



DOC20/48699  
SSD 10417

Ms Melissa Anderson  
Environmental Assessment Officer  
Resource Assessments  
Planning and Assessment Group  
[melissa.anderson@planning.nsw.gov.au](mailto:melissa.anderson@planning.nsw.gov.au)

Dear Melissa

**Dubbo Quarry Extension Project – SSD 10417**

I refer to your email dated 16 January 2020 to Biodiversity and Conservation Division (BCD) seeking input into the Department of Planning, Industry and Environment Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the Dubbo Quarry Extension Project, Dubbo, NSW (SSD 10417).

It is understood that the project involves the continued operation of the quarry through the development of two new resource areas to the south and west of the existing quarry boundary.

BCD has considered your request and provides SEARs for the proposed development in **Attachments A and B**.

BCD recommends the EIS needs to appropriately address the following:

1. Biodiversity and offsetting
2. Aboriginal cultural heritage
3. Historic heritage
4. Water and soils
5. Flooding

Please note that for projects **not** defined as pending or interim planning applications under Part 7 or the *Biodiversity Conservation (Savings and Transitional) Regulation 2017* the Biodiversity Assessment Methodology (BAM) **must** be used to assess impacts to biodiversity in accordance with the *Biodiversity Conservation Act 2016* (BC Act). For this project the BAM must be used.

If you have any questions regarding this matter further please contact Conservation Planning Officer, Helen Knight on 02 6883 5327 or email [helen.knight@environment.nsw.gov.au](mailto:helen.knight@environment.nsw.gov.au).

Yours sincerely

A handwritten signature in black ink, appearing to read 'D Love'.

29 January 2020

**Debbie Love**  
**Acting Director North West**  
**Biodiversity and Conservation Division**

Attachment A - Environmental Assessment Requirements

Attachment B - Guidance Material

## Standard Environmental Assessment Requirements

<b>Biodiversity</b>
<ol style="list-style-type: none"> <li>1. Biodiversity impacts related to the proposed [development/project] are to be assessed in accordance with <a href="#">Section 7.9 of the Biodiversity Conservation Act 2017</a> the <a href="#">Biodiversity Assessment Method</a> and documented in a <a href="#">Biodiversity Development Assessment Report (BDAR)</a>. The BDAR must include information in the form detailed in the <i>Biodiversity Conservation Act 2016</i> (s6.12), <i>Biodiversity Conservation Regulation 2017</i> (s6.8) and <a href="#">Biodiversity Assessment Method</a>, unless DPIE and DPE determine that the proposed development is not likely to have any significant impacts on biodiversity values.</li> <li>2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the <a href="#">Biodiversity Assessment Method</a>.</li> <li>3. The BDAR must include details of the measures proposed to address the offset obligation as follows; <ul style="list-style-type: none"> <li>• The total number and classes of biodiversity credits required to be retired for the development/project;</li> <li>• The number and classes of like-for-like biodiversity credits proposed to be retired;</li> <li>• The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules;</li> <li>• Any proposal to fund a <a href="#">biodiversity conservation action</a>;</li> <li>• Any proposal to conduct ecological rehabilitation (if a mining project);</li> <li>• Any proposal to make a payment to the Biodiversity Conservation Fund.</li> </ul> <p>If seeking approval to use the variation rules, the BDAR must contain details of the <a href="#">reasonable steps</a> that have been taken to obtain requisite like-for-like biodiversity credits.</p> </li> <li>4. The BDAR must be submitted with all spatial data associated with the survey and assessment as per Appendix 11 of the BAM.</li> <li>5. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the <i>Biodiversity Conservation Act 2016</i>.</li> </ol>
<b>Aboriginal cultural heritage</b>
<ol style="list-style-type: none"> <li>6. The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the project and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH 2010), and guided by the <a href="#">Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011)</a> and consultation with DPIE regional branch officers.</li> </ol>
<ol style="list-style-type: none"> <li>7. Consultation with Aboriginal people must be undertaken and documented in accordance with the <a href="#">Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW)</a>. The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.</li> </ol>

<p>8. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to DPIE.</p>
<p><b>Historic heritage</b></p>
<p>9. The EIS must provide a heritage assessment including but not limited to an assessment of impacts to <i>State and local heritage</i> including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall:</p> <ol style="list-style-type: none"> <li>a. outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996),</li> <li>b. be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria),</li> <li>c. include a statement of heritage impact for all heritage items (including significance assessment),</li> <li>d. consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant), and</li> <li>e. where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.</li> </ol>
<p><b>Water and soils</b></p>
<p>10. The EIS must map the following features relevant to water and soils including:</p> <ol style="list-style-type: none"> <li>a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).</li> <li>b. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method).</li> <li>c. Wetlands as described in s4.2 of the Biodiversity Assessment Method.</li> <li>d. Groundwater.</li> <li>e. Groundwater dependent ecosystems.</li> <li>f. Proposed intake and discharge locations.</li> </ol>
<p>11. The EIS must describe background conditions for any water resource likely to be affected by the project, including:</p> <ol style="list-style-type: none"> <li>a. Existing surface and groundwater.</li> <li>b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.</li> <li>c. Water Quality Objectives (as endorsed by the NSW Government <a href="http://www.environment.nsw.gov.au/ieo/index.htm">http://www.environment.nsw.gov.au/ieo/index.htm</a>) including groundwater as appropriate that represent the community's uses and values for the receiving waters.</li> </ol>

- d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the [ANZECC \(2000\) Guidelines for Fresh and Marine Water Quality](#) and/or local objectives, criteria or targets endorsed by the NSW Government.
- e. Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions <http://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning>

12. The EIS must assess the impacts of the project on water quality, including:

- a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the project protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction.
- b. Identification of proposed monitoring of water quality.
- c. Consistency with any relevant certified Coastal Management Program (or Coastal Zone Management Plan)

13. The EIS must assess the impact of the project on hydrology, including:

- a. Water balance including quantity, quality and source.
- b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.
- c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.
- d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).
- e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.
- f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.
- g. Identification of proposed monitoring of hydrological attributes.

#### **Flooding hazards**

14. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:

- a. Flood prone land.
- b. Flood planning area, the area below the flood planning level.
- c. Hydraulic categorisation (floodways and flood storage areas).
- d. Flood hazard

15. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP, flood levels and the probable maximum flood, or an equivalent extreme event.

<p>16. The EIS must model the effect of the proposed project (including fill) on the flood behaviour under the following scenarios:</p> <ul style="list-style-type: none"><li>a. Current flood behaviour for a range of design events as identified in 14 above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.</li></ul>
<p>17. Modelling in the EIS must consider and document:</p> <p>18. Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies.</p> <p>19. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood, or an equivalent extreme flood.</p> <p>20. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazard categories and hydraulic categories.</p> <p>21. Relevant provisions of the NSW Floodplain Development Manual 2005.</p>
<p>22. The EIS must assess the impacts on the proposed project on flood behaviour, including:</p> <ul style="list-style-type: none"><li>a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.</li><li>b. Consistency with Council floodplain risk management plans.</li><li>c. Consistency with any Rural Floodplain Management Plans.</li><li>d. Compatibility with the flood hazard of the land.</li><li>e. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.</li><li>f. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.</li><li>g. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.</li><li>h. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council.</li><li>i. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the NSW SES and Council.</li><li>j. Emergency management, evacuation and access, and contingency measures for the development considering the full range of flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the NSW SES.</li><li>k. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.</li></ul>

## ATTACHMENT B

## Guidance Material

Title	Web address
<b>Relevant Legislation</b>	
<i>Biodiversity Conservation Act 2016</i>	<a href="https://www.legislation.nsw.gov.au/#/view/act/2016/63/full">https://www.legislation.nsw.gov.au/#/view/act/2016/63/full</a>
<i>Coastal Management Act 2016</i>	<a href="https://www.legislation.nsw.gov.au/#/view/act/2016/20/full">https://www.legislation.nsw.gov.au/#/view/act/2016/20/full</a>
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	<a href="http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/">http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/</a>
<i>Environmental Planning and Assessment Act 1979</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N</a>
<i>Fisheries Management Act 1994</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N</a>
<i>Marine Parks Act 1997</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N</a>
<i>National Parks and Wildlife Act 1974</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N</a>
<i>Protection of the Environment Operations Act 1997</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N</a>
<i>Water Management Act 2000</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N</a>
<i>Wilderness Act 1987</i>	<a href="http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N">http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N</a>
<b>Biodiversity</b>	
Biodiversity Assessment Method (OEH, 2017)	<a href="https://biodiversity-ss.s3.amazonaws.com/Uploads/1494298079/Biodiversity-Assessment-Method-May-2017.pdf">https://biodiversity-ss.s3.amazonaws.com/Uploads/1494298079/Biodiversity-Assessment-Method-May-2017.pdf</a>
Biodiversity Development Assessment Report	<a href="https://www.legislation.nsw.gov.au/#/view/act/2016/63/part6/div3/sec6.12">https://www.legislation.nsw.gov.au/#/view/act/2016/63/part6/div3/sec6.12</a>
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	<a href="https://biodiversity-ss.s3.amazonaws.com/Uploads/1494298198/Serious-and-Irreversible-Impact-Guidance.PDF">https://biodiversity-ss.s3.amazonaws.com/Uploads/1494298198/Serious-and-Irreversible-Impact-Guidance.PDF</a>
Accreditation Scheme for Application of the Biodiversity Assessment Metho Order 2017	<a href="https://www.legislation.nsw.gov.au/regulations/2017-471.pdf">https://www.legislation.nsw.gov.au/regulations/2017-471.pdf</a>
Biodiversity conservation actions	<a href="http://www.environment.nsw.gov.au/resources/bcact/ancillary-rules-biodiversity-actions-170496.pdf">www.environment.nsw.gov.au/resources/bcact/ancillary-rules-biodiversity-actions-170496.pdf</a>
Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules	<a href="http://www.environment.nsw.gov.au/resources/bcact/ancillary-rules-reasonable-steps-170498.pdf">www.environment.nsw.gov.au/resources/bcact/ancillary-rules-reasonable-steps-170498.pdf</a>
DPIE Threatened Species Website	<a href="http://www.environment.nsw.gov.au/threatenedspecies/">www.environment.nsw.gov.au/threatenedspecies/</a>
NSW BioNet (Atlas of NSW Wildlife)	<a href="http://www.bionet.nsw.gov.au/">www.bionet.nsw.gov.au/</a>
NSW guide to surveying threatened plants (OEH 2016)	<a href="http://www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf">www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf</a>
DPIE threatened species survey and assessment guideline information	<a href="http://www.environment.nsw.gov.au/threatenedspecies/surveyassessm entgdlns.htm">www.environment.nsw.gov.au/threatenedspecies/surveyassessm entgdlns.htm</a>

Title	Web address
BioNet Vegetation Classification - NSW Plant Community Type (PCT) database	<a href="http://www.environment.nsw.gov.au/research/Vegetationinformationsystem.htm">www.environment.nsw.gov.au/research/Vegetationinformationsystem.htm</a>
DPIE Data Portal (access to online spatial data)	<a href="http://data.environment.nsw.gov.au/">http://data.environment.nsw.gov.au/</a>
Fisheries NSW policies and guidelines	<a href="http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation">http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation</a>
List of national parks	<a href="http://www.environment.nsw.gov.au/NationalParks/parksearchtoz.aspx">http://www.environment.nsw.gov.au/NationalParks/parksearchtoz.aspx</a>
Revocation, recategorisation and road adjustment policy (OEH, 2012)	<a href="http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm">http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm</a>
Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)	<a href="http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm">http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm</a>
<b><u>Heritage</u></b>	
The Burra Charter (The Australia ICOMOS charter for places of cultural significance)	<a href="http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf">http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf</a>
Statements of Heritage Impact 2002 (HO & DUAP)	<a href="http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf">http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf</a>
NSW Heritage Manual (DUAP) (scroll through alphabetical list to 'N')	<a href="http://www.environment.nsw.gov.au/Heritage/publications/">http://www.environment.nsw.gov.au/Heritage/publications/</a>
<b><u>Aboriginal Cultural Heritage</u></b>	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/comconsultation/09781ACHconsultreq.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/comconsultation/09781ACHconsultreq.pdf</a>
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf</a>
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf</a>
Aboriginal Site Recording Form	<a href="http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf">http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf</a>
Aboriginal Site Impact Recording Form	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf</a>
Aboriginal Heritage Information Management System (AHIMS) Registrar	<a href="http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm">http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm</a>
Care Agreement Application form	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf</a>
<b><u>Water and Soils</u></b>	
<b>Acid sulphate soils</b>	
Acid Sulfate Soils Planning Maps via Data.NSW	<a href="http://data.nsw.gov.au/data/">http://data.nsw.gov.au/data/</a>
Acid Sulfate Soils Manual (Stone et al. 1998)	<a href="http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf">http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf</a>

Title	Web address
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	<a href="http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf">http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf</a> This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
<b>Flooding and Coastal Erosion</b>	
Reforms to coastal erosion management	<a href="http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm">http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm</a>
Floodplain development manual	<a href="http://www.environment.nsw.gov.au/floodplains/manual.htm">http://www.environment.nsw.gov.au/floodplains/manual.htm</a>
Guidelines for Preparing Coastal Zone Management Plans	<a href="http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf">http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf</a>
NSW Climate Impact Profile	<a href="http://climatechange.environment.nsw.gov.au/">http://climatechange.environment.nsw.gov.au/</a>
Climate Change Impacts and Risk Management	<a href="http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf">Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation</a>
<b>Water</b>	
Water Quality Objectives	<a href="http://www.environment.nsw.gov.au/ieo/index.htm">http://www.environment.nsw.gov.au/ieo/index.htm</a>
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	<a href="http://www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1">www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1</a>
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	<a href="http://deccnet/water/resources/AWQGuidance7.pdf">http://deccnet/water/resources/AWQGuidance7.pdf</a>
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	<a href="http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf">http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf</a>

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Melissa Anderson  
Environmental Assessment Officer  
Minerals Quarry Assessments  
NSW Planning, Industry & Environment  
GPO Box 39  
Sydney NSW 2001

Our ref: DOC20/62895

Your ref: SSD10417

Emailed: via Planning Portal

24 January 2020

Dear Ms Anderson

**Subject:** Request for Secretary's Environmental Assessment Requirements – Dubbo Quarry Continuation Project – SSD10417

Thank you for your email of 16 January 2020. This is a response from the NSW Department of Planning, Industry & Environment – Division of Resources & Geoscience.

Basalt is not a prescribed mineral under the *Mining Act 1992*. Therefore, the Division has no statutory role in authorising or regulating the extraction of this commodity, apart from its role under the *Work Health and Safety Act 2011* and associated regulations and the *Work Health and Safety (Mine and Petroleum Sites) Act 2013* and associated regulations, for ensuring the safe operation of mines and quarries. However, the Division is the principal government authority responsible for assessing the State's resources of construction materials and for advising State and local government on their planning and management.

All environmental reports (EIS or similar) accompanying Development Applications for extractive industry lodged under the *Environmental Planning & Assessment Act 1979* should include a resource assessment which:

- Documents the size and quality of the resource and demonstrates that both have been adequately assessed; and
- Documents the methods used to assess the resource and its suitability for the intended applications.

The above information should be summarised in the EIS, with full documentation appended. If deemed commercial-in-confidence, the resource assessment summary included in the EIS should commit to providing the Division with full resource assessment documentation separately. Applications to modify, expand, extend or intensify an existing consent that has already been adequately reported using the above protocol in publicly available documents, may restrict detailed documentation to the additional resources to be used, if accompanied by a summary of past resource assessments and of past production.

The Division collects data on the quantity of construction materials produced annually throughout the State. Forms are sent to all operating quarries at the end of each financial year for this purpose. The statistical data collected is of great value to Government and industry in planning and resource management, particularly as a basis for analysing trends in production and for estimating future demand for particular commodities or in particular regions. Production data may be



published in aggregated form, however production data for individual operations is kept strictly confidential.

In order to assist in the collection of construction material production data, the proponent should be required to provide annual production data for the subject site to the NSW Division of Resources and Geoscience as a condition of any new or amended development consent.

During the preparation of the EIS, The Division recommends that the proponent consult NSW Department of Planning & Environment's '*EIS Guideline - Extractive Industries – Quarries*'. This guideline is available from:

[http://www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/~/\\_media/4A89C0947A8C4D70A983F8EE1D7B9790.ashx](http://www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/~/_media/4A89C0947A8C4D70A983F8EE1D7B9790.ashx)

The Division would appreciate the opportunity for early consultation in relation to the proposed location of any biodiversity offset areas (both on and off site) or any supplementary biodiversity measures to ensure there is no consequent reduction in access to prospective land for mineral exploration, or potential for sterilisation of mineral or extractive resources.

Queries regarding the above information, and future requests for advice in relation to this matter, should be directed to the Division of Resources & Geoscience - Land Use team at [landuse.minerals@geoscience.nsw.gov.au](mailto:landuse.minerals@geoscience.nsw.gov.au).

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Andrew Helman'.

Andrew Helman

Senior Geoscientist – Land Use Assessment

Geological Survey of NSW, Division of Resources & Geoscience



OUT20/1198

3 February 2020

Department of Planning, Industry and Environment  
Major Projects

Attention; Melissa Anderson

Dear Melissa

**SEAR's Request –Dubbo Quarry Continuation Project SSD-10417**

Thank you for the opportunity to provide Secretary Environmental Assessment Requirements (SEARs) for the above proposal as per your correspondence dated 28 January 2020.

The NSW Department of Primary Industries (NSW DPI) Agriculture is committed to the protection and growth of agricultural industries, and the land and resources upon which these industries depend. Important issues for extractive industries are the potential impact on limited agricultural resources and the ability to rehabilitate the land to enable continued agricultural investment. This expansion should document the impact on agricultural land and industry that currently exists particularly to the east and south, and future rehabilitation outcomes that may include agricultural land use.

The continuation area contains land mapped as biophysical strategic agriculture land. This provides a guide to the consideration of the value of the land in this area.

NSW DPI Agriculture provides SEARs (Attachment 1) and a range of publications to assist consent authorities, community and proponents in addressing the recommended SEARs (Attachment 2).

Should you require clarification on any of the information contained in this response, please contact me on phone 68811250 or by email [mary.kovac@dpi.nsw.gov.au](mailto:mary.kovac@dpi.nsw.gov.au).

Yours sincerely

*Mary Kovac*

Mary Kovac  
**Agricultural Land Use Planning Officer**  
**Agricultural Land Use Planning**

## Attachment 1: SEARs Recommendations

Issue and desired outcome	Detail / Requirement
<b>Site Suitable for development</b>	<ul style="list-style-type: none"> <li>• Detail that the quarry is consistent with strategic plans and zone requirements</li> <li>• Complete a Landuse Conflict Risk Assessment (LUCRA) to identify potential land use conflict, in particular relating to separation distances and management practices to minimise odour, dust and noise from sensitive receptors. A LUCRA is described in the DPI Land Use Conflict Risk Assessment Guide.</li> <li>• Include a map to scale showing the above operational and infrastructure details including separation distances from sensitive receptors.</li> </ul>
<b>Consideration for impacts to agricultural resources and land</b>	<ul style="list-style-type: none"> <li>• Describe the current and potential <i>Important Agriculture Land</i> on the proposed development site and surrounding locality including the land capability and agricultural productivity.</li> <li>• Demonstrate that all significant impacts on current and potential agricultural developments and resources can be reasonably avoided or adequately mitigated.</li> <li>• Consider possible cumulative effects to agricultural enterprises and landholders.</li> <li>• Detail the expected life span of the proposed development</li> </ul>
<b>Bushfire risk identified and managed</b>	<ul style="list-style-type: none"> <li>• Risk assessment level and mitigation plan developed to address bush fire risk.</li> </ul>
<b>Suitable and secure water supply</b>	<ul style="list-style-type: none"> <li>• Estimated water demand and water availability should be clearly outlined in the proposal. The source of water and any sanitisation methods to be detailed in the application.</li> <li>• Outline any impacts to water use from agriculture and mitigation measures if required.</li> </ul>
<b>Surface &amp; Groundwater protected</b>	<ul style="list-style-type: none"> <li>• Proposed development design, operation and by-product management should be undertaken to avoid nutrient and sediment build up and minimise erosion, off site surface water movement and groundwater accession.</li> </ul>
<b>Biosecurity Standards met</b>	<ul style="list-style-type: none"> <li>• Include a biosecurity (pests and weeds) risk assessment outlining the likely plant, animal and community risks.</li> <li>• Develop a biosecurity response plan to deal with identified risks as well as contingency plans for any failures. Including monitoring and mitigation measures in weed and pest management plans.</li> </ul>
<b>Suitable traffic movements</b>	<ul style="list-style-type: none"> <li>• Consideration of the route for movements needs to be taken into account so that impacts on sensitive receptors are minimised (eg noise, dust, volume of traffic). This should include consideration of Travelling Stock Reserves<sup>1</sup> (TSR) and the movement of livestock or farm vehicles along / across the affected roads</li> </ul>
<b>Visual amenity achieved</b>	<ul style="list-style-type: none"> <li>• Amenity impacts are assessed and any necessary response to mitigate visual impacts is described and illustrated.</li> </ul>
<b>Land stewardship met</b>	<ul style="list-style-type: none"> <li>• Develop Rehabilitation and Decommissioning/Closure Plans that describes the design criteria of the final land use and landform along with the expected timeline for the rehabilitation program.</li> <li>• Outline monitoring and mitigation measures to be adopted for rehabilitation remedial actions.</li> </ul>

Issue and desired outcome	Detail / Requirement
<p><b>Adequate consultation with community</b></p>	<ul style="list-style-type: none"> <li>• Consult with relevant agencies such as on the design, construction and operation of the proposed infrastructure.</li> <li>• Consult with the owners / managers of affected and adjoining neighbours and agricultural operations in a timely and appropriate manner about; the proposal, the likely impacts and suitable mitigation measures or compensation.</li> <li>• Establish a complaints register that includes reporting and investigating procedures and timelines, and liaison with Council in relation to complaint issues.</li> </ul>
<p><b>Contingency and Environmental Management Plan developed</b></p>	<ul style="list-style-type: none"> <li>• Contingency plans should be developed to enable the operation to deal with emergency situations. Commitment to the preparation of an Emergency Management plan that outlines procedures and responsibilities for responding to bushfire threats and possible mass mortality events which might result from extreme climatic conditions, routine or emergency animal disease outbreaks.</li> </ul>

## Attachment 2: Guidelines for assessment

Title	Location
Land Use Conflict Risk Assessment Guide	<a href="http://www.dpi.nsw.gov.au/content/agriculture/resources/lup/development-assessment/lucra">www.dpi.nsw.gov.au/content/agriculture/resources/lup/development-assessment/lucra</a>
Agricultural Issues for Extractive industry Development	<a href="http://www.dpi.nsw.gov.au/content/agriculture/resources/lup/development-assessment/extractive-industries">http://www.dpi.nsw.gov.au/content/agriculture/resources/lup/development-assessment/extractive-industries</a>
Agricultural land use mapping resources in NSW: Users' Guide	<a href="https://www.dpi.nsw.gov.au/agriculture/lup/agriculture-industry-mapping/agricultural-land-use-mapping-resources-in-nsw-user-s-guide">https://www.dpi.nsw.gov.au/agriculture/lup/agriculture-industry-mapping/agricultural-land-use-mapping-resources-in-nsw-user-s-guide</a>

## **Major Projects - Dubbo Quarry Continuation Project (SSD-10417 SEARS)**

DPI Fisheries are responsible for ensuring that fish stocks are conserved and that there is “no net loss” of key fish habitats upon which they depend. To achieve this, the Department ensures that developments comply with the requirements of the *Fisheries Management Act 1994* (namely the aquatic habitat protection and threatened species conservation provisions in Parts 7 and 7A of the Act respectively) and the associated *Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013)*. In addition the Department is responsible for ensuring the sustainable management of commercial and recreational fishing and aquaculture within NSW.

DPI Fisheries have reviewed the scoping report and offer the following comments on the EA. The EA should specifically address the impacts on the aquatic ecology, waterway crossings (e.g. Eulomogo Creek), riparian buffer zones, and threatened species, populations and communities as proposed below;

### **GENERAL AQUATIC ECOLOGICAL ASSESSMENT**

The aquatic ecological environmental assessment should include the following information;

- A recent aerial photograph (preferably colour) of the locality (or reproduction of such a photograph) should be provided.
- Area which may be affected either directly or indirectly by the development or activity should be identified and shown on an appropriately scaled map (and aerial photographs).
- Waterways within the area of development are to be identified.
- Description and quantification of aquatic and riparian vegetation should be presented and mapped. This should include an assessment of the extent and condition of riparian vegetation and the extent and condition of freshwater aquatic vegetation and the presence of significant habitat features (e.g. gravel beds, snags, reed beds, etc)
- Quantification of the extent of aquatic and riparian habitat removal or modification which will result from the proposed development,
- Details of the location of all waterway crossings and construction designs, such as the new haul road from the existing quarry to the SEA across Eulomogo Creek.
- Aspects of the management of the proposal, both during construction and after completion, which relate to impact minimisation.

### **WATERWAY CROSSINGS**

DPI Fisheries need to be consulted with regards to the crossing design and methodology for construction of culverts, bridges, etc in watercourses that are considered to be *Key Fish Habitat*, particularly Eulomogo Creek. The design and construction of bridges, culverts, and temporary access tracks across all waterways should be undertaken in accordance with the Department's *Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013)*. The environmental assessment should provide details on waterway crossing design duration and timing of works, and the proposed mitigation measures to ensure fish passage is not impeded and that measures are taken to protect riparian and aquatic habitats.

### **THREATENED SPECIES, POPULATIONS AND ECOLOGICAL COMMUNITIES– FISHERIES MANAGEMENT ACT 1994**

The proposal should include a threatened aquatic species assessment (as per part 7A *Fisheries Management Act 1994*) to address whether there are likely to be any significant impacts on listed threatened species, populations or ecological communities listed under the *Fisheries Management Act 1994*, such as the Purple-Spotted Gudgeon, *Mogurnda adspersa*, which is listed under Schedule 4 (Endangered species) of the *FM Act* and is expected to occur with Eulomogo Creek.

Updated Threatened species distributions can be found at [www.dpi.nsw.gov.au/fishing/species-protection/threatened-species-distributions-in-nsw/freshwater-threatened-species-distribution-maps](http://www.dpi.nsw.gov.au/fishing/species-protection/threatened-species-distributions-in-nsw/freshwater-threatened-species-distribution-maps):

### **RIPARIAN BUFFER ZONES**

DPI Fisheries policy advocates the use of terrestrial buffer zones as per the *Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013)* available on the Department's website at <http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation> which states that "NSW DPI will generally require riparian buffer zones to be established and maintained for developments or activities in or adjacent to TYPE 1 or 2 habitats or CLASS 1-3 waterways." The department anticipate that adequate riparian buffer zones will be maintained adjacent to Eulomogo Creek as part of the continued quarrying activities proposed in this development.

Should you have any queries regarding this correspondence please contact me on (02) 6763 1255 or 0429 908 856.

D. Ward.

David Ward  
Fisheries Manager (Tamworth)



OUT20/660

Ms Melissa Anderson  
Resources Assessments  
NSW Department of Planning, Industry and Environment

[Melissa.Anderson@planning.nsw.gov.au](mailto:Melissa.Anderson@planning.nsw.gov.au)

Dear Ms Anderson

**Dubbo Quarry Continuation Project (SSD-10417)  
Comment on the Secretary's Environmental Assessment Requirements (SEARs)**

I refer to your email of 16 January 2020 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter.

The following advice for you to consider is from DPIE Water and NRAR. Please note the Department of Primary Industries (DPI) and Crown Lands now provide a separate response.

**DPIE – Water and NRAR**

**The SEARS should include:**

- The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased.
- A detailed and consolidated site water balance.
- Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.
- Proposed surface and groundwater monitoring activities and methodologies.
- Consideration of relevant legislation, policies and guidelines, including the NSW Aquifer Interference Policy (2012), the Guidelines for Controlled Activities on Waterfront Land (2018) and the relevant Water Sharing Plans (available at <https://www.industry.nsw.gov.au/water>).

Any further referrals to DPIE – NRAR & Water can be sent by email to:  
[landuse.enquiries@dpi.nsw.gov.au](mailto:landuse.enquiries@dpi.nsw.gov.au).

Any further referrals to DPI & Crown Lands can be sent by email to: [dpi.cabinet@dpi.nsw.gov.au](mailto:dpi.cabinet@dpi.nsw.gov.au) & [lands.ministerials@industry.nsw.gov.au](mailto:lands.ministerials@industry.nsw.gov.au) respectively.

Yours sincerely

Alistair Drew  
Policy Officer, Assessments  
**Water – Strategic Relations**  
23 January 2020

AU20/113  
Parcel 61819  
AD20/4481  
SPR:JAF

Your ref: SSD-10417

6 February 2020



Ms M Anderson  
Environmental Assessment Officer  
Department of Planning, Industry and Environment  
GPO Box 39  
SYDNEY NSW 2001

Dear Ms Anderson

**STATE SIGNIFICANT DEVELOPMENT 10417 – DUBBO QUARRY CONTINUATION PROJECT**  
**PROPERTY: Lot 222 DP 1247780, Lot 100 DP 628628, 22L Sheraton Road, Old Dubbo Road, Dubbo**

I refer to your email dated 16 January 2020 inviting comments on the Scoping Report prepared by EMM Consulting for the proposed continuation of an existing extractive industry at the abovementioned property.

The following comments are provided to assist in the preparation of the Secretary's Environmental Assessment Requirements (SEARs):

- Under Section 2.1 of the Report (Site Details) it refers to Lot 22 DP 793541 and Lot 1 DP 623367. These allotments were superseded by a boundary adjustment approved by Dubbo Regional Council in August 2018 (and subsequently registered with Land Registry Services on 31 January 2019). The site details and other property references within the Environmental Impact Statement (EIS) should therefore refer to Lot 222 DP 1247780 (owned by Holcim Pty Ltd), and Lot 100 DP 628628.
- Part of Lot 222 of which the Application pertains to (Western Extraction Area) is zoned RE2 Private Recreation pursuant to the Dubbo Local Environmental Plan (LEP) 2011. The permissibility of extractive industry is outlined in Clause 7(3) of State Environmental Planning Policy (Mining, Petroleum and Extractive Industries) 2007 and states that extractive industry is permissible with consent on land on which development for the purposes of *agriculture* or *industry* may be carried out. Pursuant to the Dubbo LEP 2011 both land uses are prohibited in the RE2 zone. Consequently, Council considers the development proposal prohibited in the RE2 zone, despite Section 4.38(3) of the Environmental Planning and Assessment Act 1979.



All communications to: **CHIEF EXECUTIVE OFFICER**

**ABN 53 539 070 928**

PO Box 81 Dubbo NSW 2830

**T** (02) 6801 4000 **F** (02) 6801 4259 **E** [council@dubbo.nsw.gov.au](mailto:council@dubbo.nsw.gov.au)

Civic Administration Building Church St Dubbo NSW 2830

**W** [dubbo.nsw.gov.au](http://dubbo.nsw.gov.au)



In addition to being prohibited in the RE2 zone, the development proposal is also considered contrary to the RE2 zone objectives which are:

- To enable land to be used for private open space or recreational purposes;
- To provide a range of recreational settings and activities and compatible land uses; and
- To protect and enhance the natural environment for recreational purposes.

Council considers the development proposal does not conform to the zone objectives. The purpose of the RE2 zoning here was originally to provide for a golf course development (private recreation) as was envisaged by the previous land owner. Additionally, it is also strategically located to act as a buffer between the quarrying activities in the IN3 zone and the surrounding residential zoned land. The encroachment of extractive industry into the RE2 zone will undermine this protective buffer. An *extractive industry (quarry)* is therefore considered to be an incompatible use in the zone.

- The Western Extraction Area (WEA) is proposed to be approximately 300 metres from residential zoned land, namely Lot 2 DP 880413 to the west. Presently this land is zoned R5 Large Lot Residential with a minimum lot size of 1.5 hectares. Dubbo Regional Council and the Department of Planning, Infrastructure and Environment are currently considering a Gateway Planning Proposal to rezone this land R2 Low Density Residential with a minimum lot size of 600m<sup>2</sup>. This would result in a development yield of approximately 365 residential allotments within close proximity to significant extractive industry operations. In addition, Lot 1 DP 880413 located approximately 500 metres to the north-west of the WEA contains a development consent for a 51 lot residential subdivision.

Given the potential for significant land use conflict, and the permissibility questions as raised previously, Council does not support the proposed WEA of the project. In general, it is not considered 'good planning practice' to locate an extractive industry adjacent to residential zoned land and residential development due to the land use conflicts that can arise. This is a matter of consideration under Clause 12 of State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007. Concerns are particularly raised with regards to dust, noise, traffic, vibration and visual amenity impacts to residential development, as well as other neighbouring development including the solar farm on Lot 2100 DP 1227782, located approximately 430 metres to the north of the WEA.

- While noting Council's specific concerns above, generally speaking any EIS shall contain reports which outline and give consideration to:
  - Noise and Vibration (including blasting frequency and methods);
  - Air quality (dust control);
  - Ecology (flora and fauna);
  - Aboriginal heritage;
  - Traffic;
  - Surface water and water balance assessment; and
  - Groundwater.

The respective reports shall clearly outline the development operations and management regimes, as well as outlining how potentially adverse impacts will be mitigated, particularly those potential impacts to residential receivers including the undeveloped residential zoned land to the west.

Such reports should also take into consideration the cumulative impacts of this proposal and any neighbouring extractive industries, noting the presence of the South Keswick Quarry on adjoining Lot 211 DP 1220433. State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 should be consulted as to matters of consideration.

The EIS should also detail the likely visual impacts of the development, during and post-operation from key vantage points and including practical mitigation measures to minimise visual impacts (including any proposed lighting) of the development.

- The proposed WEA is identified on the Natural Resource Biodiversity Map of Dubbo LEP 2011 as containing high level biodiversity and in accordance with the scoping report, contains Grey Box, Grassy Woodland, and Derived Native Grasslands of South Eastern Australia which is a known Endangered Ecological Community and is highly limited in the Dubbo Local Government Area.

Dubbo Regional Council requests the EIS provide accurate predictions of any vegetation to be cleared on site. This shall include an assessment of the likely biodiversity impacts of the development, undertaken in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report, and including a strategy to offset any residual impacts of the development in accordance with the offset rules under the Biodiversity Offsets Scheme.

- Section 3.6 of the Report identifies that as part of decommissioning activities, groundwater monitoring bores will be capped. Council suggests the bores remain in operation until such time as the site has been fully remediated and validation has been given.
- It is noted vehicular access to the development site will be provided via Sheraton Road. Three (3) schools are located along this roadway. Therefore any traffic analysis submitted shall demonstrate how impacts to these schools will be minimised. Such measures may include limiting truck movements during peak school drop off and pick up times.

Noting referral is required to be made to Roads and Maritime Services (RMS) pursuant to Section 16(2) of State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007, Council suggests the preparation of any traffic analysis be undertaken in consultation with RMS.

- Following on from the above, any traffic analysis shall provide details as to traffic movements and impacts on the local road network. The traffic analysis shall provide details as to:
  - Vehicle type;
  - Specific gross vehicle mass;
  - Vehicle length;
  - Expected daily volumes travelling to the site;
  - Capacity of Sheraton Road and Wellington Road (Mitchell Highway) to demonstrate ability to accommodate such traffic movements in addition to existing traffic loads;
  - Existing road conditions; and
  - Safety and efficiency of the existing road network.

The analysis shall also consider whether any upgrades to Sheraton Road and access into the site are required to be undertaken. In this regard, Council is open to entering into a Planning Agreement (PA) with the Applicant for the ongoing maintenance of Sheraton Road. This is an acknowledgement that the quarry will increase the amount of heavy traffic on Sheraton Road which will in turn require an increased maintenance regime. An example of a PA may involve an ongoing monetary contribution to Council based on the tonnage of extraction by the development.

- Reference shall be made to *Dubbo City Planning and Transportation Strategy 2036* which identifies land around the WEA as accommodating the future Southern Ring Road. It is recommended discussions be held with Dubbo Regional Council's Infrastructure Division as to the location and timing of such project to ensure any quarry access and operational requirements do not conflict with future transport links.
- Noting Eulomogo Creek transects the property, Council requests the EIS considers stormwater drainage, particularly through undertaking a hydraulic analysis of additional stormwater drainage into the creek and whether such waterway can accommodate any additional stormwater runoff from the development. Such analysis shall also demonstrate any additional discharge into the creek will not cause detrimental flooding impacts to downstream property.

As part of the stormwater analysis and final design, Council requests that prior to discharge into the existing stormwater system (Eulomogo Creek), the developer shall install at their own expense a pollution control system which will collect all oil, sediment and litter produced by this development. A maintenance agreement, maintenance plan and schedule are to be provided to ensure the property owner maintains the pollution control system, and the water quality and quantity systems remain effective during both the extractive and restoration stages. All works are to be undertaken in accordance with Dubbo Regional Council's adopted AUS-SPEC #1 Development Specification Series – Design and Construction.

In addition, potential flooding impacts of Eulomogo Creek shall also be considered. It shall be demonstrated that upstream flows of Eulomogo Creek during a 1% Annual Exceedance Probability (AEP) Flood event will not detrimentally impact on quarry operations and infrastructure construction. Likewise, it shall be demonstrated the development will not detrimentally impact on existing flood characteristics through altering hydraulic behaviours.

- Details appear to be lacking with respect to how it is proposed for vehicles to cross Eulomogo Creek. The EIS will need to address this matter in detail outlining whether it is proposed to construct a bridge, whether this bridge is above or below the 1% AEP, or whether it is intended to construct a causeway. The EIS should address any potential flooding impacts on downstream properties, any potential environmental impact or any potential impacts on natural resources.
- In addressing the Dubbo LEP 2011, attention should be given to Clause 5.14 *Siding Spring Observatory – Maintaining Dark Sky*. The EIS shall demonstrate the development will not result in the emission of 1,000,000 lumens, and generally consider the requirements of The Dark Skies Guidelines.

I trust this is of assistance and look forward to receiving the completed Environmental Impact Statement and making further comment.

If you have any enquiries in this matter, please do not hesitate to contact Council's Senior Planner, Shaun Reynolds, during normal office hours, on 6801 4000.

Yours faithfully

A handwritten signature in black ink, appearing to be 'Stephen Wallace', written over a circular stamp or seal.

*Stephen Wallace*

Director Development and Environment





Our Reference: SF20/4914; DOC20/37104-2

Industry Assessments  
Department of Planning, Industry and Environment  
320 Pitt Street  
SYDNEY NSW 2000

Attention: Melissa Anderson

29 January 2020

Dear Melissa

**Request for Secretary's Environmental Assessment Requirements - Dubbo Quarry Continuation Project (SSD-10417)**

I refer to your request on 16 January 2020 for the Environment Protection Authority (EPA) to provide input to the Secretary's Environmental Assessment Requirements for an Environmental Impact Statement (EIS) for the proposed Dubbo Quarry Continuation Project (the project) located at Sheraton Road, Dubbo.

The EPA understand that the proponent is Holcim (Australia) Pty Limited, the owner and operator of the Dubbo Quarry located at Sheraton Road, Dubbo. The proponent currently holds Environment Protection Licence number 2212 (EPL 2212) for land-based extractive activity at the location.

The EPA has reviewed the Scoping Report for the Dubbo Quarry Expansion Project that accompanied the request, and identified the information it requires to adequately assess the proposal which is contained in **Attachment 1**. Guidance material is referenced in the attachment to assist with assessment.

In summary, the EPA's key information requirements for the proposal include an adequate assessment of air quality impacts, noise impacts and water management.

The activity as proposed will continue to be a scheduled activity (Extractive Industry and Crushing Grinding and Separating) under the *Protection of the Environment Operations Act 1997*. Therefore, any increase in extractive or processing limits, or other changes regulated by EPL 2212, will require a separate licence variation application to the EPA should development consent be granted.

If you have any questions or wish to discuss this matter further, please contact Steve Redden at the EPA's Central West Dubbo office by telephoning 02 6883 5357 or by email at [central.west@epa.nsw.gov.au](mailto:central.west@epa.nsw.gov.au).

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Duncan McGregor'.

**DUNCAN MCGREGOR**  
**Acting Unit Head Central West Region**  
**Environment Protection Authority**

<b>Phone</b> 131 555	<b>Fax</b> +61 2 9995 5999	PO Box 1388	L102,346 Panorama	
<b>Phone</b> +61 2 6333 3800	<b>TTY</b> 133 677	Bathurst	Avenue	<b>info@epa.nsw.gov.au</b>
(from outside NSW)	<b>ABN</b> 43 692 285 758	NSW 2795 Australia	Bathurst NSW	<b>www.epa.nsw.gov.au</b>
			2795 Australia	

## ATTACHMENT 1

### **EPA INPUT TO EIS REQUIREMENTS - DUBBO QUARRY CONTINUATION PROJECT**

The Environmental Impact Statement (EIS) should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines mentioned.

#### **Air quality**

The EIS should include a detailed air quality impact assessment (AQIA). The AQIA should:

1. Identify all potential discharges of fugitive and point source emissions of pollutants including dust for all stages of the proposal and assess the risk associated with those emissions. All processes that could result in air emissions must be identified and described. Sufficient detail to accurately communicate the characteristics and quantity of all emissions must be provided. Assessment of risk relates to environmental harm, risk to human health and amenity.
2. Justify the level of assessment undertaken on the basis of risk factors, including but not limited to:
  - a. proposal location;
  - b. characteristics of the receiving environment;
  - c. type and quantity of pollutants emitted.
3. Describe the receiving environment in detail. The proposal must be contextualised within the receiving environment (local, regional and inter-regional as appropriate). The description must include but need not be limited to:
  - a. meteorology and climate;
  - b. topography;
  - c. surrounding land-use;
  - d. ambient air quality.
4. Include a consideration of 'worst case' emission scenarios and impacts at proposed emission limits.
5. Account for cumulative impacts associated with existing emission sources as well as any currently approved developments linked to the receiving environment.
6. Include air dispersion modelling where there is a risk of adverse air quality impacts, or where there is sufficient uncertainty to warrant a rigorous numerical impact assessment. Air dispersion modelling must be conducted in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (2016), available at:  
<https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/modelling-assessing-air-emissions>.
7. Demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations (POEO) Act 1997* and the *POEO (Clean Air) Regulation (2010)*.
8. Detail emission control techniques/practices that will be employed by the proposal. Consideration should be given to dust management techniques where water is unavailable or limited, and the development of a Trigger Action Response Plan (TARP).

## Noise and Vibration

In relation to noise and vibration impacts, the following matters should be addressed (where relevant) as part of the Environmental Assessment:

1. Construction noise associated with the proposed development should be assessed using the *Interim Construction Noise Guideline* (DECC 2009), available at: <https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interim-construction-noise-guideline>.
2. Vibration from all activities (including construction and operation) to be undertaken on the premises should be assessed using the guidelines contained in *Assessing Vibration: a technical guideline* (DEC 2006), available at: <https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/assessing-vibration>.
3. If blasting is required for any reasons during the construction or operational stage of the proposed development, blast impacts should be demonstrated to be capable of complying with the guidelines contained in *Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration* (ANZEC 1990), available at: <http://www.epa.nsw.gov.au/noise/blasting.htm>.
4. Operational noise from all industrial activities proposed (including private haul roads and private railway lines) to be undertaken on the premises should be assessed using the Noise Policy for Industry (EPA 2017), available at: [https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-\(2017\)](https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-(2017)).
5. Noise from increased road traffic on public roads should be assessed in accordance with the *NSW Road Noise Policy* (DECCW 2011) and associated application notes, available at: <https://www.epa.nsw.gov.au/your-environment/noise/transport-noise>.

## Water

The EIS should:

1. Describe water usage for the proposal including the position of any intakes and discharges, volumes, water quality and frequency of all water discharges.
2. Describe existing surface and groundwater quality. An assessment needs to be undertaken for any water resource likely to be affected by the proposal.
3. State the Water Quality Objectives for the receiving waters relevant to the proposal. These refer to the community's agreed environmental values and human uses endorsed by the NSW Government as goals for ambient water. Where groundwater may be impacted the assessment should identify appropriate groundwater environmental values. The *NSW Water Quality and River Flow Objectives* (2006) are available at: <https://www.environment.nsw.gov.au/ieo/index.htm>.
4. State the indicators and associated trigger values or criteria for the identified environmental values. This information should be sourced from:
  - a) the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (2018), for all uses except primary industries, available at: <https://www.waterquality.gov.au/anz-guidelines>.
  - b) the ANZECC & ARM CANZ (2000) Guidelines for Fresh and Marine Water Quality for primary industries users, available at: <https://www.waterquality.gov.au/anz-guidelines/resources/previous-guidelines/anzecc-armcanz-2000>.

5. State any locally specific objectives, criteria or targets which have been endorsed by the NSW Government.
6. Provide a water balance for the development including water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.
7. Demonstrate that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.
8. Describe the nature and degree of impact that any proposed discharges will have on the receiving environment.
9. Assess impacts against the relevant ambient water quality outcomes. Demonstrate how the proposal will be designed and operated to:
  - a) protect the Water Quality Objectives for receiving waters where they are currently achieved; and
  - b) contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved.
10. Where a discharge is proposed that includes a mixing zone, the proposal should demonstrate how wastewater discharged to waterways will ensure the water quality criteria for relevant chemical and non-chemical parameters are met at the edge of the initial mixing zone of the discharge, and that any impacts in the initial mixing zone are demonstrated to be reversible.
11. Describe how predicted impacts will be monitored and assessed over time. Water quality monitoring should be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutants in New South Wales* (2004), available at: <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/water/approvedmethods-water.pdf>.
12. Assess potential impacts on groundwater and groundwater dependent ecosystems.
13. Detail the erosion and sediment controls to be implemented to minimise erosion and sediment mobilisation at the site which have been designed in accordance with the requirements of the publication *Managing Urban Stormwater: Soils and Construction* (Landcom 2004) Volumes 1 through 2E, available at <https://www.environment.nsw.gov.au/research-and-publications/publications-search/managing-urban-stormwater-soils-and-construction-volume-1-4th-edition>. The EIS should show the location of each measure to be implemented for the construction and operational phases of the project. The measures to be considered include:
  - Sediment traps
  - Diversion banks
  - Sediment fences
  - Bunds (earth, hay, mulch)
  - Geofabric liners
  - Other control measures as appropriate.

## **Waste, Stockpile Management, Chemicals and Hazardous Materials**

The EIS should:

1. Identify, characterise and classify all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste. All waste must be classified in accordance with EPA's *Waste Classification Guidelines (2014)* and associated addendums, available at: <https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste>.
2. Identify, characterise and classify all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling. All waste must be classified in accordance with the EPA's *Waste Classification Guidelines (2014)* and associated addendums.
3. Provide details of how waste and product stockpiles will be handled and managed onsite to minimise pollution, including:
  - Labelling of stockpiles for identification, ensuring that all waste is in clearly identified stockpiled from other types of material (especially the separation of contaminated and non-contaminated waste).
  - Proposed height limits for all waste and product stockpiles to reduce the potential for dust.
  - Procedures for minimising the movement of waste and products around the site to avoid the need for double handling.
  - Where relevant, measures to minimise leaching from stockpiles into the surrounding environment, such sediment fencing, geofabric liners etc.
4. Provide details of how the waste will be handled and managed during transport to a lawful facility. If the waste possesses hazardous characteristics, the Proponent must provide details of how the waste will be treated or immobilised to render it suitable for transport and disposal.
5. Demonstrate that appropriate spill containment will be provided for storage, filling and loading of all fuels and other chemicals to be used on site, in accordance with the relevant Australian Standard.

**From:** [Mark Nave \(Western NSW LHD\)](#)  
**To:** [Melissa Anderson](#)  
**Subject:** RE: Dubbo Quarry Continuation Project (SSD-10417) (Dubbo Regional)  
**Date:** Friday, 14 February 2020 11:09:58 AM

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Hi Melissa

Thank you for your email.

The only comments we have at this stage is:

- Concerns around particulate matter in relation to nearby homes and schools;
- Potential for ground/surface water contamination.

Regards

Mark

Mark Nave  
Environmental Health Officer  
Western NSW Local Health District

Area Office, 23 Hawthorn St  
PO Box 4061  
Dubbo NSW 2830  
Tel - (02) 6809 8977  
Mob - 0407 551 548  
Fax - (02) 6841 2368  
Email - [Mark.Nave@health.nsw.gov.au](mailto:Mark.Nave@health.nsw.gov.au)



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3 February 2020

SF2016/057834; WST16/00066/08

The Manager  
Resource Assessments  
Department of Planning, Industry & Environment  
GPO Box 39  
SYDNEY NSW 2001

**Attention: Melissa Anderson**

Dear Ms Anderson

**SSD-10417: Lot 22 DP 793541; Part Lot 100 DP 628628 & Lot 1 DP 623367, Dubbo  
Request for Secretary Environmental Assessment Requirements (SEARs)  
Dubbo Quarry Continuation Project “Holcim Quarry”**

**Please note as at 01 December 2019, the legislation, including functions and responsibilities of Roads and Maritime Services (RMS) and Transport for NSW (TfNSW) are now being performed by the integrated TfNSW organisation. All future references to Roads and Maritime will now be referred to as TfNSW.**

Thank you for the email dated 16 January 2020 referring the above development to Transport for NSW (TfNSW) for a request for input to Secretary’s Environmental Assessment Requirements (SEARs), as the proposed development is a State Significant Development under the *Environmental Planning and Assessment Act 1979*.

Following a review of the information submitted in support of the proposal, it is understood:

- Development consent for Dubbo Quarry was originally granted by Talbragar Shire Council on 18 March 1980 under SPR79/22 for a basalt quarry on former Portions 208 and 211 Parish Dubbo.
- The quarry currently employs approximately 15 employees operating 7am to 6pm Monday to Friday and 8am to 1pm Saturdays.
- The quarry will expand the extraction footprint into Lot 22 DP 793541 west and north west of the existing quarry boundary (part Lot 22 DP 793541) known as Western Extension Area (WEA) which contains 2.7 Million tonnes (Mt) of resource and to the south within part Lot 100 DP 628628 known as the Southern Extension Area (SEA), which contains 7.5 Mt of resource.
- WEA will commence within year 1 with the anticipated exhaustion being within 7-8 years of receipt of the development consent and SEA will commence in year 2 and continue up to 25 years.
- Extraction rates will be at peak 500,000 tonne per annum (tpa) and on average 350,000 tpa.

**Transport for NSW**

51-55 Currajong Street PARKES NSW 2870 | PO Box 334 PARKES NSW 2870 DX20256

P 6861 1449 | W [development.western@transport.nsw.gov.au](mailto:development.western@transport.nsw.gov.au) | ABN 18 804 239 602

- During average production it is anticipated the quarry will generate 46 truck movements per day and at the peak 65 truck movements per day, it was not stated the vehicle type.
- The surrender of the existing development consent for the quarry.
- A new private access road is proposed via Sheraton Road (local road) along the northern boundary of the WEA.
- A new haul road from the existing quarry area to the SEA across Eulomogo Creek.
- Realignment of power and telecommunications lines in the vicinity of the new access road and WEA.
- Modification/installation of water management infrastructure within the existing and extension areas.

TfNSW have reviewed the submitted documentation and identified the following key issues to be addressed in the Environmental Impact Statement (EIS) being prepared in support of the project:

- A traffic impact study is to be prepared by a suitably qualified and experienced person in accordance with the methodology set out in the *RTA Guide to Traffic Generating Developments 2002* and *Austrroads Guide to Traffic Management Part 12: Traffic Impacts of Developments* and include:
  - For both the proposed (incremental) increase in the extraction limit and the total (cumulative) quarry operation, provide details of road transport volumes and vehicle types broken down into:
    - Origin and destination.
    - Haulage routes.
    - Peak hourly movements in each direction.
    - The vehicle size and types undertaking the haulage movements throughout operation.
    - Total daily movements (e.g. based on the average load mass per truck), and
    - Temporary and permanent staff numbers (including employees and contractors) during construction and operation of the quarry.
  - The study is to provide details of projected transport operations including:
    - Traffic volumes, both proposed and cumulative, and, both input and output traffic.
    - Materials to be transported and vehicle types used for transport.
  - This includes an assessment of the cumulative impacts of existing (maximum approved) quarry traffic associated with the subject site and the Dubbo Quarry operated by Holcim. Interactions of quarry traffic with schools located along Sheraton Road (Dubbo Christian School, St Johns Primary School and St Johns College) are to be considered.
  - The TIA is to consider various traffic scenarios including (but not necessarily limited to):
    - After ramping up (Year 1) to the maximum output of 500,000 tpa, with development traffic using the Mitchell Highway / Sheraton Road roundabout.
    - The future traffic scenario (Year 10) at the maximum output of 500,000 tpa, with development traffic using the Mitchell Highway / Sheraton Road roundabout.

**Transport for NSW**

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P 6861 1449 | W [development.western@transport.nsw.gov.au](mailto:development.western@transport.nsw.gov.au) | ABN 18 804 239 602

- Analysis of the likely forecast and quarry traffic impacts to network efficiency in both the above scenarios, at the Sheraton Road / Mitchell Highway roundabout.
- Recent traffic count data should be sourced for movements at the Sheraton Road/ Mitchell Highway roundabout. Dubbo Regional Council may be able to assist with traffic count data on the local road and via traffic volume data for State Classified Roads may be obtained via: <https://www.rms.nsw.gov.au/about/corporate-publications/statistics/traffic-volumes/aadt-map/index.html?redirected#/?z=6>
- Details of any oversize over mass vehicles and loads expected as a result of the increase during ramp up and over the operational life of the proposal.
- Details of vehicular access locations and treatments need to be identified and in accordance with Austroads Guide to Road Design and relevant TfNSW supplements, including Safe Intersection Sight Distance (SISD).
- Consideration for the preparation of a Driver Code of Conduct for haulage of materials on public roads, which could include, but not be limited to:
  - A map of the primary haulage routes highlighting critical locations.
  - Safety initiatives, including scheduling of haulage through residential areas and/or outside of school zones hours, including local school bus pick up/drop off locations.
  - An induction process for vehicle operators and regular toolbox meetings.
  - A complaint resolution and disciplinary procedure.
  - Any community consultation measures for peak haulage periods.
  - Scheduling of heavy vehicle movements to minimise length of convoys / platoons.
  - Scheduling of transport and other mitigation measures for local climate conditions affecting safety or visibility (e.g. fog, wet weather).

TfNSW appreciates the opportunity to contribute to SEARs and requests a copy of the SEARs is forwarded to us at the same time they are sent to the applicant. Should you require further information please contact the Alexandra Power, Development Assessment Officer on (02) 6861 1428.

Yours faithfully



Ainsley Bruem  
A/Manager Land Use Assessment  
Western Region



# NSW RURAL FIRE SERVICE



Department of Planning and Environment (Sydney  
Offices)  
GPO Box 39  
Sydney NSW 2001

Your reference: SSD-10417

Our reference: DA20200127000294-SEARS-1

03 April 2020

**Attention:** Melissa Anderson

Dear Sir/Madam,

## Proposed Dubbo Quarry Continuation Project

Reference is made to correspondence dated 16 January 2020 seeking input regarding the preparation of Secretary's Environmental Assessment Requirements for the above State Significant Development in accordance with the *Environmental Planning and Assessment Act 1979*.

The NSW Rural Fire Service has reviewed the information submitted and provides the following advice:

A bush fire report shall be prepared by a suitably qualified bush fire consultant demonstrating how the proposed development conforms with or deviates from the provisions of *Planning for Bush Fire Protection 2019*, with regard to the bush fire prone vegetation retained on site and any future revegetation. The report shall include a bush fire management plan detailing protection measures to be implemented during the construction and operation phases of the proposed development.

For any queries regarding this correspondence, please contact Kalpana Varghese on 1300 NSW RFS.

Yours sincerely,

Nika Fomin  
Manager  
Planning and Environment Services (East)

### Postal address

NSW Rural Fire Service  
Planning and Environment Services  
Locked Bag 17  
GRANVILLE NSW 2141

### Street address

NSW Rural Fire Service  
Planning and Environment Services (East)  
4 Murray Rose Avenue  
Sydney Olympic Park NSW 2127

T 1300 NSW RFS  
F (02) 8741 5433  
E [records@rfs.nsw.gov.au](mailto:records@rfs.nsw.gov.au)  
[www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au)

