OUT19/11277

Mr Anthony Barnes
Senior Environmental Assessment Officer
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

anthony.barnes@planning.nsw.gov.au

Dear Mr Barnes

Albion Park Quarry – Stage 7 (SSD-10369)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 21st August 2019 to the Department of Planning, Industry and Environment (DPIE) Water about the above matter.

The following advice for you to consider is from relevant branches of Water.

Please note DPIE - Crown Lands and the Department of Primary Industries advice will been sent in a separate response directly from the relevant areas.

The SEARs should include:

DPIE – Water and Natural Resources Access Regulator

- 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 Water can be sent by email to landuse.enquiries@dpi.nsw.gov.au.

Yours sincerely

Simon Francis
Senior Project Officer, Assessments
DPIE Water – Strategic Relations
22 August 2019

Planning, Industry & Environment

Anthony Barnes

Department of Planning, Industry & Environment
GPO Box 39
Sydney NSW 2001

Emailed:
anthony.barnes@planning.nsw.gov.au

Our ref: DOC19/729828

Your ref: SSD 10369

File: SF18/41792

28 August 2019

Dear Mr Barnes

Subject: Request for SEARs - Albion Park Quarry – SSD 10369 – Stage 7

Thank you for the opportunity to provide advice on the above project. This is a response from the NSW Department of Planning, Industry & Environment (DPIE) – Division of Resources & Geoscience (the Division).

Latite is not a prescribed mineral under the *Mining Act 1992*, 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 (Environmental Impact Statement (EIS) or similar) accompanying Development Applications for extractive operations 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.

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

Should any biodiversity conservation measures become necessary, the Division requests early consultation 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 should be directed to the Division of Resources & Geoscience - Land Use team at landuse.minerals@geoscience.nsw.gov.au.

Yours sincerely,

Andrew Helman

Senior Geoscientist – Land Use Assessment

Geological Survey of NSW, Division of Resources & Geoscience

Planning, Industry & Environment

Our ref: DOC19/767657
Senders ref: SSD 10369

Antony Barnes
Senior Environmental Assessment Officer
Resource Assessments
Planning & Assessment
E-mail: Anthony.barnes@planning.nsw.gov.au

Dear Mr Barnes

Subject: Albion Park Quarry Stage 7 – SSD 10369 – Request for SEARs

I refer to your request for input on the Secretary's Environmental Assessment Requirements (SEARs) for the proposed Albion Park Quarry Stage 7 hard rock extraction project, located in the Shellharbour local government area.

We recommend inclusion of the attached Standard SEARs (**Attachment A**) and project specific requirements (**Attachment B**). References for guidance documents are provided in **Attachment C**.

If you have any questions about this advice, please do not hesitate to contact Mr Calvin Houlison, Senior Conservation Planning Officer, via calvin.houlison@environment.nsw.gov.au or 4224 4179.

Yours sincerely

5 - September - 2019

Chris Page

Senior Team Leader, Planning (Illawarra)
Biodiversity & Conservation Division
Environment, Energy and Science

Attachment A – Standard Environmental Assessment Requirements
Attachment B – Project Specific Requirements
Attachment C - Guidance material

Attachment A – Standard Environmental Assessment Requirements

Biodiversity
1. Biodiversity impacts related to the proposed project are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s6.12), *Biodiversity Conservation Regulation 2017* (s6.8) and Biodiversity Assessment Method. 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 Biodiversity Assessment Method. 3. The BDAR must include details of the measures proposed to address the offset obligation as follows; • The total number and classes of biodiversity credits required to be retired for the development/project; • The number and classes of like-for-like biodiversity credits proposed to be retired; • The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules; • Any proposal to fund a biodiversity conservation action; • Any proposal to conduct ecological rehabilitation (if a mining project); • Any proposal to make a payment to the Biodiversity Conservation Fund. If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits. 4. 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 *Biodiversity Conservation Act 2016*.
Aboriginal cultural heritage
5. 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 the EIS. This may include the need for surface survey and test excavation. The identification of cultural heritage values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (DECCW, 2011) and consultation with OEH regional branch officers.
6. Where Aboriginal cultural heritage values are identified, consultation with Aboriginal people must be undertaken and documented in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the EIS.

7. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the EIS. The EIS must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.
Water and soils
8. The EIS must map the following features relevant to water and soils including: a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map). b. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method). c. Wetlands as described in s4.2 of the Biodiversity Assessment Method. d. Groundwater. e. Groundwater dependent ecosystems. f. Proposed intake and discharge locations.
9. The EIS must describe background conditions for any water resource likely to be affected by the project, including: a. Existing surface and groundwater. b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations. c. Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters. 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.
10. 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 or required changes to existing monitoring programs.
11. 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 and coastal hazards

12. 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).
13. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 1 in 10 year, 1 in 100 year flood levels and the probable maximum flood, or an equivalent extreme event.
14. The EIS must model the effect of the proposed project (including fill) on the flood behaviour under the following scenarios:
    a. Current flood behaviour for a range of design events as identified in 11 above. This includes the 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
15. Modelling in the EIS must consider and document:
    a. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood.
    b. 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, hazards and hydraulic categories.
    c. Relevant provisions of the NSW Floodplain Development Manual 2005.
16. The EIS must assess the impacts on the proposed project on flood behaviour, including:
    a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
    b. Consistency with Council floodplain risk management plans.
    c. Compatibility with the flood hazard of the land.

d. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land. e. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site. f. 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. g. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council. h. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council. i. Emergency management, evacuation and access, and contingency measures for the development considering the full range or 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 SES. j. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.
17. The EIS must describe the potential effects of coastal processes and hazards (within the meaning of the Coastal Management Act 2016), including sea level rise and climate change: a. On the proposed development b. Arising from the proposed development.
18. The EIS must consider have regard to any certified Coastal Management Program (or Coastal Zone Management Plan) and be consistent with the management objectives described in the *Coastal Management Act 2016* and development controls for coastal management areas mapped under the *State Environmental Planning Policy (Coastal Management) 2018.*

Attachment B - Project Specific Requirements

1. ABORIGINAL CULTURAL HERITAGE

A.	The assessment of cultural heritage values must include a surface survey undertaken by a qualified archaeologist in areas with potential for subsurface Aboriginal deposits. The result of the surface survey is to inform the need for targeted test excavation to better assess the integrity, extent, distribution, nature and overall significance of the archaeological record. The results of surface surveys and test excavations are to be documented in the EIS.
B.	The EIS must outline procedures to be followed if Aboriginal objects are found at any stage of the life of the [development/project] to formulate appropriate measures to manage unforeseen impacts.
C.	The EIS must outline procedures to be followed in the event Aboriginal burials or skeletal material is uncovered during construction to formulate appropriate measures to manage the impacts to this material.

Attachment C – Guidance material

Title	Web address
Relevant Legislation	
Biodiversity Conservation Act 2016	https://www.legislation.nsw.gov.au/#/view/act/2016/63/full
Coastal Management Act 2016	https://www.legislation.nsw.gov.au/#/view/act/2016/20/full
State Environmental Planning Policy (Coastal Management) 2018	https://www.legislation.nsw.gov.au/#/view/EPI/2018/106/full
Commonwealth Environment Protection and Biodiversity Conservation Act 1999	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Fisheries Management Act 1994	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
Marine Parks Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
National Parks and Wildlife Act 1974	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Water Management Act 2000	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Wilderness Act 1987	http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
Biodiversity Assessment Method (OEH, 2017)	http://www.environment.nsw.gov.au/resources/bcact/biodiversity-assessment-method-170206.pdf
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	http://www.environment.nsw.gov.au/resources/bcact/guidance-decision-makers-determine-serious-irreversible-impact-170204.pdf
Fisheries NSW policies and guidelines	http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
List of national parks	http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx
Revocation, recategorisation and road adjustment policy (OEH, 2012)	http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm
Guidelines for developments adjoining land and water managed by the	http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm

Title	Web address
Department of Environment, Climate Change and Water (DECCW, 2010)	
Heritage	
The Burra Charter (The Australia ICOMOS charter for places of cultural significance)	http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf
Statements of Heritage Impact 2002 (HO & DUAP)	http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf
NSW Heritage Manual (DUAP) (scroll through alphabetical list to 'N')	http://www.environment.nsw.gov.au/Heritage/publications/
Aboriginal Cultural Heritage	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf
Aboriginal Site Recording Form	http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf
Aboriginal Site Impact Recording Form	http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf
Aboriginal Heritage Information Management System (AHIMS) Registrar	http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm
Care Agreement Application form	http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf
Water and Soils	
Acid sulphate soils	
Acid Sulfate Soils Planning Maps via Data.NSW	http://data.nsw.gov.au/data/
Acid Sulfate Soils Manual (Stone et al. 1998)	http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Flooding and Coastal Hazards	

Title	Web address
Coastal management	https://www.environment.nsw.gov.au/topics/water/coasts/coastal-management
Floodplain development manual	http://www.environment.nsw.gov.au/floodplains/manual.htm
Coastal Management Manual	https://www.environment.nsw.gov.au/topics/water/coasts/coastal-management/manual
NSW Climate Impact Profile	http://climatechange.environment.nsw.gov.au/
Climate Change Impacts and Risk Management	Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf
Water	https://www.environment.nsw.gov.au/topics/water
Stormwater management	https://www.environment.nsw.gov.au/stormwater/index.htm
Waterway health assessment	https://www.environment.nsw.gov.au/water/waterway-health-assessment.htm
Using NSW Water Quality Objectives	https://www.environment.nsw.gov.au/water/planningusingwqos.htm
Risk based framework for considering waterway health.	https://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning

DOC19/713899-2

Mr Anthony Barnes
Senior Environment Assessment Officer
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Mr Barnes

Proposed Hard Rock Quarry - Stage 7 - SSD-10369
Cleary Bros (Bombo) Pty Ltd - Albion Park Quarry

I am writing in response to your email and attached Scoping Report dated 21 August 2019 to the Environment Protection Authority (EPA) requesting input for the Secretary's Environmental Assessment Requirements (SEARs) for the above project. This project involves a proposed new quarry stage within/adjacent to the existing Albion Park Quarry operated by Cleary Bros (Bombo) Pty Ltd. The proposal would allow extraction of up to 900,000 tonnes of resource per annum.

Based on a review of the submitted information, please find attached our key requirements (Attachment A). These relate to:

- General Planning Matters
- Environment Protection Licence
- Air Quality
- Water Quality
- Noise
- Waste Management
- Contaminated Land Management.

These should be assessed in accordance with any relevant guidelines/documents listed in Attachment B.

If you have questions regarding the above, please phone the contact officer on (02) 4224 4100.

Yours sincerely

03/09/19

PETER BLOEM
Manager Regional Operations Illawarra
Environment Protection Authority

Attachment: Attachments A and B
Contact officer: MATT FULLER
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(from outside NSW)

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ATTACHMENT A

KEY ENVIRONMENTAL IMPACT ASSESSMENT REQUIREMENTS

1. General Planning Matters

Details should be documented on the location of the proposed development including the affected environment to place the proposal in its local and regional environmental context. This should include but not be limited to details of land ownership, maps and/or aerial photographs showing surrounding land uses, planning zonings, potential sensitive receptors and catchments. Details should also be provided on the proposals relationship to any other industry or facility.

The Environmental Impact Statement (EIS) should describe mitigation and management options that will be used to prevent, control, abate or mitigate identified environmental impacts (including any cumulative impacts) associated with the project and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented. Appropriate Best Management Practices must be outlined.

2. Environment Protection Licence

The development must comply with the *Protection of the Environment Operations Act 1997* (POEO Act) and associated regulations at all times (if approved).

The premises is currently regulated by the EPA under an Environment Protection Licence (EPL no. 299). The proponent should identify whether the project can comply with this EPL or whether a variation to the EPL conditions is required. The EIS should include relevant information and further guidance can be found in the *EPA Guide to Licensing.*

Under the POEO Act the following scheduled activities (recently updated) may be relevant to the project.

- ***extractive activities*** – (1) meaning the extraction (by any method, including by excavation, dredging, blasting or tunneling) or processing of extractive materials for the primary purpose of the sale of extracted material.
  (2) However, this clause does not apply to cut and fill operations, or the excavation of foundations or earthworks, that are ancillary to development that is subject to development consent or approval under the Environmental Planning and Assessment Act 1979.
  (3) The activities to which this clause applies are declared to be scheduled activities if they involve the extraction or processing of more than 30,000 tonnes of extractive materials per year.
  (4) More than 30,000 tonnes of material are taken to have been extracted in a year at premises at which extraction occurs if the total amount of extractive material transported from those premises in that year is more than 30,000 tonnes.
  (5) In this clause, "extractive materials" means clay, sand, soil, stone, gravel, rock, sandstone or similar substances that are not minerals within the meaning of the Mining Act 1992.

- ***crushing, grinding or separating*** - (1) meaning the processing of materials (including sand, gravel, rock or minerals, but not including waste of any description) by crushing, grinding or separating them into different sizes.
  (1A) However, this clause does not apply to the processing of materials by crushing, grinding or separating that occurs as part of an activity that is declared to be a scheduled activity by:
    (a) clause 33 (Railway activities--railway infrastructure construction), or
    (b) clause 35 (Road construction).
  (2) The activity to which this clause applies is declared to be a scheduled activity if it has a capacity to process more than 150 tonnes of materials per day or 30,000 tonnes of materials per year.

3. Air Quality

The environmental outcome for the project should ensure:

- emissions do not cause adverse impact upon human health or the environment
- no offensive odour beyond the boundary of the premises
- compliance with the requirements of the POEO Act and its associated regulations
- maintains or improves air quality to ensure National Environment Protection Measures for ambient air quality are not compromised
- all dust emissions from material handling, storage, processing, haul roads, transport and material transfer systems are prevented or minimised; and vehicular kilometres travelled are minimised.

The EIS should:

1. Include a detailed description of the proposal. 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. 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:
   - meteorology and climate
   - topography
   - surrounding land-use
   - receptors
   - ambient air quality.
2. Account for cumulative impacts.
3. Assess the risk associated with potential discharges of fugitive and point source emissions for all stages of the proposal. Assessment of risk relates to environmental harm, risk to human health and amenity.
4. Describe any proposed emission control techniques, monitoring and management measures the proponent intends to apply to ensure the above goals are satisfied.
5. Assess opportunities to minimise Vehicle Kilometres Travelled and measures to minimise the potential for air quality impacts associated with truck movements.
6. Demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the POEO Act 1997 and the *POEO (Clean Air) Regulation 2002.*

The EIS must include an Air Quality Impact Assessment (AQIA). The AQIA must identify and describe in detail all possible sources of air pollution and activities/processes with the potential to cause air pollutants including odours and fugitive dust emissions beyond the boundary of any premises proposed to be licensed by an EPL. This should cover both the construction and operational phases of the development. The AQIA should include cumulative impacts associated with existing developments and any developments having been granted development consent but which have not commenced.

The EIS should demonstrate that the facility will operate to minimise adverse effects on the amenity of local residents and sensitive land uses and to limit the effects of emissions on local, regional and inter-regional air quality.

The EIS must describe in detail the measures proposed to mitigate the impacts and quantify the extent to which the mitigation measures are likely to be effective in achieving the relevant environmental outcomes.

The AQIA must be prepared in accordance with the EPA's "*Approved Methods and Guidance for the Modelling & Assessment of Air Pollutants in NSW*". The AQIA must describe the methodology used and any assumptions made to predict the impacts. Air pollutant emission rates, ambient air quality data and meteorological data used in the assessment must be clearly stated and justified.

With extraction activities and processing increasing within the area of the existing quarry the EPA recommends that a site specific Best Management Practice determination be prepared as part of the AIA. This would assist in informing the adequacy and performance of existing dust mitigation measures. It would also assist in identifying the most practicable means to reduce any particle emissions associated with the existing and expanded operations and identify any additional reasonable and feasible dust mitigation measures. For your information, the Office of Environment and Heritage

commissioned Katestone Environmental to work with the coal mining industry to review coal mining activities in the GMR of NSW. EPA considers that this study would assist the proponent in identifying best practice measures to prevent and/or minimise particle emissions from the proposed activities. A copy of this review can be obtained at:
http://www.epa.nsw.gov.au/resources/air/KE1006953volumeI.pdf.

4. Water Quality

The environmental outcome for the project should ensure:

- there is no pollution of waters (including surface and groundwater) except in accordance with any conditions contained in an EPL for the activity.
- polluted water (including process waters, wash down waters, polluted stormwater or sewage) is captured on the site and directed to reticulated sewer where available or else collected, treated and beneficially reused, where this is safe and practicable to do so.
- Promote integrated water cycle management that optimises opportunities for sustainable water supply, wastewater and stormwater management and reuse initiatives where it is safe and practicable to do so.
- bunding is designed in accordance with the EPA's Bunding and Spill Management guidelines.

The EIS should document how the above outcomes will be achieved.

The EIS should also include but not necessarily be limited to the following matters:

a) Details on the existing stormwater management system, its performance and whether it needs to be upgraded to meet current contemporary standards. This should include water management associated with activities including:
   - any process waters
   - any equipment and maintenance areas, including wash down facilities, oil and water separation
   - open stockpiles
   - unsealed/sealed areas
   - extraction areas
   - material processing and transfer areas
   - loading facilities
   - haul roads
   - onsite wastewater management
   - any associated treatment and reuse systems.
b) Provide a description of the receiving waters including surface and groundwater.
c) Provide information on any water discharges including location, volumes, water quality, monitoring programs and frequency of discharge.
d) Describe the nature and degree of any likely impacts that the proposed project may have on the receiving environment. This should include a characterisation of potential water pollutants at the site and any associated mitigation and management measures.
e) Demonstrate that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.
f) Describe how stormwater will be managed both during the construction phase.

The EIS should demonstrate how the stormwater management system will satisfy relevant contemporary guidelines such as *Managing Urban Stormwater - Soils and Construction - Volume 2E Mines and Quarries* (DECC June 2008).

5. Noise Impact

The environmental outcome of the project should be to minimise adverse impacts due to noise from the project. The EIS must clearly outline the noise mitigation, monitoring and management measures the proponent intends to apply to the project to minimise noise pollution.

A noise assessment should be undertaken in accordance with the *New South Wales Noise Policy for Industry (EPA 2017)*. It should include, but not necessarily be limited to:

- identification and assessment of all potential noise sources associated with the development
- the location of all noise sensitive receivers

- proposed hours of operation
- proposed noise mitigation measures
- assessment of cumulative noise impacts, having regard to existing surrounding industrial activities and development.
- background noise measurements
- account for any low frequency noise

The assessment should also consider vibration from the proposed project in accordance with NSW *Noise Policy for Industry* and *Assessing Vibration: a technical guideline* (DEC, 2006) for assessing vibration.

The Interim Construction Noise Guideline (DECC 2009) states that noise from construction associated with mining is not covered by the Guideline. Noise from construction activities associated with new infrastructure should be assessed against INP noise objectives. All feasible and reasonable noise mitigation measures to be implemented for any construction noise that exceeds INP objectives should be identified.

The EIS must identify the transport route(s) to be used, the hours of operation and assess any potential road traffic noise impacts in accordance with the "*NSW Road Noise Policy*".

6. Waste Management

The goal of the development should be to ensure:

- All waste is managed in accordance with the principles of the waste hierarchy and cleaner production.
- the handling, processing and storage of all materials used at the premises does not have negative environmental or amenity impacts.
- land pollution is prevented.
- the beneficial reuse of all wastes generated at the premises are maximised where it is safe and practical to do so.
- no waste disposal occurs on site except in accordance with the conditions contained in any EPA Licence.

Any waste generated at the site should be assessed and classified in accordance with the *Waste Classification Guidelines* and documented in the EIS. Detail on this guideline is available in Attachment B.

The proponent should also consult NSW *EPA's Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities* (Dec 2012). This guideline provides information on better waste management practice in design, establishment, operation and ongoing management of waste services in commercial and industrial developments. This guideline can be accessed at: http://www.epa.nsw.gov.au/resources/managewaste/120960-comm-ind.pdf.

The EIS should also detail the type and quantity of any chemical substances to be used or stored at the site and describe arrangements for their safe use and storage in accordance with any legislative or EPA policy requirements.

7. Contaminated Land Management

The environmental outcome of the project should ensure any contaminated land is identified and appropriately managed for the purpose of reducing the risk of harm to human health or any other aspect of the environment.

The requirements of *State Environmental Planning Policy (SEPP) 55* will need to be satisfied and documented in the EIS. SEPP 55 states that as part of the development process, the following key considerations should be addressed:

- Whether the land is contaminated.
- If the land is contaminated whether it is suitable in its contaminated state (or will be suitable, after remediation) for all the purposes to which the land will be used.

- If the land requires remediation; will be made suitable for any purpose for which the land will be used.

In cases where land is potentially contaminated, the investigation and any remediation and validation work is to be carried out in accordance with the guidelines made or approved by the EPA under Section 105 of the *Contaminated Land Management Act 1997* and be in accordance with the requirements and procedures in the following:

- *Contaminated Land Management Act 1997*
- *Contaminated Land Management Regulation 2013*
- *SEPP 55 – Remediation of Land.*

ATTACHMENT B - GUIDANCE MATERIA

Title	Web address
Licensing	
Guide to Licensing	www.environment.nsw.gov.au/licensing/licenceguide.htm
Air Issues	
Air Quality	
Approved methods for modelling and assessment of air pollutants in NSW (2005)	http://www.environment.nsw.gov.au/resources/air/ammodelling05361.pdf
Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (DEC 2007)	http://www.environment.nsw.gov.au/resources/air/07001amsaap.pdf
POEO (Clean Air) Regulation 2010	http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+428+2010+cd+0+N
The Assessment and Management of Odour from Stationary Sources in NSW: Technical Framework	http://www.environment.nsw.gov.au/resources/air/20060440framework.pdf
The Assessment and Management of Odour from Stationary Sources in NSW: Technical Notes	http://www.environment.nsw.gov.au/resources/air/20060441notes.pdf
NSW Government Resource Efficiency Policy, (OEH 2014)	http://www.environment.nsw.gov.au/resources/government/140567NSWGREP.pdf
Noise and Vibration	
Interim Construction Noise Guideline (DECC, 2009)	http://www.environment.nsw.gov.au/noise/constructnoise.htm
Assessing Vibration: a technical guideline (DEC, 2006)	http://www.environment.nsw.gov.au/noise/vibrationguide.htm
Noise Policy for Industry (EPA, 2017)	http://www.environment.nsw.gov.au/noise/industrial.htm
NSW Road Noise Policy (EPA, 2011)	http://www.epa.nsw.gov.au/resources/noise/2011236nswroadnoisepolicy.pdf
Waste, Chemicals and Hazardous Materials and Radiation	
Waste Classification Guidelines (DECC, 2008)	http://www.environment.nsw.gov.au/waste/envguidlns/index.htm
Resource Recovery Exemptions	http://www.epa.nsw.gov.au/waste/RRecoveryExemptions.htm
EPA's Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities (Dec 2012)	http://www.epa.nsw.gov.au/warr/BPGuideCIFacilities.htm
Water and Soils	
Stormwater Management	
Managing Urban Stormwater - Soils and Construction Vol 1 (Landcom 2004) and Vol 2 (A. Installation of services; B Waste Landfills; C Unsealed Roads; d Main Roads; E Mines and quarries (DECC 2008)	Vol 1 – Available for purchase at http://www.environment.nsw.gov.au/resources/water/BlueBookVol1.pdf Vol 2-

Title	Web address
	http://www.environment.nsw.gov.au/resources/stormwater/0801soilsconststorm2a.pdf
Wastewater	
National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC 1997)	http://www.environment.gov.au/water/policy-programs/nwqms/
National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC 2000)	http://www.environment.gov.au/water/policy-programs/nwqms
Environmental Guidelines for the Utilisation of Treated Effluent by Irrigation (NSW DEC 2004)	http://www.environment.nsw.gov.au/resources/water/effguide.pdf
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf
NSW Government Water Quality and River Flow Environmental Objectives	http://www.environment.nsw.gov.au/ieo/)
Groundwater	
State Groundwater Policy Framework Document (DLWC 1997)	
The NSW State Groundwater Quality Protection Policy (DLWC 1998)	
NSW State Groundwater Dependent Ecosystems Policy (DLWC, 2002)	
National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ & ANZECC, 1995)	
Metropolitan Water Sharing Plan	http://www.water.nsw.gov.au/Water-management/Water-sharing-plans/Water-sharing
Bunding and Spill Management	
Storing and Handling Liquids: Environmental Protection - Participants Manual	http://www.environment.nsw.gov.au/resources/licensing/2007210liquidsManual.pdf
Environmental Compliance Report: Liquid Chemical Storage, Handling and Spill Management - Part B Review of Best Practice and Regulation	http://www.environment.nsw.gov.au/resources/licensing/ecrchemicalsb05590.pdf

NSW RURAL FIRE SERVICE

PCU078136

The Secretary
Department of Planning, Industry and Environment
GPO Box 39
Sydney NSW 2001

Your reference: SSD - 103691367
Our reference: D19/2898
DA19082620162 BB

Attention: Anthony Barnes

3 September 2019

Dear Sir / Madam,

State Significant Development Application - Request for SEARs - Albion Park Quarry - Stage 7

Reference is made to correspondence dated 23 August 2019 seeking key issues and assessment requirements regarding bush fire protection for the above proposal in accordance with the *Environmental Planning and Assessment Act 1979*.

The New South Wales Rural Fire Service (NSW RFS) has considered the information submitted and notes that the proposed development has the potential to increase the level of bush fire risk within the landscape and, the development may be impacted upon during a bush fire event. As such, the environmental assessment for the proposed Stage 7 extension of the Albion Park Quarry should address the following bush fire criteria:

- the aim and objectives of *Planning for Bush Fire Protection 2006;*
- identification of potential ignition sources during construction and operation of the development;
- storage of fuels and other hazardous materials;
- proposed bush fire protection measures for the development, including vegetation management and fire suppression capabilities;
- operational access for fire fighting appliance to the site; and
- emergency and evacuation planning.

If you have any queries regarding this advice, please contact Bradley Bourke, Development Assessment and Planning Officer, on 1300 NSW RFS.

Yours sincerely,

Martha Dotter
Acting Team Leader, Development Assessment and Planning
Planning and Environment Services (South)

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

T 1300 NSW RFS
F (02) 8741 5433
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www.rfs.nsw.gov.au

Transport
Roads & Maritime
Services

Our ref: STH09/00235/05
Contact: Andrew Lissenden 4221 2769
Your Ref: SSD 10369

29 August 2019

Anthony Barnes
Energy and Resource Assessments
NSW Department of Planning, Industry and Environment
BY EMAIL: information@planning.nsw.gov.au

SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS – ALBION PARK QUARRY STAGE 7 (SSD 10369)

Dear Anthony,

Roads and Maritime Services (RMS) refers to your email dated 21 August 2019 that requests RMS input into the Secretary's Environmental Assessment Requirements (SEAR's) for the Albion Park Quarry Stage 7 Extension.

RMS has reviewed the information provided (i.e. 'Scoping Report for the Albion Park Quarry Extraction Area Stage 7 Extension', Report No. 1004/03, dated August 2019 prepared by R.W.Corkery & Co. Pty Limited) focusing on the impact to the state road network. RMS as a result of its review notes the following:

- Work is currently being undertaken on adjoining land to the north that will provide an extension of the M1 Princes Motorway between Yallah and Oak Flats so as to bypass Albion Park Rail. These works when completed will form part of the state road network;
- The development for which the SEAR's are requested involves the expansion of the extraction area for the Albion Park Quarry owned by Cleary Bros. The proposed expansion seeking an annual production limit of 900 000 tonnes per annum; and
- Limited details are provided in submitted scoping report on transport/traffic related issues. The impacts of traffic generated by the development needing to be considered and mitigation measures detailed as part of any Environmental Impact Statement (EIS) lodged.

Having regard for the above RMS considers the matters outlined in **Attachment 1** should be included in the SEAR's issued and as such should be addressed by the proponent as part of any future application/EIS lodged. Please note that Attachment 1 does not intend to represent an exhaustive listing of all the issues to be considered in the assessment of the traffic impacts associated with the proposed development.

If you have any questions please contact Andrew Lissenden on 4221 2769.

Please ensure that any further email correspondence is sent to development.southern@rms.nsw.gov.au.

Yours faithfully

Chris Millet
Manager Land Use
Southern Region

Cc: anthony.barnes@planning.nsw.gov.au

- *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*

  The requirements of Clause 16 (Transport) of the above State Environmental Planning Policy must be assessed and addressed. Specifically those requirements detailed in subclause (1).

- *Traffic Impact Study (TIS)*

  A Traffic Impact Study (TIS) is required. As a guide Table 2.1 of the RTA Guide to Traffic Generating Developments outlines the key issues that should be considered in preparing a TIS.

  Noting the comments above RMS believes the TIS should include, but not be limited to, details on:

  - The annual production limit for the quarry;
  - Types of vehicles to be used, their size and their associated carrying capacity, etc;
  - Road transport routes to be used between the site and the Princes Highway inclusive of the period that the Albion Park Rail bypass construction works are being undertaken;
  - Details on vehicle movements that are currently allowed under the existing approval (LEC Consent No. 10639 of 2005 – including the associated modifications) as well as details on any changes to these that are being proposed as part of this application. This should include details on predicted traffic generation (i.e. maximum daily, AM and PM peaks, etc) and provide details for both light and heavy vehicles; and
  - Implications to the road network including the identification of suitable mitigation measures and/or infrastructure required to ameliorate any traffic impacts and safety impacts associated with the development.

- *Environmental Impacts*

  Should any works be required as a result of the proposed development within the road reserve areas the environmental assessment for the project will need to consider their environmental impacts of these works. This is to allow the consent authority to consider the environmental impacts of these works, including traffic and road safety impacts as well as other impacts such as noise, flora and fauna, heritage, impact to the community, etc. It will be a matter for consent authority to determine if any further consultation is required for any specific matter or impact.

- *General Comments:*

  - Details on how the existing approvals for the quarry which are separate approvals to this application relate to the proposed application (e.g. LEC Consent No. 10639 of 2005 that allows an annual production limit of 900,000 tonnes per annum) and how these will treated as part of the proposed works (i.e. will these approvals be surrendered should this application be approved);
  - A Drivers' Code of Conduct that includes, but is not limited to, details on the safe driving practices and how they will be maintained by drivers transporting products to and from the development site, etc; and
  - Further consultation can be had with RMS during the preparation of the Environmental Impact Statement to discuss traffic and accessibility issues if required.

Shellharbour CITY COUNCIL

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Proposal: Albion Park Quarry Stage 7

Location: Lot 1 DP858245 (Stages 1 – 6) and Lot 7 DP 3709 (Stage 7).

Proponent: Clearly Bros (Bombo) Pty Ltd

Date of Issue: 26 September 2019

Dear Mr Barnes,

In reference to your email dated 06 September 2019 and the request for input into the preparation of the Secretary's Environmental Assessment Requirements (SEAR's) for the Albion Park Quarry Stage 7 Extension.

Shellharbour City Council has reviewed the information provided (i.e. 'Scoping Report for the Albion Park Quarry Extraction Area Stage 7 Extension', Report No. 1004/03, dated August 2019 prepared by R.W.Corkery & Co. Pty Limited), and provides the following commentary;

Clause 7(4) of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* (the Mining SEPP) states:

> *"(4) Co-location of industry*
> *If extractive industry is being carried out with development consent on any land, development for any of the following purposes may also be carried out with development consent on that land:*
> *(a) the processing of extractive material,*
> *(b) the processing of construction and demolition waste or of other material that is to be used as a substitute for extractive material,*
> *(c) facilities for the processing or transport of extractive material.*

"Extractive industry" is defined under the Mining SEPP to mean:

> *"the winning or removal of extractive materials (otherwise than from a mine) by methods such as excavating, dredging, or quarrying, including the storing, stockpiling or processing of extractive materials by methods such as recycling, washing, crushing, sawing or separating, but does not include:*
> *(a) turf farming, or*
> *(b) tunnelling for the purpose of an approved infrastructure development, or*
> *(c) cut and fill operations, or the digging of foundations, ancillary to approved development, or*
> *(d) the creation of a farm dam if the material extracted in the creation of the dam is used on site and not removed from the site."*

The EIS will need to provide evidence to demonstrate that Stage 7 of the quarry meets the requirements of the Mining SEPP.

General Requirements The Environmental Impact Statement (EIS) must be prepared in accordance with, and meet the minimum requirements of, Part 3 of Schedule 2 of the

Environmental Planning and Assessment Regulation 2000 (the Regulation);

a. a statement of the objectives of the proposal, including a description of the strategic need, justification, objectives and outcomes for the proposal and reasoning behind the inclusion of Stage 1- 6 under Stage 7.
b. justification for the preferred proposal taking into consideration the objects of the *Environmental Planning and Assessment Act 1979*;

c. a detailed description of the proposal, including:

- an analysis of the proposal including an assessment, with a particular focus on the requirements of the listed key issues, in accordance with clause 7(1)(d) of Schedule 2 of the Regulation (where relevant), including an identification of how relevant planning, land use and development matters (relevant strategic and statutory matters) have been considered within the impact assessment (direct, indirect and cumulative impacts) and/or in developing management/ mitigation measures of adopting Stage 1 to 6 under the new application (i.e. new requirements/upgrade works etc) and compliance with current regulation requirements;
- detail how the principles of ecologically sustainable development will be incorporated in the design, construction and ongoing operation phases of the proposal;
- an environmental risk analysis to identify the potential environmental impacts and estimate potential environmental risks of the proposal in order to protect human health or ecosystems from contaminated land and/or water.
- a discussion on permissibility as per Clause 7(4) of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* and *Shellharbour Environmental Plan 2013* (SLEP), and
- any measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment including natural and built form.

Traffic and Transport - including but not limited to how the proposal addresses:

- transport connectivity and any transport impacts of the proposal and associated management measures,
- aerodrome operations (lighting, dust etc)
- impacts to the local road network,
- the number, frequency and size of construction related vehicles, and
- the nature of existing traffic movements and future forecasts (including consideration of peak traffic times and operation hours).

Environment (Biodiversity) - including, but not limited to:

A summary of proposed investigation regarding ecology detailed in the Scoping Report include;

- A Biodiversity Development Assessment Report (BDAR) will be prepared to fully assess the biodiversity impacts of the Stage 7 extension area;
- Targeted surveys to determine the presence or absence of threatened flora and fauna species identified in a preliminary assessment as likely to occur within the Stage 7 extension area and any offsetting requirements associated with those species;
- Any proposed vegetation clearing that could impact *Zieria granulata* would be referred under the EPBC Act

The scoping report states an Environmental Impact Statement (EIS) will be prepared and that assessments of biodiversity within the proposed Stage 7 extraction area will consider other potentially occurring threatened flora and/or fauna species.

Further Assessment recommended by Council in addition to this includes;

- Threatened flora species also recommended for targeted survey includes *Rhodamnia rubescens* (Scrub Turpentine) and *Solanum celatum.*
- EPBC referral for all EPBC listed matters recorded or considered likely to be impacted by the proposal including, Illawarra – Shoalhaven Subtropical Rainforest of the Sydney Basin Bioregion.
- Guidance from the Biodiversity & Conservation Division of DPIE is that matters that will be potentially impacted by the proposal including Illawarra Subtropical Rainforest, Illawarra Zieria, Scrub Turpentine and Illawarra Socketwood are considered to be at risk of a Serious and Irreversible Impact (SAII). Council also consider Melaleuca tall Shrubland EEC would also meet the criteria, being very limited in its distribution. SAII must be taken into consideration with the consent authority (DPIE) to determine if there are any additional and appropriate measures that will minimise the impact.

The Scoping Report states impacts are proposed to be offset under the BC Act, Biodiversity Offsetting Scheme. Under the BC Act (2016) proponents are obliged to demonstrate measures to avoid and minimise impacts prior to approval of offsetting impacts. Council recommends measures to avoid and minimise impacts including;

- A reduction of the extraction area to keep disturbance to above the top of the slope above a large continuous patch of ISTR below the south west boundary of the proposed stage 7 area. This amendment to minimise impacts to the proposal would reduce the encroachment of extraction into ISTR and limit the works to the more level area above the 100m contour (approx.) and the vegetated slope. Stormwater from the disturbed excavation area could then be diverted to avoid degradation of the bushland downslope below.
- Avoiding areas of Melaleuca Tall Shrubland EEC including Illawarra Zieria to retain all or at least some of this EEC and threatened species in situ. The proposed Stage 7 extension area is based on the 2013 SLEP RU1 zoning which is not informed by accurate or current data. The proposed extension area must be designed to avoid sensitive features of the site based on comprehensive survey and assessment.

The proposed Stage 7 extension area includes bushland within Councils Terrestrial Biodiversity Map which identified Environmentally Sensitive Land as described in the Shellharbour City Council SLEP 2013. The Stage 7 area and is directly adjacent to, and poses indirect impact to E2 (Environmental Conservation) zoned land. Assessment must ensure that the proposal is in accordance with the SLEP 2013;

- Objectives of Environmentally Sensitive Land as detailed in Clause 6.5; and,
- Objectives of E2 (Environmental Conservation) as detailed in Clause 2.8 (Page 29).

If the proposal is granted approval, mitigations recommended by Council with regard to Biodiversity include;

- Mitigation measures including a detailed protocol for minimising the risk of harm to native fauna during vegetation removal and the ongoing operation of the extraction. This must be based on comprehensive field survey to understand fauna species utilising the site

and the requirements of these species and not just assumptions on likelihood of occurrence.

- Measures to propagate from Illawarra Zieria to be removed and the use of this stock in revegetation works within or nearby the quarry site must be included within the Environmental Management Plan for the Stage 7 area. Soil translocation should be considered in this regard.
- Restoration of Stage 7 and previous stages. In the broader landscape context the quarry is a significant impediment to Dunmore Hills Regional Biodiversity Corridor as mapped in the Illawarra Biodiversity Strategy (2011). Revegetation works must be planned strategically to restore habitat and connectivity as much as possible as well as maintain weeds and further degradation of surrounding environments in the long term.

Hydrology, Soils and Water - including but not limited to:

- impacts on watercourses and surface water flows, quality, quantity, availability and users (commercial and residential), with particular reference to any likely impacts on surrounding water bodies and their catchments (including Macquarie Rivulet, Duck Creek, Horsley Inlet, Frazers Creek and Lake Illawarra), wetlands and their habitats, including how these are to be monitored,
- an assessment of construction and operational water quality impacts, taking into account impacts from runoff and flooding events (i.e. acute and chronic impacts), having consideration to impacts to surface water runoff, soil erosion and sediment transport, mass movement, and spoil and waste management. The assessment of water quality impacts is to have reference to relevant public health and environmental water quality criteria, including those specified in the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC/ARMCANZ 2000), any applicable regional, local or site-specific guidelines, water quality objectives, and any licensing requirements,
- assessment of waterways to be modified as a result of the proposal, including ecological, hydrological and geomorphic impacts (as relevant), including temporary crossings, and measures to rehabilitate the waterways to preconstruction conditions or better, including fish passage requirements consistent with *Policy and Guidelines for Fish Friendly Waterway Crossings* (DPI 2004). In particular, the boundary of the Stage 7 extraction area will require Watercourse 5 and 6 to be redirected which has implications for water movement, flood behaviour and impact on downstream ecosystems,
- identification of potential impacts and benefits of the proposal on existing flood regimes, consistent with the *Floodplain Development Manual* (Department of Natural Resources 2005), with an assessment of the potential changes to flooding behaviour (levels, velocities and direction) and impacts on bed and bank stability, through flood modelling.
- flood assessment and modelling undertaken in determining the design flood levels and velocities for events, including (as a minimum) the 10%, 2% and 1% AEP design flood events and the probable maximum flood, or an equivalent extreme event. The assessment is to demonstrate the modelled events listed above and provide consideration of blockage, climate change and impacts of land use change on flood hydrology,
- identifying potential impacts of the development on acid sulfate soils in accordance with the relevant guidelines and a description of the mitigation measures proposed to minimise potential impacts; and
- a contaminated lands assessment in accordance with relevant guidelines.

Noise, Dust and Vibration - including, but not limited to:

- an assessment of the noise impacts of the proposal during operation, consistent with the *NSW Industrial Noise Policy* (EPA 2000). The assessment must include specific consideration of impacts to receivers (dwellings, child care centres, educational

establishments located in proximity), and identify reasonable and feasible mitigation measures. Council notes that there are increased levels of residential density within the vicinity due to recent subdivisions of Dunmore Heights and Shellcove),

- if blasting is required, addressing the relevant requirements of *Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration* (ANZEC 1990); and
- if relevant, an indication of potential for works outside standard working hours, including predicted levels and exceedances, justification for the activity and discussion of available mitigation and management measures, and
- Dust reduction measures and management to prevent impact on adjoining properties during and after operation. Management measures including but not limited to water cart rotation are to be specified were relevant.

Other Issues— including, but not limited to:

- a consideration of impacts on views and vistas, streetscapes. Council notes that the NSW Department of Planning (southern Region), the then NSW Department of Environment and Climate change, and Shellharbour and Kiama Council's participated in a steering committee that undertook a review of Hard Rock Resources in the Shellharbour and Kiama LGA's. Reports on visual assessment were completed in 2006/7,
- social and economic impacts to the community and businesses in the vicinity of the proposal (including agricultural businesses), associated with traffic, access, property, public domain and amenity related changes,
- a draft Community Involvement Framework identifying relevant stakeholders, procedures for distributing information and receiving/responding to feedback and resolving community complaints,
- a Construction Management Plan that recommends monitoring, auditing and reporting processes to guide the proposed works.

Heritage -

Impacts to *State and local historic heritage* (including conservation areas, built heritage, landscapes and archaeology) should be assessed. Where impacts to State or locally significant historic heritage are identified, the assessment shall:

- 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 guidelines in the *NSW Heritage Manual* (Heritage Office and DUAP 1996),
- be undertaken by a suitably qualified heritage consultant(s) with relevant heritage expertise (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria),
- include a statement of heritage impact for all heritage items/conservation areas to be impacted (including significance assessment). This should include detailed mapping of all heritage items and how they are affected by the proposal,
- include details of any proposed mitigation and management measures (architectural and landscape),
- consider impacts from, including but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant),
- where physical archaeological test excavations are proposed, develop an appropriate archaeological assessment methodology,

- including research design, in consultation with the Department and the Heritage Council of New South Wales, to guide the test excavations, and include the results of these excavations, and
- provision of future mitigation strategies for all identified archaeological impacts that would arise from the proposal.

Impacts to *Aboriginal heritage* (including cultural and archaeological significance), in particular impacts to Aboriginal objects and potential archaeological deposits (PAD), should be assessed. Where impacts are identified, the assessment shall:

- outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the measures) generally consistent with the *Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (DEC 2005) and other relevant guidelines and requirements,
- be undertaken by a suitably qualified heritage consultant(s),
- demonstrate effective consultation with Aboriginal communities in determining and assessing impacts and developing and selecting options and mitigation measures (including the final proposed measures),
- assess and document the archaeological and cultural significance of cultural heritage values of affected sites, and
- undertake appropriate archaeological investigations generally in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010), to establish the full spatial extent and significance of any archaeological evidence across each site/area of PAD, and include the results of these excavations. If an alternative excavation method is proposed, it shall be developed in consultation with the relevant bodies.

Property Attributes

Council records indicate the following property attributes apply to the subject site:

- Bushfire Prone Land
- Loose Fill Asbestos Insulation
- Terrestrial Biodiversity
- Flood Prone Land
- Potential Contaminated Land
- Conical Surface RL 52-127m and Obstacle Limitation Surface 52m
- Aboriginal and European heritage
- Biodiversity - Threatened flora and fauna, Illawarra escarpment vegetation, biodiversity Corridor and fish habitat.

The above property attributes are not exhaustive and that additional research will be required to identify all affected elements where relevant.

Conclusion

A detailed analysis of the proposal has not been undertaken by Council officers at this preliminary stage. The EIS should also address any other relevant SEPPs including State Environmental Planning Policy (State and Regional Development) 2011.

Yours Sincerely,

James Douglas
Senior Development Assessment Officer