



APPENDIX F: NSW GOVERNMENT AGENCY CONSULTATION





Our ref: DOC20/993061-2
Your ref: SSD-11591659

Melissa Anderson

Senior Planning Officer
Minerals Quarry Assessments
Department of Planning, Industry and Environment
melissa.anderson@planning.nsw.gov.au

Dear Ms Anderson

Input into Secretary's Environmental Assessment Requirements – State Significant Development – Deep Creek Quarry, 279 Deep Creek Road, Limeburners Creek – MicCoast LGA (SSD-11591659)

I refer to your email dated 2 December 2020 seeking input into the Secretary's Environmental Assessment Requirements (SEARs) for the Deep Creek Quarry, located at 279 Deep Creek Road, Limeburners Creek. The proposed development is within the MidCoast local government area.

The Biodiversity and Conservation Division (BCD) understands that the development is a quarry producing up to 500,000 tonnes per annum of hard rock aggregate. BCD understands that the proposal is a State Significant Development (SSD) project under the *Environmental Planning and Assessment Act 1979*.

BCD has reviewed the Scoping Report as prepared by Kleinfelder (dated 16 November 2020) and has prepared Standard SEARs which are presented in **Attachment A**. There are no project-specific SEARs provided for this project (**Attachment B**). Details of guidance documents are provided in **Attachment C**.

If you have any further questions in relation to this matter, please contact Brendan Mee, Senior Conservation Planning Officer, on 4904 2730 or at rog.hcc@environment.nsw.gov.au

Yours sincerely

8 December 2020

STEVEN COX
Senior Team Leader Planning
Hunter Central Coast Branch
Biodiversity and Conservation Division

Enclosure: Attachments A, B, C

Attachment A – Standard Environmental Assessment Requirements

Biodiversity

1. Biodiversity impacts related to the proposed development (SSD 11591659) 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*.

Water and soils

5. 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.

6. The EIS must describe background conditions for any water resource likely to be affected by the development, 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.
7. The EIS must assess the impacts of the development on water quality, including: a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development 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.
8. The EIS must assess the impact of the development 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 erosion
9. 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).

10. 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.
11. The EIS must model the effect of the proposed development (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.
12. 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 affectation 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.
13. The EIS must assess the impacts on the proposed development 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 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 SES. j. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

14. The [EIS/EA] 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.

15. The [EIS/EA] 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 environmental assessment requirements

Biodiversity - nil
Water and soils - nil
Flooding and coastal erosion - nil

Attachment C – Guidance material

Title	Web address
Relevant legislation	
<i>Biodiversity Conservation Act 2016</i>	https://www.legislation.nsw.gov.au/#/view/act/2016/63/full
<i>Coastal Management Act 2016</i>	https://www.legislation.nsw.gov.au/#/view/act/2016/20/full
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
<i>Environmental Planning and Assessment Act 1979</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
<i>Fisheries Management Act 1994</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
<i>Marine Parks Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
<i>National Parks and Wildlife Act 1974</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
<i>Protection of the Environment Operations Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
<i>Water Management Act 2000</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
<i>Wilderness Act 1987</i>	http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
Biodiversity Assessment Method (OEH, 2020)	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
NSW Guide to Surveying Threatened Plant	http://www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.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 Department of Environment, Climate Change and Water (DECCW, 2010)	http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm
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

Title	Web address
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 erosion	
Reforms to coastal erosion management	http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm
Floodplain development manual	http://www.environment.nsw.gov.au/floodplains/manual.htm
Guidelines for Preparing Coastal Zone Management Plans	Guidelines for Preparing Coastal Zone Management Plans http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf
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



DOC20/1007933-2

Department of Planning and Environment
Returned via Planning Portal
Email: melissa.andersen@planning.nsw.gov.au

Attention: Melissa Andersen

Dear Ms Andersen

**DEEP CREEK QUARRY PROJECT SSD-11591659
SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS**

I refer to your email to the Environment Protection Authority (EPA), dated 2 December 2020, seeking the EPA's Secretary's Environmental Assessment Requirements (SEARs) to assist with the preparation of an Environmental Impact Statement for the Deep Creek Quarry Project, located at 279 Deep Creek Road, Limeburners Creek & Allworth, New South Wales in the Mid-Coast Local Government Area.

Based on the information provided, the EPA understands that the proposal involves the following:

- Construction of a sealed access road subdivided from Lot 551 and Lot 552 DP 1238818
- Clearing and earthworks for site preparation and to enable access to the resource and development of the quarry extraction area
- Installation of on-site processing plant for crushing and screening
- Construction of a weighbridge and associated administrative buildings
- Extraction and processing of a maximum of 500,000 tonnes per annum
- Average 55 truck movements per day during operation
- Progressive revegetation of benches and rehabilitation on completion of extraction

The EPA has considered the proposal and has identified in **Attachment A** the information it requires to assess the project. The EPA's key information requirements for the project include and adequate description and assessment of:

1. Potential noise and vibration impacts due to construction and operation;
2. Potential air quality impacts due to construction and operation;
3. Impacts to surface water, groundwater and site wide water management; and
4. Water and waste management and disposal.

In carrying out the EIS assessment, the EPA recommends that the proponent should refer to the relevant guidelines listed in **Attachment B** and any relevant industry codes of practice and best practice management guidelines.

The scope of the assessment must reflect the potential extent of all likely impacts of the proposal. A review of Figure 2 *Locality - Study area & Development footprint* and Figure 4 - *Surrounding receptors* suggests that a number of receptors are located within close proximity to the development footprint but outside of the project study area. In particular, potential noise, air quality and vibration impacts on all receptors likely to be impacted must be included in the scope of the assessment.

The proponent should be aware that any commitments made in the Environmental Impact Statement (EIS) may be formalised as approval conditions and environment protection licence conditions. Pollution control measures should not be proposed if they are impractical, unrealistic or beyond the financial viability of the development. It is important that all conclusions are supported by adequate data.

If you require any further information regarding this matter, please contact Kirsty Sutherland (02) 6659 8291 on or by email to Kirsty.Sutherland@epa.nsw.gov.au.

Yours sincerely

JOCK DUNCAN
Unit Head Regional Operations
Environment Protection Authority

Encl: Attachment A – EPA’s Recommended Secretary’s Environmental Assessment Requirements – Deep Creek Quarry
Attachment B – Guidance Material

ATTACHMENT A

EPA's Recommended Secretary's Environmental Assessment Requirements – Proposed Deep Creek Quarry SSD-11591659

1 Environmental impacts of the project

Impacts related to the following environmental issues need to be assessed, quantified and reported on:

- Air Quality
- Noise and Vibration
- Water and Soil Quality and Management
- Waste Management
- Dangerous Goods, Chemical Storage and Bunding

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. A full list of guidelines is at Attachment B.

2 Licensing requirements

Should project approval be granted, the proponent will need to make a separate application to EPA for an Environment Protection Licence for the Deep Creek Quarry. Additional information is available through the [EPA's Guide to Licensing](#) document.

General information on license requirements can also be obtained from EPA's Environment Line on 131 555 during office hours, or can be found at the EPA web site at:
<http://www.epa.nsw.gov.au/licensing/>

3 The Proposal and Premises

The objectives of the proposal should be clearly stated and refer to:

- The size and type of the operation;
- The nature of the processes and the products, by-products and wastes produced;
- The types and quantities of any chemicals to be used and stored onsite;
- Proposed operational hours, including any heavy vehicle movements;
- Proposed maximum and average annual production rates that will occur at the premises; and
- Proposed staging and timing of the proposal.

The EIS will need to fully identify all the processes and activities intended for the site over the life of the development. This will include details of:

- The location of the proposed facility and details of the surrounding environment;
- The proposed layout of the site;
- Appropriate land use zoning;

- Ownership details of any residence and/or land likely to be affected by the proposed operations;
- Maps/diagrams showing the location of residences and properties likely to be affected and other industrial developments, conservation areas, wetlands, etc. in the locality that may be affected by the facility;
- All equipment proposed for use at the site;
- All chemicals, including fuel, used on the site and proposed methods for their transportation, storage, use and emergency management;
- Clearly detail the boundary of the premises; and
- Methods to mitigate any expected environmental impacts of the development.

4 Air Issues

4.1 Air quality

The EIS should include an air quality impact assessment (AQIA) in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, including, as a minimum the following components:

Assessment Objective

1. Demonstrate the proposed project will incorporate and apply best management practice emission controls; and
2. Demonstrate that the project will not cause violation of the project adopted air quality impact assessment criteria at any residential dwelling or other sensitive receptor.

Assessment Criteria

- 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).

Existing Environment

- Provide a detailed description of the existing environment within the assessment domain, including:
 - geophysical form and land-uses;
 - location of all sensitive receptors;
 - local and regional prevailing meteorology.

Emissions Inventory

- Provide a detailed description of the project and identify the key stages with regards to the potential for air emissions and impacts on the surrounding environment.
- Identify all sources of air emissions, including mechanically generated, combustion and transport related emissions likely to be associated with the proposed development.

Air Quality Emission Control Measures

- Provide a detailed discussion of all proposed air quality emission control measures, including details of a reactive/predictive management system. The information provided must include:
 - explicit linkage of proposed emission controls to the site specific best practice determination assessment
 - timeframe for implementation of all identified emission controls;
 - key performance indicators for emission controls;
 - response mechanisms;
 - responsibilities for demonstrating and reporting achievement of KPIs;
 - record keeping and complaints response register;

5 Noise and Vibration

The following matters should be addressed in relation to noise and vibration impacts associated with the proposal. This includes identification of the hours of operations, assessment of all activities where proposed, and impacts on sensitive receivers associated with the proposed hours of operation. The following matters should be addressed as part of the EIS.

General

- Construction noise associated with the proposed development should be assessed using the *Interim Construction Noise Guideline* (DECC, 2009).
- Vibration from all activities (including construction and operation) to be undertaken on the premises should be assessed using the guidelines contained in the *Assessing Vibration: a technical guideline* (DEC, 2006).

Industry

- Operational noise from all industrial activities (including private haul roads) to be undertaken on the premises should be assessed using the guidelines contained in the *NSW Industrial Noise Policy* (EPA, 2000) and *Industrial Noise Policy Application Notes*.

Blasting

- 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).

Road

- Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the *NSW Road Noise Policy* (DECCW, 2011).
- Noise from new or upgraded public roads should be assessed using the *NSW Road Noise Policy* (DECCW, 2011).

Monitoring

- Detail monitoring that will be conducted to assess the impacts of the proposal.

6 Water and Soils

6.1 Water Quality

Describe Proposal

- Describe the proposal including position of any intakes and discharges, volumes, water quality and frequency of all water discharges.
- Demonstrate that all practical options to avoid discharges have been implemented and environmental impact minimised where discharge is necessary.
- Where relevant include 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.

Background Conditions

- Describe existing surface and groundwater quality. An assessment needs to be undertaken for any water resource likely to be affected by the proposal (including Deep Creek). Issues to be discussed should include but are not limited to:
 - a description of any impacts from existing industry or activities on water quality
 - a description of the condition of the local catchment e.g. erosion, soils, vegetation cover, etc.
 - an outline of baseline groundwater information, including, for example, depth to water table, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment
 - historic river flow data
- 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 waters (<http://www.environment.nsw.gov.au/ieo/index.htm>). Where groundwater may be impacted the assessment should identify appropriate groundwater environmental values.
- State the indicators and associated trigger values or criteria for the identified environmental values. This information should be based on the ANZECC (2000) *Guidelines for Fresh and Marine Water Quality* as a minimum.
- State any locally specific objectives, criteria or targets which have been endorsed by the NSW Government.

Impact Assessment

- Describe the nature and degree of impact that any proposed discharges will have on the receiving environment, both surface water and groundwater.
- Detail contractual and other arrangements that will be put in place to prevent pollution from haul roads and unsealed roads per se, particularly rights of carriageways not owned by the proponent.
- Assess impacts against the relevant ambient water quality outcomes. Demonstrate how the proposal will be designed and operated to:
 - protect the Water Quality Objectives for receiving waters where they are currently being achieved; and
 - contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved.
- Where a discharge is proposed that includes a mixing zone, the proposal should demonstrate how wastewater discharged to waterways will ensure the ANZECC (2000) 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.
- Propose water quality limits for any discharge(s) that adequately protects the receiving environment.
- Assess impacts on groundwater and groundwater dependent ecosystems.
- Describe how stormwater will be managed both during and after construction.

Monitoring

- Describe how predicted impacts will be monitored and assessed over time.

6.2 Soil

The EIS should include:

- An assessment of potential impacts on soil and land resources should be undertaken, being guided by *Soil and Landscape Issues in Environmental Impact Assessment* (DLWC 2000). The nature and extent of any significant impacts should be identified. Particular attention should be given to:
 - Soil erosion and sediment transport - in accordance with *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).
- A description of the mitigation and management options that will be used to prevent, control, abate or minimise identified soil and land resource impacts associated with the project. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

7 Waste

The EIS should:

- Include a detailed plan for in-situ classification of waste material, including the sampling locations and sampling regime that will be employed to classify the waste, particularly with regards to the identification of contamination hotspots.
- Identify, quantify, characterise and classify all waste that currently exists at the site. Identify the intended end use, for example reuse or disposal, and the end use location(s) for the waste. Also, specify the mechanism under which waste will be reused or disposed, such as a Resource Recovery Exemption. Note: All waste must be classified in accordance with EPA's Classification Guidelines.
- Identify, characterise and classify all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste. Note: All waste must be classified in accordance with EPA's Waste Classification Guidelines.
- 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. Note: All waste must be classified in accordance with EPA's Classification Guidelines.
- Include a commitment to retaining all sampling and classification results for the life of the project to demonstrate compliance with EPA's Waste Classification Guidelines.
- Provide details of how waste will be handled and managed onsite to minimise pollution, including:
 - a) Stockpile location and management
 - Labelling of stockpiles for identification, ensuring that all waste is clearly identified and stockpiled separately from other types of material (especially the separation of any contaminated and non-contaminated waste).
 - Proposed height limits for all waste to reduce the potential for dust and odour.
 - Procedures for minimising the movement of waste around the site and double handling.
 - Measures to minimise leaching from stockpiles into the surrounding environment, such as sediment fencing, geofabric liners etc.
 - b) Erosion, sediment and leachate control including measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site during works. The EIS should show the location of each measure to be implemented. The Proponent should consider measures such as:
 - Sediment traps
 - Diversion banks
 - Sediment fences
 - Bunds (earth, hay, mulch)
 - Geofabric liners
 - Other control measures as appropriate

The Proponent should also provide details of:

- how leachate from stockpiled waste material will be kept separate from stormwater runoff;
 - treatment of leachate through a wastewater treatment plant (if applicable); and
 - any proposed transport and disposal of leachate off-site.
- 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.
 - Include details of all procedures and protocols to be implemented to ensure that any waste leaving the site is transported and disposed of lawfully and does not pose a risk to human health or the environment.
 - Include a statement demonstrating that the Proponent is aware of EPA's requirements with respect to notification and tracking of waste.
 - Include a statement demonstrating that the Proponent is aware of the relevant legislative requirements for disposal of the waste, including any relevant Resource Recovery Exemptions, as gazetted by EPA from time to time.
 - Outline contingency plans for any event that affects operations at the site that may result in environmental harm, including: excessive stockpiling of waste, volume of leachate generated exceeds the storage capacity available on-site etc.

Include details of the quantity and type of liquid and/or non-liquid waste(s) generated, handled, processed or disposed of at the premises, including:

- the transportation, assessment and handling of waste arriving at or generated at the site;
- any stockpiling of wastes or recovered materials at the site;
- any waste processing related to the facility, including reuse, recycling, reprocessing or treatment both on- and off-site;
- the method for disposing of all wastes or recovered materials at the facility;
- the emissions arising from the handling, storage, processing and reprocessing of waste at the facility;
- the proposed controls for managing the environmental impacts of these activities.

8 Dangerous Goods, Chemical storage and Bunding

- The EIS must outline all details regarding the transport, handling, storage and use of dangerous goods, chemicals and products, including fuel, both on site and with ancillary activities and describe the measures proposed to minimise the potential for leakage or the migration of pollutants into the soil/waters or from the site.
- The EIS should identify any fuel or chemical storage areas proposed for the site.

- The EIS should consider compliance with the following legislation, standards and guidelines where relevant:
 - Australian Standard AS1692:1989 *Tanks for Flammable and combustible liquids*;
 - The DECC's "*Bunding and Spill Management*" Technical Guideline (November 1997)
 - Australian Standard AS 1940:2004 *The Storage and Handling of Flammable and Combustible Liquids*
 - Australia Standard AS 4452-1997: *The Storage and Handling of Toxic Substances*;
 - Australian/New Zealand Standard AS/NZS 4452:1997: *The Storage and Handling of Mixed Classes of Dangerous Goods in Packages and Intermediate Bulk Containers*;
 - and
 - *Road and Rail Transport (Dangerous Goods) Act 1997*

9 Monitoring Programs

The EIS should include a detailed assessment of any noise, air quality, weather, water or waste monitoring required during the construction and on-going operation of the site to ensure that the development achieves a satisfactory level of environmental performance. The evaluation should include a detailed description of the monitoring locations, sample analysis methods and the level of reporting proposed.

ATTACHMENT B – EPA’s Guidance Material (not exhaustive)

<u>Legislation</u>	
<i>Environmental Planning and Assessment Act 1979</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
<i>Protection of the Environment Operations Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
<i>Protection of the Environment Operations (Noise Control) Regulation 2017</i>	https://legislation.nsw.gov.au/#/view/regulation/2017/449
<i>Protection of the Environment Operations (Clean Air) Regulation 2010</i>	https://legislation.nsw.gov.au/#/view/regulation/2010/428
<i>Protection of the Environment Operations (Waste) Regulation 2014</i>	https://legislation.nsw.gov.au/#/view/regulation/2014/666
<i>Waste Avoidance and Resource Recovery Act 2001</i>	https://legislation.nsw.gov.au/#/view/act/2001/58
<i>Contaminated Land Management Act 1997</i>	http://www.legislation.nsw.gov.au/#/view/act/1997/140
<u>Licensing</u>	
Licensing Requirements	https://www.epa.nsw.gov.au/licensing-and-regulation/licensing
<u>Noise/Vibration</u>	
<i>Interim Construction Noise Guideline (DECC, 2009)</i>	https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interim-construction-noise-guideline
<i>Assessing Vibration: a technical guideline (DEC, 2006)</i>	https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/assessing-vibration
Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC, 1990)	http://www.environment.nsw.gov.au/noise/blasting.htm
<i>Noise Policy for Industry (2017) and Implementation and Transitional arrangements for the Noise Policy for Industry (2017)</i>	https://www.epa.nsw.gov.au/publications/noise/17p0524-noise-policy-for-industry https://www.epa.nsw.gov.au/publications/noise/17p0293-implement-transition-arrange-noise-pol-industry

NSW Road Noise Policy (DECCW, 2011)	http://www.epa.nsw.gov.au/resources/noise/2011236nswroadnoisepolicy.pdf
<u>Air/Odour</u>	
<i>Approved methods for the Modelling and Assessment of Air Pollutants in NSW (2016)</i>	http://www.epa.nsw.gov.au/resources/epa/approved-methods-for-modelling-and-assessment-of-air-pollutants-in-NSW-160666.pdf
<i>Approved methods for the Sampling and Analysis of Air Pollutants in NSW (2007)</i>	http://www.epa.nsw.gov.au/resources/air/07001amsaap.pdf
National Environment Protection (Ambient Air Quality) Measure	http://www.nepc.gov.au/nepms/ambient-air-quality
No EPA specific guidance material exists for the control of dust from construction sites. Consideration should be given to the POEO Act and the <i>Local Government Air Quality Toolkit</i> (DECC, 2007)	http://www.epa.nsw.gov.au/air/lgaqt.htm
<u>Water/Soils</u>	
<i>ANZECC Guidelines for Fresh and Marine Water Quality (2018)</i>	https://www.waterquality.gov.au/guidelines/anz-fresh-marine
<i>NSW Water Quality and River Flow Objectives</i>	http://www.environment.nsw.gov.au/ieo/index.htm
<i>Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones</i>	http://deccnet/water/resources/AWQGuidance7.pdf
<i>Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)</i>	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/water/approvedmethods-water.pdf
<i>Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000)</i>	https://www.shop.nsw.gov.au/publication/soil-and-landscape-issues-in-environmental-impact-assessment-technical-report-no-34-1324-6860-839
<i>Managing urban stormwater: soils and construction, vol. 1 (Landcom, 2004)</i> and Addendum Publications (Various)	http://www.environment.nsw.gov.au/stormwater/publications.htm
<i>Landslide Risk Management (2007)</i>	http://www.australiangeomechanics.org/resources/downloads/
<i>Site Investigations for Urban Salinity (DLWC, 2002)</i>	http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf
Dryland Salinity Resources (Various)	http://www.environment.nsw.gov.au/salinity/solutions/urban.htm
<u>Waste</u>	

<i>NSW Waste Avoidance and Resource Recovery Strategy 2014-2021</i>	http://www.epa.nsw.gov.au/wastestrategy/warr.htm
<i>Waste Classification Guidelines – 4 Parts (EPA, 2014)</i>	http://www.epa.nsw.gov.au/wasteregulation/classify-waste.htm
<u>Chemical and Fuel Storage</u>	
<i>Storage and Handling of Dangerous Goods – Code of Practice (WorkCover, 2005)</i>	http://www.safework.nsw.gov.au/_data/assets/pdf_file/0005/50729/storage-handling-dangerous-goods-1354.pdf

Deep Creek Quarry – Request for Secretary's Environmental Assessment Requirements

Address:	279 Deep Creek Road Limeburners Creek 2324	Contact Officer:	Lisa Proctor
-----------------	---	-------------------------	--------------

The Department of Planning, Industry and Environment's Major Projects Team has requested Council's input to the Secretary's Environmental Assessment Requirements (SEARs) for the development of a hard rock quarry at Limeburner's Creek. This is a State Significant Development.

Council requests that the issues below be considered for inclusion in the SEARs.

Issue	Key points
Traffic and Transport	- Assess in detail the construction and operational traffic impacts of the development. - Provide details of traffic volumes (both light and heavy vehicles) and transport routes during construction and operation, including traffic associated with sourcing raw materials. - Assess the potential traffic impacts of the project on road network function including intersection performance and site access arrangements and road safety, including any bus routes. - Assess the capacity of the existing road network to accommodate the type and volume of traffic generated by the project (including over-mass / over-dimensional traffic) during construction and operation. - Provide details of measures to mitigate and / or manage potential impacts including a schedule and designs of all required road upgrades, road maintenance contributions, and any other traffic control measures, developed in consultation with the relevant road authority.
Biodiversity	A biodiversity assessment should be undertaken in accordance with the recommendations and findings in Kleinfelder's <i>Request for Secretary's Environmental Assessment Requirements. Ironstone Development Pty Ltd. Deep Creek Quarry. 16/11/202</i> . Given the potential for off-site and indirect impacts on local biodiversity as a result of the quarry operations the size of the study area should be increased to include a larger buffer to the development footprint.
Noise and Vibration	- Assess in detail the likely construction and operational and noise impacts (including transport noise impacts) of the development in accordance with the <i>Interim Construction Noise Guideline, NSW Noise Policy for Industry and the NSW Road Noise Policy</i> respectively. - Provide the proposed blasting hours, frequency and methods and a detailed assessment of the likely blasting impacts of the development (including ground vibrations, overpressure, flyrock, visual and fumes/odour) on people, animals, buildings/structures,

Issue	Key points
	infrastructure and significant natural features, having regard to the relevant ANZEC guidelines. Detail reasonable and feasible mitigation measures, including evidence that there are no such measures available other than those proposed and provide details of monitoring and management measures.
Air Quality	- Assess in detail the potential construction and operational air quality impacts, in accordance with the <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW</i>, and with a particular focus on dust emissions including PM2.5 and PM10, diesel and blast fume emissions. - Detail reasonable and feasible mitigation measures, including evidence that there are no such measures available other than those proposed and provide details of monitoring and management measures.
Hydrology	Assess in detail the likely impacts of the development (including flooding, excavation, wastewater, stormwater and erosion) on the quality and quantity of existing surface and ground water resources to achieve the following objectives: - To control the hydrological impacts of development on the hydrological regime of the receiving surface and groundwater systems including the frequency, magnitude and duration of flows to preserve, as far as practical, pre-development groundwater and surface water regimes and interactions. - To achieve a neutral or beneficial effect on water quality. The assessment is to include: - A detailed site water balance, including a description of site water demands, water disposal methods (inclusive of volume and frequency of any water discharges), water supply infrastructure and water storage structures; - baseline monitoring data (for both water quality and flows) in Deep Creek, upstream and downstream of the site; - proposed water discharge quantities and quality against receiving water quality and flow objectives; - impacts on Deep Creek and associated riparian land; - a detailed description of the proposed water management system (including wastewater and stormwater management), water monitoring program, erosion and sediment control measures for the construction and operational phase in accordance with the <i>'Blue Book Volume 1' (Landcom 2004)</i> and the <i>'Blue Book Volume 2' (DECC 2008)</i>;

15 December 2020

Attention: Department of Planning, Industry & Environment

APPLICATION NO: (Our Ref. 25-2020-2-2)

PROPOSAL: Deep Creek Quarry

PROPERTY: 279 Deep Creek Road, Limeburners Creek (Lot 472 DP 1162208
& Lot 48 DP 753178)

Dear Sir / Madam,

Thank you for your request for comment on the Scoping Report to support the request for Secretary's Environmental Assessment Requirements (SEARs) for the Depp Creek Quarry proposal. Council has completed a review of the Proposal and provides the following advice:

Ecology and Environment

Council reviewed the Scoping Report to support the request for SEARs for the Deep Creek Quarry prepared by Kleinfelder, dated 16 November 2020. Council's main concerns relate to water extraction and water quality impacts to Deep Creek.

The project is proposed in the upper tributaries of Deep Creek, which feeds into the Karuah River and outlets into Port Stephens Local Government Area. The scoping study identifies soils in this area as being of high erosion hazard. Due to the sensitive downstream receivers including the Karuah River and Karuah's Oyster industry, and the Port Stephens Marine Park, it is recommended that a detailed Water Impact Assessment be undertaken with detailed consideration to these sensitive downstream receiving environments that are of significance to Port Stephens.

Traffic

The Scoping document states an assessment of traffic impacts is to be completed and included in the EIS. Council is satisfied that the key traffic impact matters will be considered as part of the Traffic Impact Assessment to be undertaken as part of the proposal.

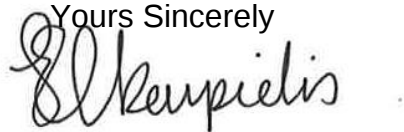
Development Contributions

It is noted the initial proposal to access the Deep Creek Road from The Bucket's Way was not adopted. Should the proposal result in the use of a Regional classified road, which is managed and financed by Council, development contributions would be applied in accordance with the Port Stephens Council Local Infrastructure Contribution Plan. As Council finances the maintenance of The Bucket's Way, it is expected that contributions would be applied in accordance with the Local Infrastructure Contribution Plan.

For development involving extractive industries, Council will collect monetary contributions towards the maintenance of Council financed roads used as haulage routes.

Thank you for the opportunity to comment on the proposed development. If you wish to discuss the matters raised above or have any questions, please contact me on the number below and I will be happy to help.

Yours Sincerely

A handwritten signature in black ink, appearing to read 'S. Efkarpidis', with a small dot at the end.

Sophie-Marie Efkarpidis

A/ Senior Development Planner

Phone: 4988 0316

Email: Sophie.efkarpidis@portstephens.nsw.gov.au



OUT20/15065

Melissa Anderson
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

melissa.anderson@planning.nsw.gov.au

Dear Ms Anderson

**Deep Creek Quarry (SSD-11591659)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)**

I refer to your email of 2 December 2020 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter.

The following recommendations are provided by DPIE Water and NRAR.

The SEARS should include:

1. The identification of an adequate and secure water supply for each water year of the entire life of the project.
2. Annual volumes of surface water and groundwater proposed to be taken by the activity (including through inflow and seepage) from each surface and groundwater source as defined by the relevant Water Sharing Plan.
3. An annual site water balance for the duration over which the activity proposes to impact the natural water cycle.
4. The development of a thorough groundwater conceptual model with supporting cross section and extraction mining depth supported by field data.
5. 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.
6. Proposed surface and groundwater monitoring activities and methodologies.
7. Details of a proposed water management plan.
8. 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>)

For detailed requirements of the above please see **Attachment A**.



Any further referrals to DPIE Water & NRAR can be sent by email to:
landuse.enquiries@dpie.nsw.gov.au.

Yours sincerely

Alistair Drew
Acting Senior Project Officer, Assessments
Water – Knowledge Division
4 December 2020

**Deep Creek Quarry (SSD-11591659)
SEARs Detailed Requirements**

1. The identification of an adequate and secure water supply for each water year of the entire life of the project.

This should include:

- Identification of any licensing requirements or other approvals required under the *Water Act 1912* and/or *Water Management Act 2000*.
- Confirmation that the required entitlements can be obtained prior to development approval from an appropriately authorised and reliable supply in accordance with the operating rules of any relevant Water Sharing Plan.
- An assessment of the current market depth where water entitlement is required to be purchased.

2. Annual volumes of surface water and groundwater proposed to be taken by the activity (including through inflow and seepage) from each surface and groundwater source as defined by the relevant Water Sharing Plan.

No further explanation required.

3. An annual site water balance for the duration over which the activity proposes to impact the natural water cycle.

This should include:

- All input and output volumes of each potentially connected surface water and groundwater source.
- Identification of each of the activity's water requirements and all proposed volumetric take (direct and indirect) from each water source.
- Cumulative volumetric take by neighbouring users.
- Complex three-dimensional numerical modelling as per the Australian Groundwater Modelling Guidelines (2012), with evidence-based conceptual modelling and testing (cf. Enemark et al. 2019), calibration, and numerical model uncertainty analysis (Middlemis & Peeters 2018).

4. The development of a thorough groundwater conceptual model with supporting cross section and extraction mining depth supported by field data.

This should include:

- A full description of hydrogeological settings, formation characteristics, baseline groundwater flow and groundwater quality, supporting environmental values. Description to be supported by maps and cross sections.
- An assessment of all potential hazards and consequences and processes associated with those impacts.

5. 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.

This should:

- Be based on data that is demonstrated to be of adequate type, quality and quantity.

- Be informed by complex numerical hydrogeological modelling parameterised with suitably distributed and accurate site measurements, collected in accordance with relevant and current national or international standards.
- Include a geochemical impact assessment (static and kinetic testing of acid-base accounting and element mobility) of the stockton sandbeds, and any bounding geological units, in accordance with AMIRA (2002), Inap (2009); Dear et al. 2014, Duap 1996, Shand et al. 2018, Simpson et al. 2018, and Tulau 2007.
- Modelled transportation of water-quality hazards (acidity, metals, nutrients, salinity, pathogens, site-used dangerous substances, pfas) toward the site, third-party registered groundwater users, and environmental assets.
- If forecasting any impact on water salinity, provide a salinity budget based on the numerical groundwater model.
- Identify and apply appropriate local community values and water-quality objectives as per Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2018 (ANZG).

6. Proposed surface and groundwater monitoring activities and methodologies.

No further explanation required.

7. Details of a proposed water management plan.

This should include:

- An appropriate data-quality assurance plan:
 - for water levels – see WMSTC (2019)
 - for water quality – see US EPA (2006) and Mueller (2015)
 - for other measurements – apply the most applicable industry standard available.
- Stakeholder consultation to define the community value (beneficial use category) of each water source as per ANZG (2018).
- Establishment and updating of baseline status as per ANZG (2018), with estimated uncertainty, and with respect to community values and identified risks, including:
 - water take
 - groundwater levels and circulation paths and rates
 - transportation of salinity, pathogens, dangerous substances, pfas
 - turbidity
 - oxidation state (redox, dissolved oxygen), acidity generation and release of metals, metalloids, nutrients
- Specification of water-quality target values, action-trigger parameters, water-quality assessment approach, and response strategy for the early positive detection of change, trends or other signatures relating to ecosystem condition and community value; to be established in accordance with ANZG (2018).
- Mitigation and management strategy. For acid sulphate soils refer to:
 - Dear et al. 2014,
 - DUAP 1996,
 - Shand et al. 2018,
 - Simpson et al. 2018,
 - Stone et al. 1998, and;
 - Tulau 2007.

8. 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>)

No further explanation required.

References

- AMIRA (2002). ARD Test Handbook: Project 387A Prediction and kinetic control of acid mine drainage. Australian Minerals Industry Research Association, Ian Wark Research Institute and Environmental Geochemistry International Pty Ltd, May 2002. < <https://www.resolutionmineeis.us/sites/default/files/references/amira-2002.pdf> >.
- ANZG 2018. Australian and New Zealand Guidelines for Fresh and Marine Water Quality. Australian and New Zealand governments and Australian state and territory governments, Canberra. < www.waterquality.gov.au/anz-guidelines >. Guidelines for Water Quality Management, available < <https://www.waterquality.gov.au/guidelines> >.
- Barnett B, Townley LR, Post V, Evans RE, Hunt RJ, Peeters L, Richardson S, Werner, AD, Knapton A and Boronkay A. Australian Groundwater Modelling Guidelines, June 2012. < <http://www.groundwater.com.au/media/W1siZiIsIjIwMTIvMTAvMTcvMjFfNDFFMzZfOTYwX0F1c3RyYWxpYW5fZ3JvdW5kd2F0ZXJfbW9kZWxsaW5nX2d1aWRlbGluZXMucGRmI1d/Australian-groundwater-modelling-guidelines.pdf> >.
- Dear, S-E., Ahern, C. R., O'Brien, L. E., Dobos, S. K., McElnea, A. E., Moore, N. G. & Watling, K. M. 2014. Queensland Acid Sulfate Soil Technical Manual: Soil Management Guidelines. Brisbane: Department of Science, Information Technology, Innovation and the Arts, Queensland Government. < https://www.publications.qld.gov.au/dataset/cf17fb49-0ea5-4dee-82c9-32e09bf1eab5/resource/6d880993-4b80-45e3-9110-5c24fa7a7e75/fs_download/queensland-ass-management-guideline-2014.pdf >.
- DUAP (NSW Department of Urban Affairs and Planning) 1996. Extractive industries dredging and other extraction in riparian and coastal areas: EIS Guideline. Pubs No 96/57. < <https://www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/extractive-industries-dredging-and-other-extraction-in-riparian-and-coastal-areas-eis-guideline-1996-10.pdf?la=en> >.
- Enemark T., Peeters, L.J.M., Mallants, D. & Batelaan, O. 2019. Hydrogeological conceptual model building and testing: a review. Journal of Hydrology 569, 310-329. < <https://doi.org/10.1016/j.jhydrol.2018.12.007> >.
- INAP. (2009). Global acid rock drainage guide (GARD Guide). Document prepared by Golder Associates on behalf of the International Network on Acid Prevention (INAP). June 2009. < http://www.gardguide.com/index.php?title=Main_Page >.
- Middlemis H and Peeters LJM (2018). Uncertainty analysis—Guidance for groundwater modelling within a risk management framework. A report prepared for the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development through the Department of the Environment and Energy, Commonwealth of Australia 2018. < <https://www.iesc.environment.gov.au/system/files/resources/f96c0697-34fe-45de-bc58-9fbb405702f6/files/information-guidelines-explanatory-note-uncertainty-analysis.pdf> >.
- Mueller, D.K., Schertz, T.L., Martin, J.D., and Sandstrom, M.W. (2015). Design, analysis, and interpretation of field quality-control data for water-sampling projects: U.S. Geological Survey Techniques and Methods, book 4, chap. C4, 54 p. < <http://dx.doi.org/10.3133/tm4C4> >.
- Shand, P, Appleyard, S, Simpson, SL, Degens, B 2018, National Acid Sulfate Soils Guidance: Guidance for the dewatering of acid sulfate soils in shallow groundwater environments, Department of Agriculture and Water Resources, Canberra, ACT. CC BY 4.0. < <https://www.waterquality.gov.au/sites/default/files/documents/dewatering-acid-sulfate-soils.pdf> >.
- Simpson, SL, Mosley, L, Batley, GE and Shand, P (2018). National acid sulfate soils guidance: guidelines for the dredging of acid sulfate soil sediments and associated dredge spoil management, Department of Agriculture and Water Resources, Canberra, ACT. CC BY 4.0. < <https://www.waterquality.gov.au/sites/default/files/documents/dredging-sediments-spoil.pdf> >.

- Stone, Y., Ahern, C.R. and Blunden, B. (1998). Acid sulfate soils manual 1998. Acid Sulfate Soil Management Advisory Committee, Wollongbar, NSW, Australia. < <https://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf> >.
- Tulau, M.J. (2007). Acid Sulfate Soils Remediation Guidelines for Coastal Floodplains in New South Wales. Department of Environment and Climate Change. < <https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Water/Coasts/acid-sulfate-soils-remediation-guidelines-coastal-floodplains-070321.pdf> >.
- United States Environmental Protection Agency (US EPA) Guidance on Systematic Planning Using the Data Quality Objectives Process (EPA QA/G-4: EPA/240/B-06/001), February 2006. < <https://www.epa.gov/sites/production/files/2015-06/documents/g4-final.pdf> >.
- Water Monitoring Standardisation Technical Committee (WMSTC; 2019). National industry guidelines for hydrometric monitoring. Part 2: Site establishment and operations. NI GL 100.02-2019. Commonwealth of Australia (Bureau of Meteorology). < http://www.bom.gov.au/water/standards/documents/NI_GL_100_02-2019.pdf >.

MINING, EXPLORATION & GEOSCIENCE ADVICE RESPONSE

Melissa Anderson
Energy, Resources & Compliance Division
Department of Planning, Industry and Environment
GPO Box 39
SYDNEY NSW 2001

melissa.anderson@planning.nsw.gov.au

Dear Melissa

Project: Deep Creek Quarry
Stage: Secretary's Environmental Assessment Requirements
Development Application: SSD-11591659

I refer to your correspondence dated 12 October 2020 inviting Regional NSW – Mining, Exploration & Geoscience (MEG) to provide comments on the Deep Creek Quarry (the Project) submitted by Ironstone Developments Pty Ltd (the Proponent).

The relevant units internal to MEG have been consulted in generating this advice. The Department of Planning, Industry and Environment – Energy, Resources & Compliance Division and the Proponent should be aware that matters concerning subsidence, subsidence management, mine operator, safety, rehabilitation and environmental impacts of final landform design are not assessed by MEG and advice should be sought from the Resources Regulator.

MEG has reviewed the information supplied in relation to the abovementioned Project and requires that the Project's Environmental Impact Statement (EIS) refers to and includes all requirements set out in the Regional NSW – Mining, Exploration & Geoscience Secretary's Environmental Assessment Requirements for Deep Creek Quarry provided in **Attachment 1** (DOC 20/1010348).

For further advice concerning this matter, please contact Scott Anson, Manager Assessment Coordination Unit on 02 4063 6534 or assessment.coordination@planning.nsw.gov.au.

Yours sincerely



Scott Anson
Manager Assessment Coordination
Resource Operations
Regional NSW – Mining, Exploration & Geoscience
16 December 2020

for
Sima Williamson
A/Executive Director Resource Operations
Regional NSW – Mining, Exploration & Geoscience

Mining, Exploration & Geoscience Environmental Assessment Requirements

for proposed integrated/designated development applications requiring consultation
under Schedule 2 Part 2(4) of the Environmental Planning & Assessment Regulation 2000

Project	Deep Creek Quarry
Reference Number:	DOC20/1010348
Issue date of SEARs:	16 December 2020
Type of Approval:	Mining operation - open cut
Proponent:	Ironstone Developments Pty Ltd
DA Number:	SSD 11591659
LGA:	Mid Coast
Mineral:	Dimension Stone

In preparing the environmental assessment requirements concerning an application for Integrated/Designated Development, the Planning Secretary must consult relevant public authorities and have regard to the need for the requirements to assess any key issues raised by those public authorities.

This development may require approval under the *Mining Act 1992* to be issued by the Department of Regional NSW – Mining, Exploration & Geoscience (MEG). The proponent must apply to MEG for the relevant approval (mining lease) during the development assessment process, or once consent has been granted, and before the commencement of any mining or ancillary activity.

A development application under the *Environmental Planning and Assessment Act 1979* must be approved before a mining lease can be granted. A mining lease will only be granted for activities specified in the development consent.

Environmental Impact Statement (EIS) requirements for mining

1. Project description

The Proponent is to supply a comprehensive overview and description of all aspects of the Project, including:

- (a) Location map showing the project area, mining titles, nearest town/s, major roads etc.
- (b) Status of all titles (including mining and exploration), and development consents in place and/or timeline to obtain necessary approvals.
- (c) Any relationships between the resource and existing mines or other infrastructure.
- (d) Nature of operation (e.g. underground, open cut) and ore mineral/s to be extracted.

2. Geology

The Proponent is to supply a summary of the geological components of the mineral resource, including:

- (a) A brief description of the regional and local geology including information on the stratigraphic units within which the resource is located with a supporting map.
- (b) A detailed description of the physical characteristics and dimensions of the resource types (rhyolite and dimension stone) with representative plans and cross-sections of each, including, location of drill holes and the area proposed for extraction. Drill logs should be included or appended.
- (c) The size and quality of the resource and demonstrate how adequately this has been assessed including detail about suitability for the intended application, including representative photographs of the dimension stone.
 - a. Information should be provided on properties such as grainsize and mineralogy, the nature and extent of weathering or alteration, and amount and type of deleterious minerals, if any.
- (d) Project tonnages of dimension stone, year on year, should be included.

3. Mineral Resources and Ore Reserves

The Proponent is to provide a basic resource/reserve estimate including the anticipated tonnage and grades for the Project.

4. Life of mine schedule

The Proponent must supply a life of mine production schedule for each year of operation of the mine and for the life of the Project. The production schedule is to include:

- (a) Details of run-of-mine ore and waste rock tonnage planned to be extracted for each year and for the life of the Project, and an estimate of the saleable product produced for each year and the life of the Project.
- (b) In terms of text, plans or charts, the EIS must clearly show the proposed extent and sequence of the development.

5. Project economics and target market

The Proponent is to supply an assessment of project economics including:

- (a) Price forecasts by product type used by the Proponent. MEG requires these forecasts to analyse the Proponent's calculations of royalty value and export value.
- (b) Product tonnages split into market segment. These estimates are necessary to arrive at total revenue value and royalty calculations. Include justification for market segment based on quality parameters.
- (c) CAPEX & OPEX necessary for the Project broken down into the various sub-categories and equipment type. Include any changes that the Project will have on existing mine infrastructure and broader ex-mine infrastructure - rail, CHPP etc.
- (d) Estimates of employment generation broken down into direct, indirect, ongoing, construction and contract workers.
- (e) Total royalty generated over the life of the Project.
- (f) Relationship and interaction with other mines. Detailing the Project impacts on the existing mine and surrounding mines.

MEG understands that an estimate of product split into individual market segments is difficult to estimate at a point in time and is dependent on market conditions as the life of the Project progresses. MEG requires the Proponent to provide its best estimate of their market mix at the initial stages of the Project.

6. Royalty generated

Total royalty generated to the state over the life of the Project.

All above information should be summarised in the EIS, with full documentation appended. If deemed commercial-in-confidence, the resource summary included in the EIS must commit to providing MEG with full resource documentation via MEG's Resource and Economic Assessment process.

Additional matters for attention

Resource and Economic Assessment

The Resource and Economic Assessment (REA) is designed to review the resource/reserve estimates stated in the submitted EIS and supporting material. The REA also examines whether the project will deliver significant social and economic benefits to NSW from the efficient development of the resource, by optimising resource recovery and mine design and minimising waste. It also aims to ensure an appropriate return to the state from developing the resource. This process commences two months prior to lodgement of the EIS, the proponent to contact the Assessment Coordination Unit.

Biodiversity offsets

MEG requests that the Proponent consider potential resource sterilisation in relation to any proposed biodiversity offsets areas. Biodiversity offsets have the potential to preclude access for future resource discovery and extraction and could also potentially permanently sterilise access to mineral resources.

The EIS must therefore clearly illustrate the location (including offsite locations) of any biodiversity offsets being considered for the project and their spatial relationship to known and potential mineral and construction material resources and existing mining & exploration titles.

MEG requests consultation with both the Geological Survey of NSW – Land Use Assessment team and holders of existing mining and exploration authorities affected by planned biodiversity offsets. Evidence of consultation should be included in the EIS.

Mining Titles

As dimension stone is a prescribed mineral under the *Mining Act 1992*, the Proponent is required to hold an appropriate mining title(s) from MEG in order to mine the mineral.

The EIS for a project should clearly identify existing mineral titles, mineral title applications and the final proposed mining lease area(s) for the project site and areas surrounding the proposed project area and address the

environmental impacts and management measures for the mining and mining purpose activities as licensed under the *Mining Act 1992*.

A development application under the *Environmental Planning and Assessment Act 1979* must be approved before a mining lease can be granted. A mining lease will only be granted for activities specified in the development consent.

Where a proposal includes Crown Land the proponent is required to comply with the Commonwealth *Native Title Act 1993* and undertake the right to negotiate process for the Crown Lands within the current exploration licence area(s) if proof of extinguishment cannot be determined.

For ancillary mining activities a proponent holding a mining lease granted in respect of mineral/s may, in accordance with the lease conditions, carry out any ancillary mining activity on that land (see definition of ancillary mining activity in clause 7 of the Mining Regulations 2016).

There is a subset of ancillary mining activity that the legislation defines as ‘designated ancillary mining activity’ (defined in section 6(6) of the *Mining Act 1992*).

A proponent seeking to undertake designated ancillary mining activity on land inside the mining area must ensure that the mining lease granted in respect of mineral/s contains a condition allowing undertaking of this designated ancillary mining activity (Section 6(1) of the *Mining Act 1992*).

A proponent seeking to undertake a designated ancillary mining activity outside a mining area, but in the immediate vicinity of and that directly facilitates the mining lease in respect of mineral(s), must apply for one of the following:

1. A separate mining lease for the designated ancillary mining activity which authorises the carrying out of the activity. (This provides the holder with the right to access the mining area to undertake the ancillary mining activity, however does not provide the holder with the right to mine).
2. A condition on an existing mining lease that regulates the carrying out of the designated ancillary mining activity in an off-title area. (See section 6(2) of the *Mining Act 1992*). The ancillary mining activity condition will include the survey plan of the designated ancillary mining activity area on which the designated ancillary mining activity is (or is proposed to be) located.

Royalty

The holder of a mining lease is also liable to pay a royalty for both publicly and privately-owned minerals (refer to section 282-285 of the Act).

Approvals

Position	Approval	Date
Approving Officer: Scott Anson Manager Assessment Coordination Resource Operations (02) 4063 6972	In CM9	16/12/2020
Endorsing Officer: Leanne O'Brien A/Director Resource Assessments Resource Operations (02) 4063 6546	In CM9	16/12/2020

Melissa Anderson

From: Alan Bawden <Alan.Bawden@rfs.nsw.gov.au>
Sent: Wednesday, 6 January 2021 4:22 PM
To: Melissa Anderson
Subject: RFS advice : Request for Input to SEARs - Deep Creek Quarry (SSD-11591659)
Attachments: Deep Creek Quarry Scoping_Report_Nov 2020.pdf

Good afternoon Melissa

The NSW RFS has received and reviewed your comments below and the attached document.

The subject lands are mapped BFPL by Council.

The development involves the placement of plant and equipment including workers amenities and office building.

As such the required EA shall identify bush fire risk to the plant and equipment and recommend bush fire mitigation measures to minimise said risk.

The EA shall also address any hazard materials to be stored on-site.

Regards



Alan Bawden
Team Leader - Development Assessment and Planning
Planning and Environment Services (North)
NSW RURAL FIRE SERVICE
51 Moonee Street Coffs Harbour
Locked Bag 17 GRANVILLE NSW 2142
p 02 66910400 e pes@rfs.nsw.gov.au
www.rfs.nsw.gov.au www.facebook.com/nswrfs www.twitter.com/nswrfs
PREPARE.ACT.SURVIVE

From: Melissa Anderson <Melissa.Anderson@planning.nsw.gov.au>
Sent: Wednesday, 2 December 2020 11:28 AM
To: Records <Records@rfs.nsw.gov.au>
Subject: Request for Input to SEARs - Deep Creek Quarry (SSD-11591659)

Proposal: Deep Creek Quarry

Address: 279 Deep Creek Road, Limeburners Creek, NSW 2324

The Department of Planning, Industry and Environment has received a request for Secretary's Environmental Assessment Requirements (SEARs) for the Deep Creek Quarry, located at Limeburners Creek in the Mid-Coast local government area. The proposed development is a State Significant Development under the *Environmental Planning and Assessment Act 1979*.

The proposal seeks to establish a hard rock quarry to extract up to 500,000 tonnes per annum over a period of 30 years. The proposal would require the construction of a new intersection and sealed access road, site office, workshop, weighbridge and stockpile area with associated water management infrastructure.

Details about the proposal can be found on the Department's Major Projects website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/40731>

The Department requests input to the SEARs for the proposal, including details of any key issues and assessment requirements by the due date of **Wednesday 16 December 2020**.

If you have any enquiries, please contact Melissa Anderson on 02 8275 1392 or via email melissa.anderson@planning.nsw.gov.au

Kind regards
Melissa

Melissa Anderson

Senior Environmental Assessment Officer

Energy, Industry & Compliance | Planning and Assessment

Department of Planning, Industry and Environment

T 02 8275 1392 | **E** melissa.anderson@planning.nsw.gov.au

A 4 Parramatta Square, 12 Darcy St, Parramatta, NSW 2150 | **M** Locked Bag 5022, Parramatta NSW 2124

www.dpie.nsw.gov.au



**Planning,
Industry &
Environment**

The Department of Planning, Industry and Environment acknowledges that it stands on Country which always was and always will be Aboriginal land. We acknowledge the Traditional Custodians of the land and waters, and we show our respect for elders past, present and emerging. We are committed to providing places in which Aboriginal people are included socially, culturally and economically through thoughtful and collaborative approaches to our work.



18 December 2020

Department of Planning, Industry & Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Attention: Melissa Anderson

SEARS REQUEST (SSD-11591659) – PROPOSED HARD ROCK QUARRY, LOT: 472 DP: 1162208 LOT: 48 DP: 753178, 279 DEEP CREEK ROAD LIMEBURNERS CREEK

Transport for NSW (TfNSW) advises that legislation to dissolve Roads and Maritime Services and transfer its assets, rights and liabilities to TfNSW came into effect on 1 December 2019. It is intended that the new structure will enable TfNSW to deliver more integrated transport services across modes and better outcomes to customers and communities across NSW.

For convenience, correspondence, advice or submissions made to or by Roads and Maritime Services prior to its dissolution, are referred to in this letter as having been made to or by 'TfNSW'.

On 2 December 2020, TfNSW accepted the referral by the Department of Planning, Industry and Environment (DPIE) through the Planning Portal regarding the abovementioned application. DPIE referred the application to TfNSW for comment. This letter is a submission in response to that referral.

TfNSW's primary interests are in the road network, traffic and broader transport issues. In particular, the efficiency and safety of the classified road network, the security of property assets and the integration of land use and transport.

TfNSW have reviewed the Scoping Report prepared by Kleinfelder Australia Pty Ltd and dated 16 November 2020. It is understood that the proposal is for a hard rock quarry (to be known as Deep Creek Quarry) with the capacity to extract up to 500,000 tonnes/annum (maximum 4,000 tonnes/day) of hard rock aggregate products over a period of up to 30 years. The proposal includes construction of a sealed site access road forming a new intersection on The Bucketts Way.

TfNSW response & requirements

TfNSW recommends that the Environmental Impact Statement (EIS) should refer to the following guidelines with regard to the traffic and transport impacts of the proposed development:

- Road and Related Facilities within the Department of Planning EIS Guidelines, and,
- Section 2 Traffic Impact Studies of Roads and Maritime's *NSW's Guide to Traffic Generating Developments 2002*, and,
- Austroads Guide to Traffic Management, Part 12, Integrated Transport Assessments for Developments.

Furthermore, a traffic and transport study shall be prepared in accordance with the Roads and Maritime Services NSW's *Guide to Traffic Generating Developments 2002* and is to include (but not be limited to) the following:

- Assessment of all relevant vehicular traffic routes and intersections for access to / from the subject site.
- Details of all traffic types and volumes likely to be generated by the proposal during construction, operation and rehabilitation, including description of heavy vehicle types, and haul route origins and destinations.
- Daily inbound and outbound traffic profile by time of day and day of week broken down per vehicle types.
- Investigate the use of vehicles with higher carrying capacity such as Performance Based Standards combinations to reduce the number of heavy vehicle movements.
- Detailed site layout to demonstrate that the site will be able to accommodate the most productive vehicle type as well as the worst performing vehicle type. This includes parking layout on site in accordance with the relevant Australian Standard and Council's Development Control Plan.
- Details of access to, from and within the site from the road network including assessment of intersection location, design and sight distance. It must be demonstrated that the site plan, site access and surrounding road network can accommodate the largest vehicles entering, exiting and maneuvering throughout the site.
- Assessment of the forecasted daily and peak (AM, PM) vehicle movements' impact on road safety and midblock capacity of road network, including potential impact on pavement lifespan.
- Traffic analysis of any major / relevant intersections impacted, including but not limited to the new intersection on The Bucketts Way and the intersection of Pacific Highway with The Bucketts Way, using SIDRA or similar traffic model, including:
 - o Current traffic counts and traffic growth projections over the operational life (30 years)
 - o With and without development scenarios
 - o 95th percentile back of queue lengths
 - o Delays and level of service on all legs for the relevant intersections
 - o Electronic data for Transport for NSW review.

- An assessment of the cumulative study area traffic impacts associated with the development and any other known proposed/approved developments in the area.
- If required, identification of any dangerous goods likely to be transported on arterial and local roads to/ from the site and, if necessary, the preparation of an incident management strategy.
- Conduct a road safety audit by a qualified road safety auditor to identify potential existing and future safety issues with the new intersection on The Bucketts Way and existing Pacific Highway/The Bucketts Way intersection to accommodate development traffic over the operational life (30 years) of the proposed quarry.
- Identify the necessary road network infrastructure upgrades that are required to maintain existing levels of service and improve road safety on surrounding road network. In this regard, preliminary concept drawings shall be submitted with the EIS for any identified road infrastructure upgrades. However, it should be noted that any identified road infrastructure upgrades will need to be to the satisfaction of Transport for NSW and Council.
- An assessment of any other impacts on the regional and state road network including consideration of pedestrian, cyclist and public transport facilities and provision for service vehicles.

On determination of this matter, please forward a copy to TfNSW for record and / or action purposes. Should you require further information please contact Dipen Nathwani, Development Assessment Officer, on 0418 514 166 or by emailing development.hunter@rms.nsw.gov.au.

Yours sincerely



Peter Marler
Manager Land Use Assessment
Hunter Region