## **Notice of Modification**

## Section 75W of the Environmental Planning and Assessment Act 1979

As delegate of the Minister for Planning, I modify the development consent referred to in Schedule 1, as set out in Schedule 2.

Oliver Holm

Executive Director

Resource Assessments & Compliance

Sydney

13/3/201

#### **SCHEDULE 1**

The development consent (DA 213-10-99) for the Jandra Quarry, granted by the Minister for Urban Affairs and Planning on 30 March 2000.

## **SCHEDULE 2**

- 1. In Schedule 1, delete the words "("the Applicant")", "("the Minister")" and "("the development")".
- 2. Delete Schedule 2 and Attachments 1 & 2, and insert the following:

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#### **DEFINITIONS**

Aboriginal object

Annual review Applicant

BCA Council Day

Department DRE

Development

EA (Mod 5)

EPA Act
EP&A Regulation

EPL Evening Feasible

Incident

Land

Material harm to the environment

Minister
Mitigation
Morning Shoulder
NOW
OEH
POEO Act
Previous approvals

Public infrastructure

Quarrying operations

Quarry products

Reasonable

Any item that provides evidence of the use of an area by Aboriginal people, as defined under the *National Parks and Wildlife Act* 1974

The review required by condition 4 of Schedule 5

CSR Pty Limited, Holcim(Australia) Pty Limited or any other person or persons who rely on this consent to carry out the development that is subject to this consent

Building Code of Australia Greater Taree City Council

The period from 7 am to 6 pm, Monday to Saturday, and 8 am to 6 pm

Sunday and Public Holidays

Department of Planning and Environment

Division of Resources and Energy (within the Department of Trade and Investment, Regional Infrastructure and Services)

The development as described in the documents listed in condition 2 of Schedule 2

Modification Application DA 231-10-00 Mod 5 and accompanying Environmental Assessment entitled *Jandra Quarry Intensification in Production*, and dated June 2014, and the Response to Submissions entitled *Jandra Quarry Intensification in Production Submissions Report*, dated October 2014.

**Environment Protection Authority** 

Environmental Planning and Assessment Act 1979
Environmental Planning and Assessment Regulation 2000
Environment Protection Licence issued under the POEO Act

The period from 6 pm to 10 pm

Feasible relates to engineering considerations and what is practical to

build or carry out

A set of circumstances that:

 causes, or threatens to cause, material harm to the environment; and/or

breaches or exceeds the limits or performance measures/criteria in this consent

As defined in the EP&A Act, except where the term is used in the noise and air quality conditions in Schedules 3 and 4 of this consent, where it is defined as the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent

Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial

Minister for Planning, or delegate

Activities associated with reducing the impacts of the development

The period from 6am to 7am, Monday to Saturday

NSW Office of Water

Office of Environment and Heritage

Protection of the Environment Operations Act 1997

(a) Development Application No. 231-10-99 and the accompanying Environmental Impact Statement, dated October, 1999;

(b) Statement of Environmental Effects titled Jandra Quarry – The Enlargement of an Overburden Emplacement Area, dated June 2002;

(c) Modification Application MOD 199-6-2002;

(d) Modification Application DA 231-10-99 Mod 3 and the accompanying report titled Section 96 Report for Readymix – Jandra Quarry, dated August 2007; and

(e) Modification Application DA 231-10-99 Mod 4 and document entitled *Jandra Quarry Clarification of Production Limits Environmental Assessment*, dated February 2012.

Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, etc.

The extraction, processing and transportation of extractive materials on the site and the associated removal of vegetation, topsoil and overburden.

Includes all saleable quarry products, but excludes tailings and other wastes

Reasonable relates to the application of judgement in arriving at a

decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements

The restoration of land disturbed by the development to a good condition, ensuring it is safe, stable, non-polluting environment and appropriately vegetated.

Reduced level

Roads and Maritime Services

Secretary of the Department, or nominee Secretary

Rehabilitation

RL RMS

## SCHEDULE 2 ADMINISTRATIVE CONDITIONS

#### OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific criteria in this consent, the Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.

#### **TERMS OF CONSENT**

- 2. The Applicant shall carry out the development generally in accordance with the:
  - (a) previous approvals;
  - (b) EA (Mod 5); and
  - (c) conditions of this consent.

Note: The general layout and stages of the development are shown on the plans in Appendix 1.

- 3. If there is any inconsistency between the documents identified in condition 2, the more recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail over all other documents to the extent of any inconsistency.
- 4. The Applicant shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:
  - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent;
  - (b) any reviews, reports or audits, commissioned by the Department regarding compliance with this consent; and
  - (c) the implementation of any actions or measures contained in these documents.

#### **LIMITS ON CONSENT**

5. The Applicant may carry out quarrying operations on the site until 31 March 2045.

Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary. Consequently, this consent will continue to apply in all other respects other than the right to conduct quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.

- 6. The Applicant shall not carry out quarrying operations below a level of RL 20 m AHD.
- The Applicant shall not extract more than 16.5 million tonnes of quarry products from the site under this
  consent.
- 8. The Applicant shall not extract more than 490,000 tonnes of quarry products from the site in any calendar year.
- 9. The Applicant shall not transport more than 475,000 tonnes of quarry products from the site in any calendar year.

#### HOURS OF OPERATION

10. The Applicant shall comply with the operating hours in Table 1.

Table 1 - Operating Hours

Day	Extraction and processing operations	Transportation operations	Asphalt Plant and associated transport (on a campaign basis)	
Monday – Friday	6 am to 10 pm	6 am to 10 pm	24 hours a day	
Saturday	6 am to 6 pm	6 am to 10 pm	24 hours a day	
Sundays and Public Holidays	None	None	24 hours a day	

The following activities may be carried out on the site outside the hours specified in Table 1:

(a) return of trucks to the site prior to 12 midnight Monday to Saturday;

- (b) delivery or dispatch of materials as requested by Police, Fire Brigade or other similar authorities; and
- (c) emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

In circumstances outlined in (b) and (c), the Applicant shall notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.

#### STRUCTURAL ADEQUACY

11. The Applicant shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

#### **DEMOLITION**

12. The Applicant shall ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.

#### PROTECTION OF PUBLIC INFRASTRUCTURE

- 13. The Applicant shall:
  - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
  - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

Note: This condition does not apply to damage to roads caused as a result of general road usage.

#### **OPERATION OF PLANT AND EQUIPMENT**

14. The Applicant shall ensure that all the plant and equipment used at the site is maintained and operated in a proper and efficient manner.

#### STAGED SUBMISSION OF ANY STRATEGY, PLAN OR PROGRAM

- 15. With the approval of the Secretary, the Applicant may:
  - (a) submit any strategy, plan or program required by this consent on a progressive basis; and
  - (b) combine any strategy, plan or program required by this consent with any similar strategy, plan or program required for the development.

To ensure these strategies, plans or programs are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval.

#### Notes:

- While any strategy, plan or program may be submitted on a progressive basis, the Applicant will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.
- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must
  clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to
  any future stages, and the trigger for updating the strategy, plan or program.

#### IDENTIFICATION OF APPROVED LIMITS OF EXTRACTION

- 16. Prior to 31 August 2015, the Applicant shall:
  - (a) engage a registered surveyor to mark out the boundaries of the approved area of extraction and the boundaries of the approved infrastructure area; and
  - (b) submit a survey plan of these boundaries to the Secretary.
- 17. The Applicant shall ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify the location of these boundaries and that guarrying operations are contained within the approved areas.

#### PRODUCTION DATA

18. The Applicant shall provide annual quarry production data to DRE using the standard form for that purpose; and report these data in the Annual Review (see condition 4 of Schedule 5).

## SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

## NOISE

#### Noise Criteria

1. The Applicant shall ensure that the noise generated by the development does not exceed the criteria in Table 2 or Table 3 at any residence on privately-owned land.

Table 2: Noise criteria – quarrying operations only dB(A)

Location	6 am - 10 pm (L <sub>Aeq(15 min)</sub> )
R1	46
R5	40
R2, R4, R6	36
R7	35

Table 3: Noise criteria - quarrying operations & asphalt plant production combined dB(A)

Location	6 am - 10 pm (L <sub>Aeq(15 min)</sub> )	10 pm – 6 am	
	Carry To Priv (=xed(to trimit)	(LAeg(15 min))	(LA1(1 min))
R1	48	46	51
R5	41	39	51
R4	40	39	51
R2, R6	40	35	48
R7	36	35	48

#### Notes:

- Receiver locations are shown on the figure in Appendix 2.
- Condition 10 of Schedule 2 prohibits quarrying operations during the hours 10 pm 6 am.

Noise generated by the development is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy* (as may be updated from time-to-time). Appendix 3 details the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

However, these criteria do not apply if the Applicant has a negotiated agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.

## **Additional Noise Mitigation Upon Request**

2. Upon receiving a written request from the owner of any residence on property R1 the Applicant shall implement additional noise mitigation measures (such as double glazing, insulation, or air conditioning) at the residence in consultation with the owner. These measures must be reasonable and feasible and directed towards reducing the noise impacts of the project on the residence.

If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

However, the obligation to implement noise mitigation measures does not apply if the Applicant has a negotiated agreement with the owner/s of the relevant residence or land that sets aside noise mitigation measures under the terms of this consent, and the Applicant has advised the Department in writing of the terms of this agreement.

#### **Operating Conditions**

- 3. The Applicant shall:
  - (a) implement best practice management to minimise the construction, operational and transportation noise of the development;
  - (b) minimise the noise impacts of the development during meteorological conditions when the noise limits in this consent do not apply (see Appendix 3);
  - (c) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent; and
  - (d) regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent,

to the satisfaction of the Secretary.

### Noise Management Plan

- 4. The Applicant shall prepare and implement a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be submitted to the Secretary for approval by 31 August 2015;
  - (b) describe the measures that would be implemented to ensure:
    - · compliance with the noise criteria in this consent;
    - · best management noise minimisation practice is employed on site;
    - noise emissions from trucks on the site after 10 pm do not annoy neighbouring residents; and
    - the noise impacts of the development are minimised during any meteorological conditions when the noise limits in this consent do not apply; and
  - (c) detail a monitoring program that will be put in place to measure noise from the development against the noise criteria in Table 2 and 3, and which:
    - includes quarterly attended monitoring for the first two years of each of the three Stages of the development, as shown in the three figures in Appendix 1 (this monitoring must take place within a 24 hour asphalt campaign, if any such campaign is conducted during the quarter), and thereafter annually unless the Secretary agrees otherwise; and
    - · evaluates and reports on the effectiveness of the noise management system on site.

#### **BLASTING**

## **Blasting Impact Assessment Criteria**

5. The Applicant shall ensure that blasting on site does not cause any exceedance of the criteria in Table 4.

Table 4: Blasting criteria

Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Any residence on	120	10	0%
privately owned land, or any public infrastructure	115	5	5% of the total number of blasts over a period of 12 months

However, these criteria do not apply if the Applicant has a written agreement with the relevant owner to exceed the limits in Table 4, and the Applicant has advised the Department in writing of the terms of this agreement.

#### **Blasting Hours**

6. The Applicant shall only carry out blasting on site between 9 am and 5 pm Monday to Friday and 9 am to 3 pm Saturday. No blasting is allowed on Sundays or public holidays, or at any other time without the written approval of the Secretary.

#### **Blasting Frequency**

7. The Applicant may carry out a maximum of 2 blasts per month on site. This condition does not apply to blasts required to ensure the safety of the quarry or workers on site.

Note: For the purposes of this condition a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the quarry.

## **Operating Conditions**

- 8. The Applicant shall:
  - (a) implement best management practice to:
    - protect the safety of people and livestock in the areas surrounding blasting operations;
    - protect public or private infrastructure/property in the surrounding area from damage from blasting operations;
    - protect the Pacific Highway from flyrock from blasting operations; and
    - · minimise the dust and fume emissions of any blasting;
  - (b) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site; and
  - (c) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent,

to the satisfaction of the Secretary.

#### Blast Management Plan

- 9. The Applicant shall prepare and implement a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be submitted to the Secretary for approval by 31 August 2015;
  - (b) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent;
  - include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this consent;
  - (d) include a blast fume management protocol to demonstrate how emissions will be minimised including risk management strategies if blast fumes are generated;
  - (e) include public notification procedures on the blasting schedule; and
  - (f) include a protocol for investigating and responding to complaints.

#### **AIR QUALITY**

#### Air Quality Impact Assessment Criteria

10. The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables 5, 6 and 7 at any residence on privately-owned land

Table 5: Long-term impact assessment criteria for particulate matter

Pollutant	Averaging Period	<sup>d</sup> Criterion
Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 μg/m <sup>3</sup>
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>а</sup> 30 µg/m <sup>3</sup>

Table 6: Short-term impact assessment criteria for particulate matter

Pollutant	Averaging Period	<sup>d</sup> Criterion
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>а</sup> 50 µg/m <sup>3</sup>

Table 7: Long-term impact assessment criteria for deposited dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month

Notes for Tables 5 to 7:

- Total impact (ie incremental increase in concentrations due to the development plus background concentrations due to all other sources);
- b. Incremental impact (ie incremental increase in concentrations due to the development on its own);
- c. Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air Determination of Particulate Matter Deposited Matter Gravimetric Method: and
- d. Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed to by the Secretary in consultation with the EPA.

#### Odour

11. The Applicant shall not cause or permit the emission of offensive odour beyond the boundaries of the site.

#### **Operating Conditions**

- 12. The Applicant shall:
  - (a) implement best practice management to minimise the odour and dust emissions of the development;
  - (b) carry out regular air quality monitoring to determine whether the development is complying with the relevant conditions of this consent;
  - (c) regularly assess air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this consent:
  - (d) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d under Table 7); and
  - (e) minimise the area of surface disturbance and maximise progressive rehabilitation of the site, to the satisfaction of the Secretary.

## **Quarry-owned Land**

- 13. The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria in Tables 5, 6, and 7 at any occupied residence on quarry-owned land unless:
  - (a) the tenant has been notified of any health risks associated with such exceedances in accordance with the notification requirements under Schedule 4 of this consent;
  - (b) the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice;
  - (c) air quality monitoring is regularly undertaken to inform the tenant of the actual particulate emissions at the residence; and
  - (d) data from this monitoring is presented to the tenant in an appropriate format for a medical practitioner to assist the tenant in making informed decisions on health risks associated with occupying the property,

to the satisfaction of the Secretary.

#### Air Quality Management Plan

- 14. The Applicant shall prepare and implement an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be submitted to the Secretary for approval by 31 August 2015;
  - (b) describe the measures that would be implemented to ensure:
    - compliance with the relevant conditions of this consent;
    - · best practice management is employed; and
    - the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;
  - (c) describe the proposed air quality management system; and
  - (d) include an air quality monitoring program that:
    - is capable of evaluating the performance of the development;
    - includes a protocol for determining any exceedances of the relevant conditions of consent;
    - · effectively supports the air quality management system; and
    - evaluates and reports on the adequacy of the air quality management system.

## **Meteorological Monitoring**

15. For the life of the development, the Applicant shall ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline.

## Greenhouse Gas Emissions

16. The Applicant shall implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site.

#### **SOIL AND WATER**

#### **Water Supply**

17. The Applicant shall ensure it has sufficient water for all stages of the development, and if necessary, adjust the scale of quarrying operations to match the available water supply.

### **Surface Water Discharges**

18. The Applicant shall ensure that all surface water discharges from the site comply with the discharge limits in any EPL which regulates water discharges from the site, or with section 120 of the POEO Act.

### Soil and Water Management Plan

19. The Applicant shall prepare and implement a Soil and Water Management Plan for the development to the satisfaction of the Secretary. This plan must be prepared in consultation with the Council and NOW, by suitably qualified and experience person/s whose appointment has been approved by the Secretary, and be submitted to the Secretary for approval by 31 August 2015.

In addition to the standard requirements for management plans (see condition 3 of Schedule 5) this plan must include a:

- (a) Site Water Balance that:
  - · includes details of:
    - sources and security of water supply, including contingency planning to ensure demand will be met under all climatic conditions;
    - o the site water storage capacity and licensing requirements for all stages of the development;
    - water use and management on site; and
- (b) Surface Water Management Plan that includes:
  - a detailed description of the surface water management system for the development, including the
    - o clean water diversion system;
    - o erosion and sediment controls; and
    - o the water storages required for each stage of the development;
  - identification of all reasonable and feasible measures to improve the quality of surface water on the site, particularly those measures required to improve the water quality in the main dam, and a timeframe for the implementation of any identified improvements;
  - the measures that would be implemented to minimise water use on site;
  - · surface water impact assessment criteria;
  - a program to monitor surface water quality; and
  - a plan to respond to any exceedances of the performance criteria, and mitigate any adverse surface water impacts of the development; and
  - · reporting procedures.

## **On-Site Sewage Management**

20. The Applicant shall manage on-site sewage to the satisfaction of Council and the EPA.

#### **BIODIVERSITY AND REHABILITATION**

#### **Biodiversity and Rehabilitation Objectives**

21. The Applicant shall implement a biodiversity offset strategy and rehabilitate the site to the satisfaction of the Secretary, in accordance with the rehabilitation strategy in the documents listed in condition 2 of Schedule 2 and the objectives in Table 8.

Table 8: Biodiversity and Rehabilitation objectives

Feature	Objective
Site (as a whole)	<ul> <li>Safe, stable and non-polluting.</li> <li>Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and has minimal visual impact when viewed from surrounding land.</li> </ul>
Land identified in the biodiversity offset strategy and other vegetated land	<ul> <li>Conserved and enhanced with native, endemic vegetation.</li> <li>Containing self-sustaining ecosystems.</li> </ul>

Surface Infrastructure	101	Decommissioned and removed, unless the Secretary agrees otherwise.
Quarry Benches	•	Landscaped and vegetated using native tree and understorey species, to minimise the visual impact of the quarry.
Quarry Pit Floor	•	Landscaped and revegetated using native tree and understorey species.

#### **Progressive Rehabilitation**

22. The Applicant shall rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation.

Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to disturbance in the future.

#### **Biodiversity Offset Strategy**

- 23. By 31 March 2016, the Applicant shall implement a strategy to offset the impacts of clearing 1.28 ha of Small-fruited Grey Gum - Tallowwood shrubby open forest on coastal foothills of the southern North Coast vegetation community by either:
  - (a) entering into a Biobanking agreement under the *Threatened Species Conservation Act 1995* to retire at least the number of Ecosystem Credits assessed using the Biobanking Credit Calculator; or
  - (b) implementing a strategy to provide a Biodiversity Offset Area of at least 7 ha of Small-fruited Grey Gum – Tallowwood shrubby open forest on coastal foothills of the southern North Coast vegetation community.

in consultation with OEH and to the satisfaction of the Secretary.

#### Long Term Security of Offset

24. By 30 September 2016, the Applicant shall make suitable arrangements to protect in perpetuity any Biodiversity Offset Area established under condition 23 above to the satisfaction of the Secretary.

Note: For the purposes of this consent, suitable arrangements may include the use of Public Positive Covenants in combination with Restrictions on Use of Land on the land title/s of the Biodiversity Offset Area. Other arrangements such as the use of Biobanking Agreements or transfer of lands to the national parks estate would also be considered for their suitability.

## Biodiversity and Rehabilitation Management Plan

- 25. The Applicant shall prepare and implement a Biodiversity and Rehabilitation Management Plan for the site to the satisfaction of the Secretary. This plan must:
  - (a) be prepared by suitably qualified person(s) whose appointment has been approved by the Secretary;
  - (b) be prepared in consultation with OEH and Council, and submitted to the Secretary for approval by 31 August 2015;
  - (c) describe the short, medium and long-term measures that would be implemented to:
    - · manage the native vegetation and fauna habitat on the site;
    - · implement the biodiversity offset strategy; and
    - ensure compliance with the biodiversity and rehabilitation objectives in Table 8, and progressive rehabilitation obligations in this consent;
  - include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy and the rehabilitation of the site, including triggers for any necessary remedial action;
  - (e) include a detailed description of the measures that would be implemented to:
    - minimise impacts on threatened species, populations and habitats as a result of the quarrying activities on the site;
    - enhance the quality of native vegetation and fauna habitat across the site and in the biodiversity offset area;
    - landscape the site to minimise visual and lighting impacts:
    - · minimise the impact of clearing on native fauna;
    - maximise the salvage of environmental resources from any area approved to be cleared –
      including tree hollows, vegetative and soil resources for beneficial reuse;
    - provide two nest boxes for each tree-hollow destroyed by vegetation clearing;
    - control weeds and feral pests;
    - control erosion:

- control access; and
- bushfire management;
- (f) include a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria;
- (g) identify the potential risks to rehabilitation of the site and the implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate these risks; and
- (h) include details of who would be responsible for monitoring, reviewing, and implementing the plan.

#### **Habitat for Threatened Fauna Species**

26. The Applicant shall ensure that the Biodiversity Offset Area provides suitable habitat for all threatened fauna species that have potential habitat within the 1.28 ha of land proposed to be cleared under EA (Mod 5).

#### Rehabilitation and Conservation Bond

- 27. Within 12 months of the approval of the Biodiversity and Rehabilitation Management Plan, the Applicant shall lodge a Rehabilitation and Conservation Bond with the Department to ensure that the biodiversity offset strategy and the rehabilitation of the site is implemented in accordance with the performance and completion criteria set out in the Biodiversity and Rehabilitation Management Plan. The sum of the bond shall be determined by:
  - (a) calculating the cost of implementing the biodiversity offset strategy and rehabilitating the site, and
  - (b) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary.

Note: If the rehabilitation of the site and the implementation of the biodiversity offset strategy is completed to the satisfaction of the Secretary, then the Secretary will release the bond. If the rehabilitation of the site and the implementation of the biodiversity strategy is not completed to the satisfaction of the Secretary, then the Secretary will call in all or part of the bond, and arrange for the completion of the relevant works.

- 28. Within 3 months of each Independent Environmental Audit (see condition 8 of Schedule 5), the Applicant shall review, and if necessary revise, the sum of the Rehabilitation and Conservation Bond to the satisfaction of the Secretary. This review must consider the:
  - (a) effects of inflation;
  - (b) likely cost of rehabilitating the site (taking into account the likely surface disturbance over the next 3 years of the development) and implementing the biodiversity offset strategy; and
  - (c) performance of the implementation of the rehabilitation of the site and the biodiversity offset strategy to date.

#### ABORIGINAL CULTURAL HERITAGE

- 29. The Applicant shall prepare and implement an Aboriginal Cultural Heritage Management Plan for the project to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with Aboriginal stakeholders;
  - (b) be submitted to the Secretary for approval by 31 August 2015;
  - (c) describe the measures that would be implemented to:
    - · manage known Aboriginal objects and sites;
    - monitor all new surface disturbance on site for unidentified Aboriginal objects;
    - manage the discovery of any human remains or previously unidentified Aboriginal objects on site;
       and
  - (d) ensure ongoing consultation with Aboriginal stakeholders in the management of any Aboriginal cultural heritage values on site.

#### **TRANSPORT**

#### **Operating Conditions**

- 30: The Applicant shall ensure that:
  - (a) all vehicles entering or leaving the site carrying material that is capable of generating wind-borne dust have their loads covered or suitably contained within the truck; and
  - (b) all laden vehicles leaving the site are cleaned of materials that may fall on the road, before leaving the site.

## **Pacific Highway Intersection**

- 31. The Applicant shall maintain the intersection of the Pacific Highway and the Jandra Quarry Access Road, for the duration of product transport from the site, to the satisfaction of the RMS.
- 32. The Applicant shall install and subsequently maintain street lighting at the intersection of the Pacific Highway and the Jandra Quarry Access Road, to the satisfaction of the RMS, prior to transporting quarry products from the site outside of the hours 7 am to 6 pm. Any works affecting the Pacific Highway must not take place without the prior approval of the RMS.

#### **Monitoring of Product Transport**

- 33. The Applicant shall keep accurate records of:
  - (a) the amount of quarry products, including asphalt, transported from the site (calendar month and vear):
  - (b) the number of laden vehicle movements to and from the site (day, calendar month and year); and
  - (c) publish these records on its website at the end of each calendar quarter.

#### **VISUAL IMPACTS**

- 34. The Applicant shall:
  - (a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development;
  - (b) ensure that all external lighting associated with the development complies with Australian Standard AS4282 (INT) 1997 Control of Obtrusive Effects of Outdoor Lighting, or its latest version; and
  - (c) take all practical measures to shield views of quarrying operations from users of public roads and privately-owned residences,

to the satisfaction of the Secretary.

#### **WASTE**

- 35. The Applicant shall:
  - (a) implement all reasonable and feasible measures to minimise the waste generated by the development;
  - (b) ensure that the waste generated by the development is appropriately stored, handled and disposed of; and
  - (c) monitor and report on effectiveness of the waste minimisation and management measures each calendar year,
  - to the satisfaction of the Secretary.
- 36. Except as expressly permitted in an EPL, the Applicant must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.

#### LIQUID STORAGE

37. The Applicant shall ensure that all liquid storage facilities are protected by appropriate bunding, which must exceed 110% of the stored volume of the liquid.

### **DANGEROUS GOODS**

38. The Applicant shall ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant *Australian Standards*, particularly AS1940 and AS1596, and the *Dangerous Goods Code*.

#### BUSHFIRE

- 39. The Applicant shall:
  - (a) ensure that the development is suitably equipped to respond to any fires on site; and
  - (b) assist the Rural Fire Service, emergency services and National Parks and Wildlife Service as much as possible if there is a fire in the surrounding area.

## SCHEDULE 4 ADDITIONAL PROCEDURES

#### NOTIFICATION OF LANDOWNERS

1. As soon as practicable after obtaining monitoring results showing an exceedance of any relevant criteria in Schedule 3, the Applicant shall notify affected landowners in writing of the exceedance, except where a negotiated agreement has been entered into in relation to that impact, and provide regular monitoring results to each affected landowner until the development is complying with the relevant criteria.

#### INDEPENDENT REVIEW

- 2. If an owner of privately-owned land considers the development to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.
- 3. If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant shall:
  - (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:
    - consult with the landowner to determine his/her concerns;
    - determine whether the development is complying with the relevant criteria in Schedule 3; and
    - if the development is not complying with these criteria then identify measures that could be implemented to ensure compliance with the relevant criteria; and
  - (b) give the Secretary and landowner a copy of the independent review.
- 4. If the independent review determines that the development is complying with the relevant criteria in Schedule 3, then the Applicant may discontinue the independent review with the approval of the Secretary.
- 5. If the independent review determines that the development is not complying with the relevant criteria in Schedule 3, then the Applicant shall:
  - (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring to determine whether these measures ensure compliance; or
  - (b) secure a written agreement with the landowner to allow exceedances of the relevant criteria, to the satisfaction of the Secretary.

## SCHEDULE 5 ENVIRONMENTAL MANAGEMENT CONDITIONS

## **Environmental Management Strategy**

- 1. The Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
  - (a) be submitted to the Secretary for approval by 31 August 2015;
  - (b) provide the strategic framework for the environmental management of the development;
  - (c) identify the statutory approvals that apply to the development;
  - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
  - (e) describe the procedures that would be implemented to:
    - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
    - receive, handle, respond to, and record complaints;
    - · resolve any disputes that may arise during the course of the development;
    - · respond to any non-compliance; and
    - · respond to emergencies; and
  - (f) include:
    - copies of any strategies, plans and programs approved under the conditions of this development consent; and
    - a clear plan depicting all the monitoring required to be carried out under the conditions of this
      consent.

### **Adaptive Management**

2. The Applicant shall assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Applicant shall, at the earliest opportunity:

- (a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur:
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the Secretary,

to the satisfaction of the Secretary.

## **Management Plan Requirements**

- 3. The Applicant shall ensure that the Management Plans required under this consent are prepared in accordance with any relevant guidelines, and include:
  - (a) detailed baseline data;
  - (b) a description of:
    - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
    - · any relevant limits or performance measures/criteria; and
    - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
  - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
  - (d) a program to monitor and report on the:
    - impacts and environmental performance of the development; and
    - effectiveness of any management measures (see (c) above);
  - (e) a contingency plan to manage any unpredicted impacts and their consequences;
  - a program to investigate and implement ways to improve the environmental performance of the development over time;
  - (g) a protocol for managing and reporting any:
    - incidents;
    - · complaints;
    - non-compliances with statutory requirements; and
    - · exceedances of the impact assessment criteria and/or performance criteria; and

(h) a protocol for periodic review of the plan.

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

#### **Annual Review**

- 4. By the end of March each year, the Applicant shall review the environmental performance of the development to the satisfaction of the Secretary. This review must:
  - (a) describe the development (including rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against:
    - the relevant statutory requirements, limits or performance measures/criteria;
    - the monitoring results of previous years; and
    - the relevant predictions in the documents listed in condition 2 of Schedule 2;
  - (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
  - (d) identify any trends in the monitoring data over the life of the development;
  - (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
  - (f) describe what measures will be implemented over the current calendar year to improve the environmental performance of the development.

## Revision of Strategies, Plans & Programs

- 5. Within 3 months of the submission of an:
  - (a) annual review under condition 4 above;
  - (b) incident report under condition 6 below;
  - (c) audit report under condition 8 below; and
  - (d) any modifications to this consent,

the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.

## REPORTING

### Incident Reporting

6. The Applicant shall notify, at the earliest opportunity, the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the development, the Applicant shall notify the Secretary and any other relevant agencies as soon as practicable after the Applicant becomes aware of the incident. Within 7 days of the date of the incident, the Applicant shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

## Regular Reporting

7. The Applicant shall provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

### INDEPENDENT ENVIRONMENTAL AUDIT

- 8. By 31 March 2016, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
  - (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
  - (b) include consultation with the relevant agencies;
  - (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water License (including any assessment, plan or program required under these approvals);

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

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

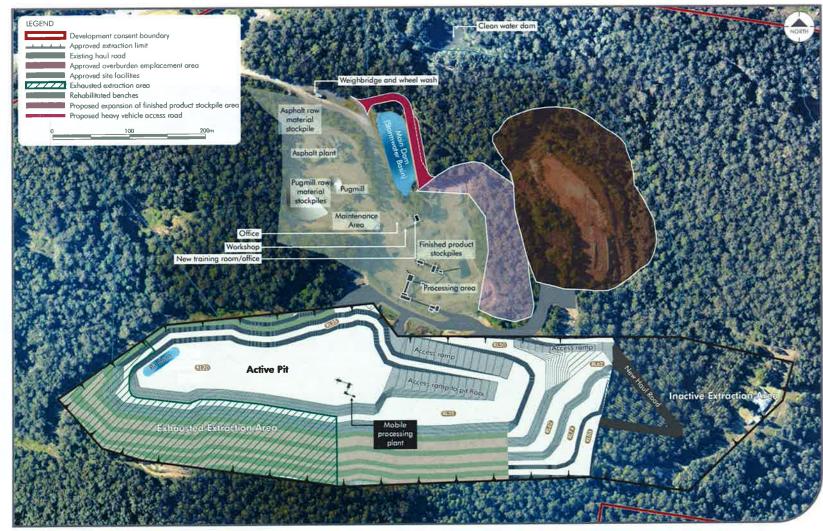
9. Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

#### **ACCESS TO INFORMATION**

- 10. By 31 August 2015, the Applicant shall:
  - (a) make the following information publicly available on its website:
    - the documents listed in condition 2 of Schedule 2;
    - · current statutory approvals for the development;
    - · approved strategies, plans or programs;
    - a summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;
    - a complaints register, which is to be updated on a quarterly basis;
    - the annual reviews (over the last 5 years);
    - any independent environmental audit, and the Applicant's response to the recommendations in any audit; and
    - any other matter required by the Secretary; and
  - (b) keep this information up-to-date, to the satisfaction of the Secretary.

## APPENDIX 1: DEVELOPMENT PLANS – STAGES 1, 2 & 3

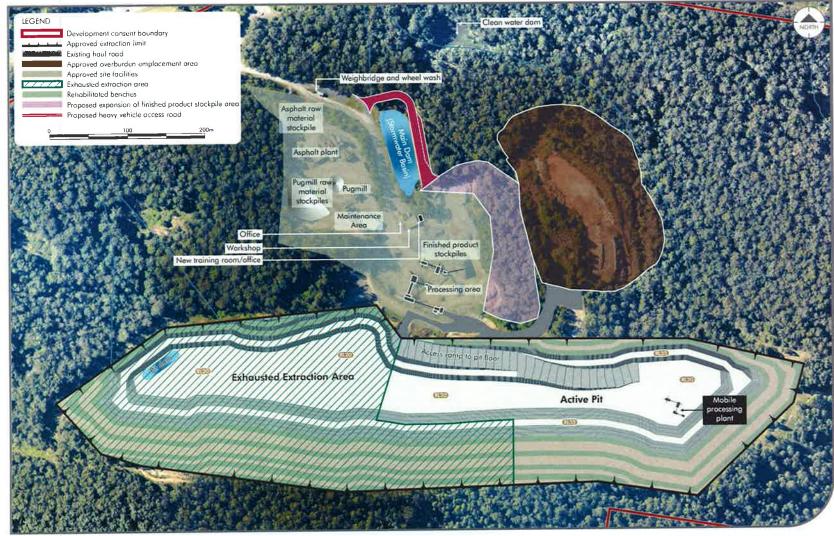






## PROPOSED STAGE 2 EXTRACTION

Environmental Assessment Jandra Quarry Possum Brush, New South Wales 2430

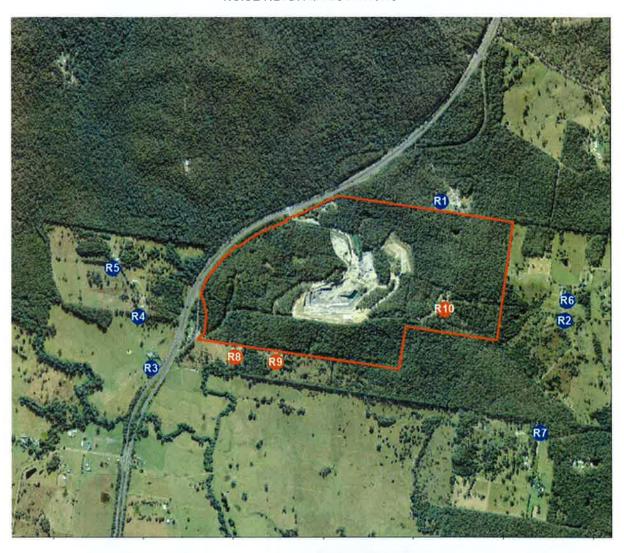


#### PROPOSED STAGE 3 EXTRACTION

Environmental Assessment Jandra Quary Possum Brush, New South Wales 2430

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# APPENDIX 2: NOISE RECEIVER LOCATIONS



- Blue circles show the location of privately-owned dwellings Orange circles show the location of company-owned dwellings

## APPENDIX 3 NOISE COMPLIANCE ASSESSMENT

## **Applicable Meteorological Conditions**

- 1. The noise criteria in Table 2 and 3 apply under all meteorological conditions except the following:
  - (a) wind speeds greater than 3 m/s at 10 m above ground level; or
  - (b) stability category F temperature inversion conditions and wind speeds greater than 2 m/s at 10 m above ground level; or
  - (c) stability category G temperature inversion conditions.

## **Determination of Meteorological Conditions**

2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be that recorded by the meteorological station required under condition 15 of Schedule 3.

#### **Compliance Monitoring**

- 3. Unless otherwise directed by the Secretary, attended quarterly monitoring is to be used to evaluate compliance with the relevant conditions of this consent.
  - Note: The Secretary may direct that the frequency of attended monitoring increase or decrease at any time during the life of the development.
- 4. Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the *NSW Industrial Noise Policy* (as amended from time to time), in particular the requirements relating to:
  - (a) monitoring locations for the collection of representative noise data;
  - (b) meteorological conditions during which collection of noise data is not appropriate;
  - (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and
  - (d) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.

