in the approved form for this purpose.	-	-	License hasn't been transferred.
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.	NA - milestone not reached.	NA	

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
	Deadline for Annual Return			
R1.5	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	Sighted December 2011 EPL Annual Return.	C	Anniversary date: 15 December
	Licensee must retain copy of Annual Return			
R1.7	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.	NA - milestone not reached.	NA	
	Certifying of statement of compliance and signing of monitoring and complaints summary			
R1.8	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.	Sighted certification page of December 2011 EPL 12939 Annual Return.	C	
R1.9	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.	-	-	
R2	Notification of environmental harm			
	Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	Incident reports were prepared regarding disturbance of areas of Aboriginal significance outside of the approved footprint in August to September 2011. Correspondence between Holcim and OEHL indicates that these issues were satisfactory resolved. Unauthorised offsite water discharges on 20 March 2012 are reported in the site Environmental Incident Register. No incident reports are available. It is not known if they caused (or threatened to cause) material harm to the environment.	NC1	See comments regarding DA 128-5-2005, Schedule 5, Condition 5.
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555	No incidents reported to EPA.	NC1	See comments regarding DA 128-5-2005, Schedule 5, Condition 5.
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	No incidents reported to EPA.	NC1	See comments regarding DA 128-5-2005, Schedule 5, Condition 5.
R3	Written report			
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.	NA - EPA has requested a written report.	NA	
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.	NA - EPA has requested a written report.	NA	

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Section	Condition	Evidence verified	Compliance	Comments and recommendations
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.	NA - EPA has requested a written report.	NA	
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.	-	-	
	General conditions			
G1	Copy of licence kept at the premises			
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	Sighted EPL 12939.	C	
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	-	-	
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Hardcopy of licence is available.	C	

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