

Appendix 2

Secretary's Environmental Assessment Requirements and Matters Identified for Consideration

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Secretary's Environmental Assessment Requirements

Section 78A(8) of the *Environmental Planning and Assessment Act 1979* and Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*.

Designated Development

EAR Number	EAR 1053
Proposal	Continuation and expansion of an existing quarry to extract a maximum of 50,000 tonnes of granite regolith per year, and establishment of a topsoil quarry to extract a maximum of 50,000 tonnes of topsoil, for a period of up to 15 years.
Location	1329 Mid Western Highway, Evans Plains (Lot 241 DP 1185616)
Applicant	Yarragrove Family Trust
Date of Issue	18 September 2017
Date of Expiry	18 September 2019
General Requirements	The Environmental Impact Statement (EIS) for the development must comply with the requirements in Clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>. In particular, the EIS must include: • an executive summary; • a comprehensive description of the development, including: - a detailed site description and history of any previous quarrying on the site, including a current survey plan; - identification of the resource, including the amount, type, composition; - the layout of the proposed works and components (including any existing infrastructure that would be used for the development); - an assessment of the potential impacts of the development, as well as any cumulative impacts, including the measures that would be used to minimise, manage or offset these impacts; - a detailed rehabilitation plan for the site; - any likely interactions between the development and any existing/approved developments and land uses in the area, paying particular attention to potential land use conflicts with nearby residential development; - a list of any other approvals that must be obtained before the development may commence; - the permissibility of the development, including identification of the land use zoning of the site; - identification of sensitive receivers likely to be affected by the development using clear maps/plans, including key landform areas, such as conservation areas and waterways; • a conclusion justifying why the development should be approved, taking into consideration: - alternatives; - the suitability of the site; - the biophysical, economic and social impacts of the project, having regard to the principles of ecologically sustainable development; and - whether the project is consistent with the objects of the Environmental Planning and Assessment Act 1979; and • a signed declaration from the author of the EIS, certifying that the information contained within the document is neither false nor misleading.
Consultation	In preparing the EIS for the development, you should consult with relevant local, State or Commonwealth Government authorities, infrastructure and service providers and any surrounding landowners that may be impacted by the development. The EIS must describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these issues have been addressed in the EIS.
Key Issues	The EIS must assess the potential impacts of the proposal at all stages of the development, including the establishment, operation and decommissioning of the development. The EIS must address the following specific issues: • Water – including: - a detailed site water balance and an assessment of any volumetric water licensing requirements, 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; - identification of any licensing requirements or other approvals required under the <i>Water Act 1912</i> and/or <i>Water Management Act 2000</i>; - demonstration that water for the construction and operation of the development can be obtained from an appropriately authorised and reliable supply in accordance with the operating rules of any relevant Water Sharing Plan (WSP); - a description of the measures proposed to ensure the development can operate in accordance with the requirements of any relevant Water Sharing Plan or water source embargo; - a detailed consideration of maintenance of an adequate buffer between all excavations at the highest predicted groundwater table; - an assessment of activities that could cause erosion or sedimentation issues, and the proposed measures to prevent or control these impacts; - an assessment of any likely flooding impacts of the development; - an assessment of potential impacts on the quality and quantity of existing surface and ground water resources, including a detailed assessment of proposed water discharge quantities and quality against receiving water quality and flow objectives; and - a detailed description of the proposed water management system, water monitoring program and other measures to mitigate surface and groundwater impacts; • Noise – including a quantitative assessment of potential: - construction and operational noise and off-site transport noise impacts of the development in accordance with the <i>Interim Construction Noise Guideline</i>, <i>NSW Industrial Noise Policy</i> and <i>NSW Road Noise Policy</i> respectively; - reasonable and feasible mitigation measures to minimise noise emissions; and - monitoring and management measures; • Air – including an assessment of the likely air quality impacts of the development in accordance with the <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW</i>. The assessment is to give particular attention to potential dust impacts on any nearby private receivers due to construction activities, the operation of the quarry and/or road haulage; • Biodiversity – including: - accurate predictions of any vegetation clearing on site; - a detailed assessment of the potential biodiversity impacts of the development, paying particular attention to threatened species, populations and ecological communities and groundwater dependent ecosystems; - a detailed description of the proposed measures to maintain or improve the biodiversity values of the site in the medium to long term, as relevant; and - an assessment of whether a Species Impact Statement is required; • Heritage – including: - an assessment of the potential impacts on Aboriginal heritage (cultural and archaeological), including evidence of appropriate consultation with relevant Aboriginal communities/parties and documentation of the views of these stakeholders regarding the likely impact of the development on their cultural heritage; and - identification of Historic heritage in the vicinity of the development and an assessment of the likelihood and significance of impacts on heritage items, having regard to the relevant policies and guidelines listed in Attachment 1; • Traffic & Transport – including: - accurate predictions of the road traffic generated by the construction and operation of the development, including a description of the types of vehicles likely to be used for transportation of quarry products; - an assessment of potential traffic impacts on the capacity, condition, safety and efficiency of the local and State road networks, detailing the nature of the traffic generated, transport routes, traffic volumes and potential impacts on local and regional roads; - a description of the measures that would be implemented to maintain and/or improve the capacity, efficiency and safety of the road network (particularly the proposed transport routes) over the life of the development; - evidence of any consultation with relevant roads authorities, regarding the establishment of agreed contributions towards road upgrades or maintenance; and - a description of access roads, specifically in relation to nearby Crown roads and fire trails; • Land Resources – including an assessment of: - potential impacts on soils and land capability (including potential erosion and land contamination) and the proposed mitigation, management and remedial measures (as appropriate); - potential impacts on landforms (topography), paying particular attention to the long-term geotechnical stability of any new landforms (such as overburden dumps, bunds etc); and - the compatibility of the development with other land uses in the vicinity of the development, in accordance with the requirements of Clause 12 of <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>;
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	• Waste – including estimates of the quantity and nature of the waste streams that would be generated or received by the development and any measures that would be implemented to minimise, manage or dispose of these waste streams; • Hazards – including an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks and the transport, storage, handling and use of any hazardous or dangerous goods; • Visual – including an assessment of the likely visual impacts of the development on private landowners in the vicinity of the development and key vantage points in the public domain, including with respect to any new landforms; • Social & Economic – an assessment of the likely social and economic impacts of the development, including consideration of both the significance of the resource and the costs and benefits of the project; and • Rehabilitation – including: - a detailed description of the proposed rehabilitation measures that would be undertaken throughout the development and during quarry closure; - a detailed rehabilitation strategy, including justification for the proposed final landform and consideration of the objectives of any relevant strategic land use plans or policies; and - the measures that would be undertaken to ensure sufficient financial resources are available to implement the proposed rehabilitation strategy, recognising that a rehabilitation bond will likely be required as a condition of any future development consent.
Environmental Planning Instruments	The EIS must take into account all relevant State Government environmental planning instruments, guidelines, policies, and plans. While not exhaustive, Attachment 1 contains a list of some of the environmental planning instruments, guidelines, policies and plans that may be relevant to the environmental assessment of this development. During the preparation of the EIS you must also consult the Department's EIS Guideline – Extractive Industries – Quarries. This guideline is available at http://www.planning.nsw.gov.au/~media/Files/DPE/Guidelines/extractive-industries-quarries-eis-guideline-1996-10.ashx. In addition, the EIS must assess the development against the Bathurst Regional Local Environmental Plan 2014 and any relevant development control plans/strategies.
Consultation	In preparing the EIS for the development, you should consult with relevant local, State or Commonwealth Government authorities, infrastructure and service providers and any surrounding landowners that may be impacted by the development. The EIS must describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these issues have been addressed in the EIS.

ATTACHMENT 1

The following guidelines may assist in the preparation of the Environmental Impact Statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal.

Many of these documents can be found on the following websites:

<http://www.planning.nsw.gov.au>
<http://www.bookshop.nsw.gov.au>
<http://www.publications.gov.au>

Environmental Planning Instruments, Policies, Guidelines & Plans

Environmental Planning Instruments - General	
	State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007
	State Environmental Planning Policy (State and Regional Development) 2011
	State Environmental Planning Policy (Infrastructure) 2007
	Bathurst Regional Local Environmental Plan 2014
Risk Assessment	
	AS/NZS 4360:2004 Risk Management (Standards Australia)
	HB 203: 203:2006 Environmental Risk Management – Principles & Process (Standards Australia)
Land	
	State Environmental Planning Policy No. 55 – Remediation of Land
	Agricultural Land Classification (DPI)
	Rural Land Capability Mapping (OEH)
	Soil and Landscape Issues in Environmental Impact Assessment (NOW)
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)
	Guidelines for Consultants Reporting on Contaminated Sites (EPA)
	Agricultural Issues for Extractive Industry Development (DPI)
Water	
Groundwater	NSW Aquifer Interference Policy 2012 (NOW)
	NSW State Groundwater Policy Framework Document (NOW)
	NSW State Groundwater Quality Protection Policy (NOW)
	NSW State Groundwater Quantity Management Policy (NOW)
	Australian Groundwater Modelling Guidelines 2012 (Commonwealth)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	Guidelines for the Assessment & Management of Groundwater Contamination (EPA)
Surface Water	NSW State Rivers and Estuary Policy (NOW)
	NSW Government Water Quality and River Flow Objectives (EPA)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (EPA)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (EPA)
	Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volume 2E: Mines and Quarries (DECC)
	Managing Urban Stormwater: Treatment Techniques (EPA)
	Managing Urban Stormwater: Source Control (EPA)
	Technical Guidelines: Bunding & Spill Management (EPA)
	A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)
Flooding	NSW Guidelines for Controlled Activities (NOW)
	Floodplain Development Manual (OEH)
	Floodplain Risk Management Guideline (OEH)
Biodiversity	
	State Environmental Planning Policy No. 44 – Koala Habitat Protection

	BioBanking Assessment Methodology (OEH 2014)
	BioBanking Assessment Methodology and Credit Calculator Manual (DECC) 2008
	NSW Guide to Surveying Threatened Plants (OEH 2016)
	Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna – Amphibians (DECC 2009)
	Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities – Working Draft (DEC 2004)
	Threatened Species Assessment Guideline – The Assessment of Significance (DECC 2007)
	OEH principles for the use of biodiversity offsets in NSW
	NSW State Groundwater Dependent Ecosystem Policy (NOW)
Heritage	
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
	Guide to investigation, assessing and reporting on Aboriginal cultural heritage in NSW (OEH) 2011
	Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation (DP&E)
	Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH)
	Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (OEH)
	Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (OEH)
	NSW Heritage Manual (OEH)
	Statements of Heritage Impact (OEH)
Noise	
	NSW Industrial Noise Policy (EPA)
	Interim Construction Noise Guideline (EPA)
	NSW Road Noise Policy (EPA)
Air	
	Protection of the Environment Operations (Clean Air) Regulation 2002
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA)
	Assessment and Management of Odour from Stationary Sources in NSW (DEC)
	National Greenhouse Accounts Factors (Commonwealth)
Transport	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RMS) & relevant Austroads Standards
Public Safety	
	State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
	Hazardous and Offensive Development Application Guidelines – Applying SEPP 33
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
Resource	
	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (JORC)
Waste	
	Waste Classification Guidelines (DECC)
	Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes 1999 (EPA)
Rehabilitation	
	Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)
	Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)
	Strategic Framework for Mine Closure (ANZMEC-MCA)

ATTACHMENT 2

AGENCIES' CORRESPONDENCE



Our reference : SF16/27545; DOC17/443468-01
Contact : Mr Andrew Helms, (02) 6332 7604

Ms Lauren Evans
Planning Officer
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

11 September 2017

Dear Ms Evans

**REQUEST FOR SECRETARY ENVIRONMENTAL ASSESSMENT REQUIREMENTS
Swan Ponds Sand and Topsoil Quarry – EAR 1053**

I refer to your e-mail dated 28 August 2017 requesting that the Environment Protection Authority (EPA) review the Secretary's Environmental Assessment Requirements (SEARs) prepared for the revised Swan Ponds Sand and Topsoil Quarry proposal and provide any additional advice as appropriate.

The EPA has reviewed the original SEARs with regard for the changes to the quarry proposal and notes that there are no new issues or assessment requirements resulting from the changes.

The changes to the original proposal do result, however, in the requirement for the proponent to apply for an Environment Protection Licence (EPL) for "Land based extractive activities" should development consent be granted.

Should you have any enquiries in relation to this matter please contact Mr Andrew Helms on (02) 6332 7604 or via e-mail at central.west@epa.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Allan Adams'.

ALLAN ADAMS
A/Head Central West Unit
Environment Protection Authority



Attention: Ms Lauren Evans

Notice Number 1541852
File Number EF13/4920; DOC16/296736-01
Date 28-Jun-2016

Dear Ms Evans

SAND AND TOPSOIL QUARRY - EVANS PLAINS (SEAR 1053)
Secretary Environmental Assessment Requirements

I refer to your e-mail to the Environment Protection Authority (EPA), dated 16 June 2016, seeking Secretary Environmental Assessment Requirements (SEARs) for an Environmental Impact Statement (EIS) for the proposed Sand and Topsoil Quarry located at 1329 Mid Western Highway, Evans Plains (SEAR ID 1053).

The EPA has reviewed the document titled "*Form A - Request for Director General Requirements for the preparation of an Environmental Impact Statement*" and a project overview prepared by Anthony Daintith Town Planning Pty Limited that accompanied the abovementioned e-mail and has identified the information that it requires to adequately assess the proposal in Attachment 1. General Guidance material is provided in Attachment 2. In summary, the EPA's key information requirements for the proposal include an adequate assessment of:

- water and soil management;
- air quality impacts; and
- noise impacts

It is not clear to the EPA at this stage whether the proposed activities would qualify as scheduled activities ('Extractive' and/or 'Crushing, grinding or separating' activities) under the *Protection of the Environment Operations Act 1997*. The proponent must provide specific details on the proposed scale of the activities at the quarry in order for the EPA to determine whether an Environment Protection Licence will be required.

Should you have any queries in relation to this matter please contact Mr Andrew Helms at the Central West (Bathurst) Office of the EPA by telephoning (02) 6332 7604.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Darryl Clift'.

DARRYL CLIFT
Head Central West Unit
Environment Protection Authority

Enclosures: Attachment 1 - EPA requirements for Sand and Topsoil Quarry, Evans Plains
Attachment 2 - General guidance material



ATTACHMENT 1: EPA REQUIREMENTS FOR SAND AND GRAVEL QUARRY, EVANS PLAINS

1. Environmental impacts of the project

Environmental Impact Statements (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 provided in **Attachment 2**.

2. Water and soils

2.1 Soils

The EIS should include:

1. 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:
 - a. 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).
 - b. Mass movement (landslides) – in accordance with *Landslide risk management* guidelines presented in Australian Geomechanics Society (2007).
 - c. Urban and regional salinity – guidance given in the Local Government Salinity Initiative booklets which includes *Site Investigations for Urban Salinity* (DLWC, 2002).
2. 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, in particular soil and surface water management procedures in order to protect Evans Plains Creek from any impacts resulting from quarry operations. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

2.2 Water management

The EIS should:

1. Describe water usage for the proposal including the position of any intakes and discharges, volumes, water quality and frequency of all water discharges.
2. Demonstrate that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.
3. 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.
4. Describe existing surface and groundwater quality. An assessment needs to be undertaken for any water resource likely to be affected by the proposal.
5. 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.

6. State the indicators and associated trigger values or criteria for the identified environmental values. This information should be sourced from the ANZECC (2000) Guidelines for Fresh and Marine Water Quality (<http://www.environment.gov.au/water/quality/publications/australian-and-new-zealandguide-lines-fresh-marine-water-quality-volume-1>).
7. State any locally specific objectives, criteria or targets which have been endorsed by the NSW Government.
8. Describe the nature and degree of impact that any proposed discharges will have on the receiving environment.
9. Assess impacts against the relevant ambient water quality outcomes. Demonstrate how the proposal will be designed and operated to:
 - i. protect the Water Quality Objectives for receiving waters where they are currently being achieved; and
 - ii. contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved.
10. Where a discharge is proposed that includes a mixing zone, the proposal should demonstrate how wastewater discharged to waterways will ensure the 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.
11. Describe how stormwater will be managed both during and after construction.
12. Describe how predicted impacts will be monitored and assessed over time.

3. Air issues

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

1. Identify all potential discharges of fugitive and point source emissions of pollutants including dust for all stages of the proposal and assess the risk associated with those emissions. All processes that could result in air emissions must be identified and described. Sufficient detail to accurately communicate the characteristics and quantity of all emissions must be provided. Assessment of risk relates to environmental harm, risk to human health and amenity.
2. Justify the level of assessment undertaken on the basis of risk factors, including but not limited to:
 - a. proposal location;
 - b. characteristics of the receiving environment; and
 - c. type and quantity of pollutants emitted.
3. Describe the receiving environment in detail. The proposal must be contextualised within the receiving environment (local, regional and inter-regional as appropriate). The description must include but need not be limited to:
 - a. meteorology and climate;
 - b. topography;
 - c. surrounding land-use; receptors; and
 - d. ambient air quality.
4. Include a consideration of 'worst case' emission scenarios and impacts at proposed emission limits.
5. Account for cumulative impacts associated with existing emission sources as well as any currently approved developments linked to the receiving environment.



6. Include air dispersion modelling where there is a risk of adverse air quality impacts, or where there is sufficient uncertainty to warrant a rigorous numerical impact assessment. Air dispersion modelling must be conducted in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (2005) <http://www.environment.nsw.gov.au/resources/air/ammodelling05361.pdf>.
7. Demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations (POEO) Act (1997)* and the *POEO (Clean Air) Regulation (2010)*.
8. Detail emission control techniques/practices that will be employed by the proposal.

4. Noise and vibration

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

1. Construction noise associated with the proposed development should be assessed using the *Interim Construction Noise Guideline* (DECC, 2009). <http://www.epa.nsw.gov.au/resources/noise/09265cng.pdf>.
2. Operational noise from all industrial activities (including private haul roads and private railway lines) 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*. <http://www.epa.nsw.gov.au/noise/applicnotesindustnoise.htm>
3. 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). <http://www.epa.nsw.gov.au/resources/noise/2011236nswroadnoisepolicy.pdf>
4. Noise from new or upgraded public roads should be assessed using the *NSW Road Noise Policy* (DECCW, 2011). <http://www.epa.nsw.gov.au/resources/noise/2011236nswroadnoisepolicy.pdf>.



ATTACHMENT 2: GENERAL GUIDANCE MATERIAL

Title	Web address
Relevant Legislation	
<i>Contaminated Land Management Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+140+1997+cd+0+N
<i>Environmentally Hazardous Chemicals Act 1985</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+14+1985+cd+0+N
<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
Licensing	
Guide to Licensing	www.epa.nsw.gov.au/licensing/licenceguide.htm
Air Issues	
Air Quality	
Approved methods for modelling and assessment of air pollutants in NSW (2005)	http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf
POEO (Clean Air) Regulation 2010	http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+428+2010+cd+0+N
Noise and Vibration	
Interim Construction Noise Guideline (DECC, 2009)	http://www.epa.nsw.gov.au/noise/constructnoise.htm
Assessing Vibration: a technical guideline (DEC, 2006)	http://www.epa.nsw.gov.au/noise/vibrationguide.htm
Industrial Noise Policy Application Notes	http://www.epa.nsw.gov.au/noise/applicnotesindustnoise.htm
Industrial Noise Policy (EPA 2000)	http://www.epa.nsw.gov.au/noise/ind_noise.pdf
Environmental Criteria for Road Traffic Noise (EPA, 1999)	http://www.epa.nsw.gov.au/resources/noise/roadnoise.pdf
Waste, Chemicals and Hazardous Materials and Radiation	
Waste	
Environmental Guidelines: Solid Waste Landfills (EPA, 1996)	http://www.epa.nsw.gov.au/resources/waste/envguidlns/solidlandfill.pdf
Draft Environmental Guidelines - Industrial Waste Landfilling (April 1998)	http://www.epa.nsw.gov.au/resources/waste/envguidlns/industrialfill.pdf



Waste Classification Guidelines (DECC, 2009)	http://www.epa.nsw.gov.au/waste/envguidlms/index.htm
Resource recovery exemption	http://www.epa.nsw.gov.au/waste/RRecoveryExemptions.htm
Water and Soils	
Soils – general	
Soil and Landscape Issues in Environment Impact Assessment (DLEC 2000)	Available for purchase at:- http://www.shop.nsw.gov.au/pubdetails.jsp?publication=839
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 - http://www.environment.nsw.gov.au/resources/water/BlueBookVol1.pdf Vol 2 - http://www.environment.nsw.gov.au/resources/stormwater/08208soilconststorm2e.pdf
Landslide risk management guidelines	http://www.australiangeomechanics.org/resources/downloads/
Site Investigations for Urban Salinity (DLWC, 2002)	http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf
Local Government Salinity Initiative Booklets	http://www.environment.nsw.gov.au/salinity/solutions/urban.htm
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	http://www.environment.gov.au/water/publications/quality/nwqms-guidelines-4-vol1.html
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf



7 September 2017

Lauren Evans
Planning Officer – Resource Assessments
Department of Planning & Environment
GPO Box 39
Sydney NSW 2001

Emailed: lauren.evans@planning.nsw.gov.au

Your Reference: EAR 1053
Our Reference: OUT17/36592

Dear Ms Evans,

**Re: Request for Reissue of Secretary's Environmental Assessment
Requirements – Swan Ponds Quarry Proposal – EAR 1053.**

Thank you for the opportunity to provide revised advice on the Secretary's Environmental Assessment Requirements for the Swan Ponds Quarry Proposal (EAR 1053). This is a response from NSW Department of Planning & Environment – Division of Resources & Geoscience, Geological Survey of New South Wales (GSNSW).

R. W. Corkery & Co. Pty Ltd on behalf of the proponent, The Yarragrove Family Trust, seek consent to extract weathered granite from the project site at an average rate of 35,000 tonnes per annum (tpa), up to a maximum of 50, 000 tpa. It is also proposed to extract top soil at an average rate of 20 000tps, with a maximum extraction rate of 50 000 tpa. Extraction will be undertaken on a campaign basis with crushing, screening, washing and stockpiling of the extracted material occurring onsite.

General Information

The building and construction industries in NSW require ongoing replacement of supplies as sources are exhausted. The expansion of existing quarries, subject to environmental assessment, helps to ensure a continued supply of material for a range of building and construction uses in NSW. The resource in the subject area represents an important source of basalt and topsoil for the Bathurst area.

It is in the best interests of both the proponent and the community to fully assess the resources which are to be extracted. This means that a thorough geological assessment should be undertaken to determine the nature, quality and extent of the resource. Failure to undertake such an assessment could lead to operational problems and possibly even failure of the proposal.

Basalt and topsoil are not prescribed minerals under the *Mining Act 1992*. Therefore, the Department has no statutory role in authorising or regulating the extraction of this commodity,

NSW Department of Planning and Environment
DIVISION of RESOURCES & GEOSCIENCE
PO Box 344 Hunter Region Mail Centre NSW 2310
Tel: 02 4931 6666 Fax: 02 4931 6726
ABN 38 755 709 681

apart from its role under the *Work Health and Safety Act 2011* and associated regulations and the *Work Health and Safety (Mine and Petroleum Sites) Act 2013* and associated regulations, for ensuring the safe operation of mines and quarries. However, the Department is the principal government authority responsible for assessing the State's resources of construction materials and for advising State and local government on their planning and management.

All environmental reports (EIS or similar) accompanying Development Applications for extractive industry lodged under the *Environmental Planning & Assessment Act 1979* should include a resource assessment (as detailed in Attachment A) 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 DRG 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.

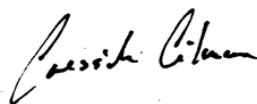
DRG collects data on the quantity of construction materials produced annually throughout the State. Forms are sent to all operating quarries at the end of each financial year for this purpose. The statistical data collected is of great value to Government and industry in planning and resource management,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

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

Should biodiversity offsets be considered for the project GSNSW requests consultation to ensure that there are no potential sterilisation impacts to resources.

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

Yours sincerely



Cressida Gilmore
Manager - Land Use

Encl. Attachments "A"



ATTACHMENT A

NSW Department of Planning & Environment RESOURCES & GEOSCIENCE DIVISION

ENVIRONMENTAL and WORK HEALTH & SAFETY ASSESSMENT REQUIREMENTS FOR CONSTRUCTION MATERIAL QUARRY PROPOSALS

It is in the best interests of both the proponent and the community to fully assess the resources which are to be extracted. This means that a thorough geological assessment should be undertaken to determine the nature, quality and extent of the resource. Failure to undertake such an assessment could lead to operational problems and possibly even failure of the proposal.

The following issues need to be addressed when preparing an environmental assessment (EA) or environmental impact statement (EIS) for a proposed construction materials (extractive materials) quarry:

Resource Assessment

1. A summary of the regional and local geology including information on the stratigraphic unit or units within which the resource is located.
2. The amount of material to be extracted and the method or methods used to determine the size of the resource (e.g. drilling, trenching, geophysical methods). Plans and cross-sections summarising this data, at a standard scale, showing location of drillholes and/or trenches, and the area proposed for extraction, should be included in the EA or EIS. Relevant supporting documentation such as drill logs should be included or appended. Major resource proposals should be subject to extensive drilling programs to identify the nature and extent of the resource.
3. Characteristics of the material or materials to be produced:
 - a) For structural clay/shale extraction proposals, ceramic properties such as plasticity, drying characteristics (e.g. dry green strength, linear drying shrinkage), and firing characteristics (e.g. shrinkage, water absorption, fired colour) should be described.
 - b) For sand extraction proposals, properties such as composition, grain size, grading, clay content and contaminants should be indicated. The inclusion of indicative grading curves for all anticipated products as well as the overall deposit is recommended.
 - c) For hard rock aggregate proposals, information should be provided on properties such as grain size and mineralogy, nature and extent of weathering or alteration, and amount and type of deleterious minerals, if any.
 - d) For other proposals, properties relevant to the range of intended uses for the particular material should be indicated.

Details of tests carried out to determine the characteristics of the material should be included or appended. Such tests should be undertaken by NATA registered testing laboratories.

4. An assessment of the quality of the material and its suitability for the anticipated range of applications should be given.
5. The amount of material anticipated to be produced annually should be indicated. If the proposal includes a staged extraction sequence, details of the staging sequence needs to be provided. The intended life of the operation should be indicated.
6. If the proposal is an extension to an existing operation, details of history and past production should be provided.
7. An assessment of alternative sources to the proposal and the availability of these sources. The impact of not proceeding with the proposal should be addressed.
8. Justification for the proposal in terms of the local and, if appropriate, the regional context.
9. Information on the location and size of markets to be supplied from the site.
10. Route(s) used to transport quarry products to market.
11. Disposal of waste products and the location and size of stockpiles.
12. Assessment of noise, vibration, dust and visual impacts, and proposed measures to minimise these impacts.
13. Proposed rehabilitation procedures during, and after completion of, extraction operations, and proposed final use of site.
14. Assessment of the ecological sustainability of the proposal.

Health and Safety Issues

In relation to the health and safety of mining and quarrying operations, the following must be addressed:

1. All mining operations are to comply with the following legislation:
 - a. *Work Health and Safety Act 2011*
 - b. *Work Health and Safety Regulation 2017*
 - c. *Work Health and Safety (Mine and Petroleum Sites) Act 2013*
 - d. *Work Health and Safety (Mine and Petroleum Sites) Regulation 2014*
 - e. *Explosives Act 2003*
 - f. *Explosives Regulation 2013.*
2. | The mine holder must appoint a mine operator and notify the Department in writing as required by clause 7 of the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014* before commencing any mining operations.

3. Other duties and notification and reporting requirements exist under the WHS laws
| and duty holders must ensure they understand and comply with these requirements.

Mineral Ownership

The *Mining Act 1992* applies to those commodities prescribed by the regulations of the Act (Schedule 2, *Mining Regulation 2016*). Most construction materials are not prescribed minerals under the *Mining Act 1992*. In general terms, this means these materials are owned by the Crown where they occur on Crown land and by the landowner in the case of freehold land. A Mining Title is not required for their extraction although a Crown Lands licence is required where they occur on Crown land.

Construction materials such as *sand (other than marine aggregate), loam, river gravel, and coarse aggregate materials such as basalt, sandstone, and granite* are not prescribed minerals under the *Mining Act 1992*. Therefore, NSW Department of Planning & Environment has no statutory responsibility for authorising or regulating the extraction of these commodities, apart from its role under the WHS laws with respect to the safe operation of mines and quarries. However, the Department 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.

Some commodities, notably *structural clay (ie clay for brick, tile and pipe manufacture), dimension stone (except for sandstone), quartzite, kaolin, limestone and marine aggregate* are prescribed minerals under the *Mining Act 1992*. Minerals which are prescribed as minerals under the terms of the Mining Act may, in some cases belong either to the Crown or to an individual, depending on a number of factors including the date on which the mineral was proclaimed and the date of alienation of the land.

The proponent needs to determine whether the material is privately owned or Crown mineral (publicly owned). If it is privately owned, then either a mining lease or mining (mineral owner) lease would be required. If it is a Crown mineral, an application for a mining lease will have to be lodged.

If you are unsure whether a mining title is required for your proposal you should contact NSW Department of Planning & Environment, Resources & Geoscience Division.



DOC17/465940
EAR ID No. 1053

Ms Lauren Evans
Planning Officer
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Ms Evans

Swan Ponds Sand and Topsoil Quarry, Evans Plains

Thank you for your email dated 28 August 2017 seeking the requirements of the Office of Environment and Heritage (OEH) for the preparation of an Environmental Impact Statement (EIS) for the above proposal.

Please note that under Part 7 of the *Biodiversity Conservation (Savings and Transitional) Regulation 2017* this proposal is defined as a pending or interim planning application and therefore former planning provisions continue to apply if the application is lodged within 18 months of the commencement (25 August 2017) of the *Biodiversity Conservation Act 2016* (BC Act).

The background information provided indicates that the proponent is seeking development approval for an existing quarry and an expansion to increase the area and volume of extraction.

OEH Role

OEH has responsibilities under the:

- *National Parks and Wildlife Act 1974* - namely the protection and care of Aboriginal objects and places, the protection and care of native flora and fauna and the protection and management of reserves; and the
- *Biodiversity Conservation Act 2016*.

OEH understands from the correspondence that the proposed activity is a Part 4 application pursuant to the *Environmental Planning and Assessment Act 1979* (EP&A Act), and has not been classified as State Significant Development. As such OEH only has a statutory role in assessing such an activity if the consent authority determines that:

- a) the activity is likely to significantly affect a threatened species, population, ecological community, or its habitat, as listed under the BC Act; and/or
- b) An Aboriginal Heritage Impact Permit is required.

The EP&A Act and *Environmental Planning and Assessment Regulation 2000* require that the EIS should fully describe the proposal, the existing environment and impacts of the proposal. It is the responsibility of the proponent and consent authority to adequately consider the requirements under the EP&A Act and Regulation.

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www.environment.nsw.gov.au

OEH can provide advice on the EIS where the EIS deals with natural and cultural heritage conservation issues. OEH may also comment on the legitimacy of the conclusions reached regarding the significance of impacts by the proposed development to these components of the environment.

This letter directs you primarily to our generic guidance material. However please note that it is up to the proponent (and later the consent/determining authority after appropriate consultation) to determine the detail and comprehensiveness of the surveys and level of assessment required to form legally defensible conclusions regarding the impact of the proposal. The scale and intensity of the proposed development should dictate the level of investigation. It is important that all conclusions are supported by adequate data.

OEH Requirements

In summary, the OEH's key information requirements for the proposal include an adequate assessment of:

1. Impacts on flora, fauna, threatened species, populations, communities and their habitats;
2. Impacts to Aboriginal cultural heritage objects.

This assessment should include consideration of direct and indirect impacts as a result of both construction and operation of the project. Assessment of any cumulative impacts of this and other developments in the area will be essential.

Flora, Fauna and Threatened Species

A copy of our generic Environmental Assessment Guidelines are included in Attachments A and B. These guidelines address requirements under the EP&A Act and OEH's areas of responsibility relating to flora, fauna and threatened species, populations and ecological communities and their habitats.

OEH is committed to the protection, appropriate management, and where necessary, rehabilitation of native vegetation. For these reasons, OEH considers that careful planning should precede any development that involves further vegetation clearance or other significant impact within areas of remnant vegetation.

Negative impacts to native vegetation (e.g. clearing) should be avoided where possible. Where impacts cannot be avoided, the EIS should detail how a "maintain or improve" outcome for biodiversity will be achieved. BioBanking provides a voluntary mechanism through which this can be achieved. The BioBanking Assessment Methodology allows quantification of impacts and assessment of the value of offset areas and associated management regimes for those areas. The BioBanking scheme provides an alternative path for proponents to the current threatened species assessment of significance process. Information about BioBanking is located on OEH's website at <http://www.environment.nsw.gov.au/biobanking/>.

In addition to these guidelines, we also recommend that the EIS specifically address the following issues:

1. OEH mapping indicates that vegetation within the project site is likely to be consistent with White Box Yellow Box Blakely's Red Gum Woodland Endangered Ecological Community (EEC) listed under the BC Act and White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland Critically Endangered Ecological Community (CEEC) listed under the federal Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

The EIS must include a map identifying the vegetation communities in the project site and all areas to be impacted during both construction and operation of the project. Any removal of native vegetation should be calculated using an appropriate methodology and offset. The offset will need to fulfil the OEH principles for the use of biodiversity offsets in NSW, which can be found at <http://www.environment.nsw.gov.au/biodivoffsets/oehoffsetprincip.htm>

2. The Koala (*Phascolarctos cinereus*) has been previously recorded within 1 kilometre of the project site. This species is listed as Vulnerable under both the BC Act and the EPBC Act. The project site contains potential habitat for this species. It is recommended that targeted

surveys be conducted for this species, in accordance with the Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities – Working Draft (DEC, 2004).

The Bathurst Local Government Area is listed in Schedule 1 of *SEPP No. 44 - Koala Habitat Protection*. Therefore, the requirements of the SEPP regarding Koala habitat protection must also be considered by the proponent.

Cultural Heritage

The importance of protecting Aboriginal Cultural Heritage is reflected in the provisions under Part 6 of the *National Parks and Wildlife Act 1974 (NP&W Act)*, as amended. That Act clearly establishes that Aboriginal objects and places are protected and may not be harmed, disturbed or desecrated without appropriate authorisation. Importantly, approvals under Parts 4 and 5 of the *EP&A Act 1979* do not absolve the proponent of their obligations under the *NP&W Act 1979*.

Under the *NP&W Act 1974*, it is the responsibility of each individual proposing to conduct ground disturbance works to ensure that they have conducted a due diligence assessment to avoid harming Aboriginal objects by the proposed activity. OEH has produced a generic due diligence process, which is not mandatory to follow, however any alternative process followed must be able to demonstrate their process was reasonable and practicable in attempts to avoid harm to Aboriginal objects.

Consultation must also be in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010) as set by OEH if impact to cultural heritage is unavoidable.

Further advice regarding Aboriginal cultural heritage can be found on the OEH web-site at: <http://www.environment.nsw.gov.au/licences/achregulation.htm> and within guidance documents listed in Attachment B.

Should you require further information please contact Michelle Howarth, Conservation Planning Officer on (02) 6883 5339.

Yours sincerely



DAVID GEERING
A/Senior Team Leader Planning North West
Regional Operations Group

14 September 2017

Contact officer: MICHELLE HOWARTH
02 6883 5339

ATTACHMENT A

Office of Environment and Heritage's EIS Requirements for the Sand and Topsoil Quarry

1. Environmental impacts of the project

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

- Cumulative impact
- Aboriginal cultural heritage
- Biodiversity
- OEH Estate - Land reserved or acquired under the NPW Act

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. Cumulative Impact

The cumulative impacts from all clearing activities and operations, associated edge effects and other indirect impacts on cultural heritage, biodiversity and OEH Estate need to be comprehensively assessed in accordance with the *Environmental Planning and Assessment Act 1979*.

This should include the cumulative impact of the proponent's existing and proposed development and associated infrastructure (such as access tracks etc) as well as the cumulative impact of other developments located in the vicinity. This assessment should include consideration of both construction and operational impacts.

3. Aboriginal cultural heritage

The EIS report should contain:

- a. A description of the Aboriginal objects and declared Aboriginal places located within the area of the proposed development.
- b. A description of the cultural heritage values, including the significance of the Aboriginal objects and declared Aboriginal places, that exist across the whole area that will be affected by the proposed development, and the significance of these values for the Aboriginal people who have a cultural association with the land.
- c. A description of how the requirements for consultation with Aboriginal people as specified in clause 80C of the *National Parks and Wildlife Regulation 2009* have been met.
- d. The views of those Aboriginal people regarding the likely impact of the proposed development on their cultural heritage. If any submissions have been received as a part of the consultation requirements, then the report must include a copy of each submission and your response.
- e. A description of the actual or likely harm posed to the Aboriginal objects or declared Aboriginal places from the proposed activity, with reference to the cultural heritage values identified, and the need apply for an Aboriginal Heritage Impact Permit (AHIP).
- f. A description of any practical measures that may be taken to protect and conserve those Aboriginal objects or declared Aboriginal places.
- g. A description of any practical measures that may be taken to avoid or mitigate any actual or likely harm, alternatives to harm or, if this is not possible, to manage (minimise) harm.
- h. A specific Statement of Commitment that the proponent will complete an Aboriginal Site Impact Recording Form and submit it to the Aboriginal Heritage Information Management System (AHIMS) Registrar, for each AHIMS site that is harmed through the proposed development.

In addressing these requirements, the proponent must refer to the following documents:

- **Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010** (DECCW, 2010) - <http://www.environment.nsw.gov.au/licences/consultation.htm>. This document further

explains the consultation requirements that are set out in clause 80C of the National Parks and Wildlife Regulation 2009. The process set out in this document must be followed and documented in the Environmental Assessment Report.

- **Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales** (DECCW, 2010)
<http://www.environment.nsw.gov.au/licences/archinvestigations.htm>. The process described in this Code should be followed and documented where the assessment of Aboriginal cultural heritage requires an archaeological investigation to be undertaken.

Notes:

- i. An *Aboriginal Site Impact Recording Form*
(<http://www.environment.nsw.gov.au/licences/DECCAHISSiteRecordingForm.htm>) must be completed and submitted to the Aboriginal Heritage Information Management System (AHIMS) Registrar, for each AHIMS site that is harmed through archaeological investigations required or permitted through these environmental assessment requirements.
- ii. Under section 89A of the *National Parks and Wildlife Act 1974*, it is an offence for a person not to notify OEH of the location of any Aboriginal object the person becomes aware of, not already recorded on the Aboriginal Heritage Information Management System (AHIMS). An AHIMS Site Recording Form should be completed and submitted to the AHIMS Registrar
(<http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm>), for each Aboriginal site found during investigations.

4. Biodiversity

Biodiversity impacts can be assessed using either:

- Biodiversity Assessment Method under the BC Act or
- The BioBanking Assessment Methodology or
- A detailed biodiversity assessment.

Note:

- i. The Shire may be listed in Schedule 1 of *SEPP No. 44 - Koala Habitat Protection*. If so, the requirements of the SEPP regarding Koala habitat protection should also be considered by the proponent.

Where a proposal is assessed outside the BioBanking Assessment Methodology

1. The EIS should include a detailed biodiversity assessment, including assessment of impacts on threatened biodiversity, native vegetation and habitat. This assessment should address the matters included in the following sections.
2. A field survey of the site should be conducted and documented in accordance with relevant guidelines, including:
 - the [*Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna -Amphibians*](#) (DECCW, 2009);
 - [*Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft*](#) (DEC, 2004); and
 - Threatened species survey and assessment guideline information on www.environment.nsw.gov.au/threatenedspecies/surveyassessmentguidlns.htm.
 - Commonwealth survey requirements (birds, bats, reptiles, frogs, fish and mammals): <http://www.environment.gov.au/topics/environment-protection/environment-assessments>. These are relevant when species or communities listed under the *Environment Protection and Biodiversity Conservation Act* are present.

It is preferable for proponents to use the Interim Vegetation Mapping Standard data form to collect the vegetation plot data for the project site, and any offset site associated with the project. This will provide data that is useful for vegetation mapping as well as in the BioBanking

Assessment Methodology. This is available at <http://www.environment.nsw.gov.au/research/VISplot.htm>.

If a proposed survey methodology is likely to vary significantly from the above methods, the proponent should discuss the proposed methodology with the OEH prior to undertaking the EIS, to determine whether the OEH considers that it is appropriate.

Recent (less than five years old) surveys and assessments may be used. However, previous surveys should not be used if they have:

- been undertaken in seasons, weather conditions or following extensive disturbance events when the subject species are unlikely to be detected or present, or
- utilised methodologies, survey sampling intensities, timeframes or baits that are not the most appropriate for detecting the target subject species,

unless these differences can be clearly demonstrated to have had an insignificant impact upon the outcomes of the surveys. If a previous survey is used, any additional species listed under the BC Act since the previous survey took place, must be surveyed for.

Determining the list of potential threatened species for the site must be done in accordance with the [*Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft*](#) (DEC, 2004).

The OEH Threatened Species website <http://www.environment.nsw.gov.au/threatenedspecies/> and the *Atlas of NSW Wildlife* database must be the primary information sources for the list of threatened species present.

The Vegetation Types database (available via the OEH website at <http://www.environment.nsw.gov.au/biobanking/vegtypedatabase.htm>, and other data sources (e.g. PlantNET, Online Zoological Collections of Australian Museums (<http://ozcam.org.au/>), previous or nearby surveys etc.) may also be used to compile the list.

Other reference literature may be available for the subject locality/region. The proponent should explore this possibility thoroughly.

3. The EIS should contain the following information as a minimum:
 - a. Description and geo-referenced mapping of study area (and associated spatial data files), e.g. overlays on topographic maps, satellite images and /or aerial photos, including details of map datum, projection and zone, all survey locations, vegetation communities (including classification and methodology used to classify), key habitat features and reported locations of threatened species, populations and ecological communities present in the subject site and study area. Separate spatial files (.shp format) to be provided to the OEH should include, at a minimum, shapefiles of the project site, impact footprint, vegetation mapping and classification for both the impact and any offset site(s);
 - b. Description of survey methodologies used, including timing, location and weather conditions, and a comparison of survey effort (in tabular form) with that recommended in the [*Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft*](#) (DEC, 2004). Where survey effort is not consistent with those guidelines justification must be provided;
 - c. Detailed description of vegetation communities (including classification and methodology used to classify) and including all plot data. Plot data should be supplied to the OEH in electronic format (eg MS-Excel) and organised by vegetation community;
 - d. Details, including qualifications and experience of all staff undertaking the surveys, mapping and assessment of impacts as part of the EIS;
 - e. Identification of national and state listed threatened biota known or likely to occur in the study area and their conservation status;
 - f. Description of the likely impacts of the proposal on biodiversity and wildlife corridors, including direct and indirect and construction and operation impacts. Wherever possible, quantify these impacts such as the amount of each vegetation community or species habitat to be cleared or impacted, or any fragmentation of a wildlife corridor;

- g. Identification of the **avoidance, mitigation and management measures** that will be put in place as part of the proposal to avoid or minimise impacts, including details about alternative options considered and how long term management arrangements will be guaranteed;
 - h. Description of the residual impacts of the proposal. **If the proposal cannot adequately avoid or mitigate impacts on biodiversity, then a biodiversity offset package is expected** (see the requirements for this at point 6 below); and
 - i. Provision of specific Statement of Commitments relating to biodiversity.
4. An assessment of the significance of **direct and indirect** impacts of the proposal must be undertaken for threatened biodiversity **known or considered likely to occur** in the study area based on the presence of suitable habitat. The Assessment of Significance is a statutory mechanism which allows decision makers to assess whether a proposed development or activity is likely to have a significant effect on threatened species, populations or ecological communities, or their habitats. This assessment must take into account:
 - a. the factors identified in s.5A of the EP&A Act¹; and
 - b. the guidance provided by *The Threatened Species Assessment Guideline – The Assessment of Significance (DECCW, 2007)*. This guideline is available on the OEH website:
<http://www.environment.nsw.gov.au/resources/threatenedspecies/tsaguide07393.pdf>
5. Where an offsets package is proposed by a proponent for impacts to biodiversity (and the BioBanking Assessment Methodology has not been used) this package should:
 - a. Meet the OEH's *Principles for the use of biodiversity offsets in NSW*², which are available at: <http://www.environment.nsw.gov.au/biodivoffsets/oehoffsetprincip.htm>
 - b. Identify the conservation mechanisms to be used to ensure the long term protection and management of the offset sites; and
 - c. Include an appropriate Management Plan (such as vegetation or habitat) that has been developed as a key amelioration measure to ensure any proposed compensatory offsets, retained habitat enhancement features within the development footprint and/or impact mitigation measures (including proposed rehabilitation and/or monitoring programs) are appropriately managed and funded.
6. **Where appropriate, likely impacts (both direct and indirect) on any adjoining and/or nearby OEH estate reserved under the *National Parks and Wildlife Act 1974* or any marine and estuarine**

¹ Following threatened species assessment via the Assessment of Significance, it may be necessary to prepare a **Species Impact Statement (SIS)**. The proponent will need to prepare a SIS in the following circumstances:

- If (after having addressed Section 5A) the flora/fauna assessment concludes that there is likely to be a significant impact to threatened species

If a SIS is required, the proponent (not the consultant) must write to OEH for any formal requirements for the SIS that may be deemed appropriate. The SIS must then be prepared in accordance with these requirements and provided to the OEH. In some instances the Minister for the Environment will also need to be consulted for approval.

Methods to reduce the impact on the protected and threatened species should be considered fully, and are considered an integral requirement within any SIS document.

Conducting an Assessment of Significance or an SIS is a complex task and should be undertaken by suitably qualified person(s).

² **Please note** that the OEH's *Principles for the use of biodiversity offsets in NSW* ('the Principles') require offsets to be based on a **quantitative assessment** of the loss in biodiversity from the proposal and the gain in biodiversity from the offset. The methodology must be based on the best available science, be reliable, and used for calculating both the impact and offset sites. Even where a proponent does not intend to use the BioBanking Assessment Methodology and Credit Calculator (Scenario 1), use of a **suitable alternative metric**, justified in the EA, is necessary to demonstrate that the proposal is consistent with the Principles. Ultimately the proponent is expected to demonstrate quantitatively that the biodiversity losses associated with the project will be adequately compensated for by the improvement in vegetation condition and security expected from the offset site. This cannot be properly determined by a hectare comparison alone.

protected areas under the *Fisheries Management Act 1994* or the *Marine Parks Act 1997* should be considered. Refer to the [Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water](#) (DECC, 2010).

7. With regard to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, the assessment should identify any relevant Matters of National Environmental Significance and whether the proposal has been referred to the Commonwealth or already determined to be a controlled action.

ATTACHMENT B

Guidance Material

Title	Web Address
<i>Commonwealth Environment Protection & 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>National Parks and Wildlife Act 1974</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
<i>Biodiversity Conservation Act 2016</i>	https://www.legislation.nsw.gov.au/~view/act/2016/63
<i>Water Management Act 2000</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Aboriginal Cultural Heritage	
Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (2005)	Available from DoPI.
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	http://www.environment.nsw.gov.au/licences/consultation.htm
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	http://www.environment.nsw.gov.au/licences/archinvestigations.htm
Due Diligence Code for the Protection of Aboriginal Objects in NSW (DECCW 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/ddcop/10798ddcop.pdf
Aboriginal Site Impact Recording Form	http://www.environment.nsw.gov.au/licences/DECCAHiMSSiteRecordingForm.htm
Aboriginal Heritage Information Management System (AHIMS) Registrar	http://www.environment.nsw.gov.au/contact/AHiMSRegistrar.htm
Biodiversity	
BioBanking Assessment Methodology (OEH, 2014)	http://www.environment.nsw.gov.au/resources/biobanking/140661BBAM.pdf
BioBanking Assessment Methodology and Credit Calculator Operational Manual (DECCW, 2008)	http://www.environment.nsw.gov.au/biobanking/calculator.htm
Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna –Amphibians (DECCW, 2009)	http://www.environment.nsw.gov.au/resources/threatenedspecies/09213amphibians.pdf
Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities – Working Draft (DEC, 2004)	http://www.environment.nsw.gov.au/resources/nature/TBSAGuidelinesDraft.pdf
Survey requirements (birds, bats, reptiles, frogs, fish and mammals) for species listed under the EPBC Act	http://www.environment.gov.au/topics/environment-protection/environment-assessments

OEH Threatened Species website	http://www.environment.nsw.gov.au/threatenedspecies/
Atlas of NSW Wildlife	http://www.environment.nsw.gov.au/wildlifeatlas/about.htm
Vegetation Types databases	http://www.environment.nsw.gov.au/biobanking/vegtypedatabase.htm
PlantNET	http://plantnet.rbgsyd.nsw.gov.au/
Online Zoological Collections of Australian Museums	http://www.ozcam.org.au/
Threatened Species Assessment Guideline - The Assessment of Significance (DECCW, 2007)	http://www.environment.nsw.gov.au/resources/threatenedspecies/tsaguide07393.pdf
Principles for the use of biodiversity offsets in NSW	http://www.environment.nsw.gov.au/biodivoffsets/oehoffsetprincip.htm



OUT16/24220

24 June 2016

Lauren Evans
Planning Officer
Resource Assessments
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Email: lauren.evans@planning.nsw.gov.au

Dear Lauren

**SEAR's Request EAR ID No 1053 Existing and Proposed Quarry 1329 Mid Western Highway
Evans Plains**

Thank you for the opportunity to provide Environmental Assessment Requirements for the above proposal as per your email dated 16 June 2016.

DPI Agriculture, a division of Department of Primary Industries (DPI), is concerned with the protection and growth of agricultural industries and the resources upon which these industries depend. The subject land is located on and within the vicinity of agricultural lands used both for grazing and cropping. The assessment of the land and soil capability of the existing and new quarry area will indicate on site land type and its capability for various agricultural uses, and rehabilitation options for both sites. There is a need to consider how the proposed quarry operations will impact on the use of adjacent lands particularly those used for agriculture. Also the end uses of the quarry sites and a rehabilitation process are important to be included so that a stable landform that is appropriate to the local area is achieved.

The Environmental Impact Statement for the proposal should consider surrounding agricultural industries and resources as potential receptors of any identified impacts. Of particular importance, is consideration of any potential impacts on drainage patterns especially with the main creek being involved as a result of the existing and proposed extraction and the final landform being planned. The rehabilitation program including monitoring and outcomes for the existing quarry is also a priority. Specific issues for this proposal are identified in Attachment 1.

The *Agriculture Issues for Extractive Industry Development Factsheet* provides information on other potential agricultural impacts that may need consideration for these types of development. This is available at this link:

<http://www.dpi.nsw.gov.au/agriculture/resources/lup/development-assessment/extractive-industries>

Should you require clarification on any of the information contained in this response, please contact me on (02) 68811250 or mobile 0427949987.

Yours Sincerely

Electronically signed

Mary Kovac
Resource Management Officer
Central and Far West Regions

**Summary of Major Issues for SEARS for the existing and proposed Sand and Gravel Quarry
at 1329 Mid Western Highway Evans Plains**

Issue	Detail and Recommendation
Impact on Agricultural Land	Review the grazing/farming operations in both the project area and surrounding landholdings in the area. Determine the amount of land being removed from agriculture in the identified proposal area. Review the existence of both plant and animal diseases in the area and describe any mitigation to overcome these by this proposed activity. Undertake a soil and land capability assessment to determine: - Existing land value to plant and animal land uses both on the proposal site and adjacent lands to the proposed activity. - The potential and amount of topsoil and subsoil resources for rehabilitation purposes, and its management for stripping, storage and final use. Summarise any past agricultural concerns/complaints in relation to the existing quarry and associated operations. Outline mitigating approaches to such issues with the proposed expansion.
Dust	Undertake an inventory of potential impacts on adjacent farm residences and farming operations. Outline mitigating actions to minimize dust impact on adjacent farming enterprises.
Weed containment and management	Develop a Weed Management Plan (particularly for any soil stockpiles to be used for future rehabilitation) and adjacent roadsides (to avoid spreading weeds off site).
Pest Management	Develop a Pest Management Plan.
Soil erosion and sedimentation	Develop Erosion and Sediment Control Plan and a Stormwater Management Plan.
Access and noise (Traffic)	Identify access routes and associated noise and traffic impacts on farm residences and farming operations in the vicinity and mitigation measures for these impacts.
Visual and lighting	Identify visual and lighting impacts on nearby farm residences and farming operations identified and describe mitigation measures.
Bushfire management	Complete a bush fire risk assessment and develop a Bush Fire Management Plan
Rehabilitation planning	Determine the impact on surrounding land uses by documenting end land uses and final landforms for both the existing and proposed new quarry area.
Consultation	Show any consultation commitments regarding adjacent landholders and rural community regarding the operations and access details of the proposal.



FE16/468 C16/267

27th June 2016

Department of Planning & Environment

Lauren Evans

GPO Box 39

SYDNEYNSW 2001

Dear Ms Evans

RE: Proposal - Request for Secretary's Environmental Assessment Requirements - Sand & Topsoil Quarry, 1329 Mid Western Highway, Evans Plains ID No. EAR 1053

Thank you for your referral seeking EARs' on the proposal from DPI Fisheries, a division of NSW Department of Primary Industries (DPI). DPI Fisheries are responsible for ensuring that fish stocks are conserved and that there is "no net loss" of key fish habitats upon which they depend. To achieve this, the Department ensures that developments comply with the requirements of the *Fisheries Management Act 1994* (namely the aquatic habitat protection and threatened species conservation provisions in Parts 7 and 7A of the Act respectively) and the associated *Fisheries Management Act 1994* and the *Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013)*.

AQUATIC ECOLOGICAL ASSESSMENT

The aquatic ecological environmental assessment should include the following information;

- A recent aerial photograph (preferably colour) of the locality (or reproduction of such a photograph) should be provided.
- Area which may be affected either directly or indirectly by the development or activity should be identified and shown on an appropriately scaled map (and aerial photographs).
- Waterways within the area of development are to be identified.
- Description of aquatic and riparian vegetation should be presented and mapped.
- The extent of aquatic habitat removal or modification which may result from the proposed development,
- Details of the location of all waterways crossings, including any access tracks,
- Aspects of the management of the proposal, both during construction and after completion, which relate to impact minimisation e.g. Environment Management Plans, Rehabilitation Plans, etc.
- Sedimentation and erosion controls to ensure no net increase in sediment/nutrient loads entering waterways

FISHERIES AQUATIC ENVIRONMENT BRANCH
TAMWORTH AGRICULTURAL INSTITUTE
4 Marsden Park Road
CALALA NSW 2340

www.industry.nsw.gov.au

Tel: 02 6763 1255

Fax: 02 6763 1265

Riparian Buffer Zones

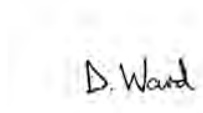
DPI Fisheries policy advocates the use of riparian buffer zones as per the *Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013)* available on the Department's website at <http://www.dpi.nsw.gov.au/publications>. Evan Plains Creek appears to be a TYPE 2 (Moderately Sensitive Key Fish Habitat) CLASS 2-3 Waterway. The riparian buffer zone adjacent to Evan Plains Creek should be managed to avoid disturbance and potential degradation of the creek.

Waterway crossings

The design and construction of roads and tracks across all waterways should be undertaken in accordance with the Department's Policy and Guidelines *Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (2004)* available at www.dpi.nsw.gov.au/fishing/habitat/protecting-habitats/toolkit. Waterway crossings need to ensure that the works are undertaken with minimal impact on the aquatic environment. Should the proponent require works on any waterway crossings within Evan Plains Creek then the proponent must obtain a permit under s.201 of the *Fisheries Management Act 1994* from DPI Fisheries for *dredging & reclamation* unless an authority is obtained under the *Water Management Act 2000* from the NSW Office of Water.

Should you require further clarification on the above issues, please contact me on 6763 1255 or 0429 908 856.

Yours sincerely



David Ward
Fisheries Manager (Tamworth)



NSW RURAL FIRE SERVICE



The Director General
Department of Planning & Environment
GPO Box 39
Sydney NSW 2001

Your reference: EAR 1053
Our reference: D16/1948

30 June 2016

Attention: Lauren Evans

Dear Sir/Madam,

Sand and Top Soil Quarry - 1329 Mid Western Highway Evans Plains

Reference is made to your correspondence dated 17 June 2016 seeking comments in relation to the above planning proposal which seeks to gain approval for the existing operation and expansion of a sand and top soil quarry at the above site.

Based upon an assessment of the information provided, the New South Wales Rural Fire Service raises no objection to the proposal. The aims and objectives of *Planning for Bushfire Protection 2006* should be considered in any subsequent development application.

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

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Nika Fomin'.

Nika Fomin
Manager, Planning and Environment Services (East)

Postal address

NSW Rural Fire Service
Records Management
Locked Bag 17
GRANVILLE NSW 2141

Street address

NSW Rural Fire Service
Planning and Environment Services (East)
42 Lamb Street
GLENDENNING NSW 2761

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



29 June 2016

SF2016/128483; WST16/00098

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

Attention: Ms Lauren Evans

Dear Ms Evans

**SEAR ID 1053: Lot 241 DP 1185616; 1329 Mid Western Highway (HW6), Evans Plains
Sand & Topsoil Quarry
Request for input into Secretary's Environmental Assessment Requirements (SEARs)**

Thank you for your email on 16 June 2016 requesting input into SEARs from Roads and Maritime Services for the above-mentioned development proposal.

Roads and Maritime has reviewed the submitted documentation and has identified the following key issues to be addressed in the Environmental Impact Statement being prepared in support of the project:

- A traffic impact study prepared in accordance with the methodology set out in Section 2 of the *RTA's Guide to Traffic Generating Developments 2002* and including:
 - For the construction and operation of the quarry, road transport volumes and vehicle types broken down into:
 - origin and destination.
 - travel routes.
 - peak hours.

Roads and Maritime Services

51-55 Currajong Street Parkes NSW 2870 |
PO Box 334 Parkes NSW 2870 DX 20256 |

www.rms.nsw.gov.au | 13 22 13

- The study is to provide details of projected transport operations including:
 - traffic volumes, both proposed and cumulative.
 - materials to be transported and vehicle types used for transport.
 - physical constraints, risks and hazards on the haulage route(s).
 - measures to be employed to ensure a high level of safety for all road users interacting with construction and operational traffic.
- Any over size and over mass vehicles and loads expected for the construction and operation of the project.
- Temporary and permanent staff numbers (including employees and contractors) and staff parking arrangements during construction and operation of the project.
- Measures to be employed to ensure traffic efficiency and safety on the public road network during construction and operation of the project. This includes an assessment of the cumulative impacts of existing and proposed quarry related traffic and existing background traffic at the quarry access to the Mid Western Highway.
- Local climate conditions that may affect road safety during construction and operation of the project (e.g. dust, fog, wet weather, etc) and appropriate measures to mitigate the impacts of such conditions.
- Details of vehicular access, location and treatment(s) servicing the proposed quarry operations. Vehicular access treatments are to be identified and in accordance with *Austroads Guide to Road Design* and Roads and Maritime supplements, including Safe Intersection Sight Distance (SISD). For a 100km/h speed environment SISD is 262 metres.

Roads and Maritime appreciates the opportunity to contribute to the SEARs and requests that a copy of the SEARs be forwarded to Roads and Maritime at the same time they are sent to the applicant. If you require further information please contact Andrew McIntyre, Manager Land Use Assessment, on 02 6861 1453.

Yours faithfully



Susie Mackay
Network & Safety Manager
Western



Civic Centre
158 Russell Street
Private Mail Bag 17
Bathurst NSW 2795

Telephone 02 6333 6111
Facsimile 02 6331 7211
council@bathurst.nsw.gov.au
www.bathurstregion.com.au

30 June 2016

Ms L Evans
Planning Officer, Resource Assessments
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Dear Ms Evans

Request for input – quarry expansion (EAR ID No. 1053)
Premises: 1329 Mid Western Highway, Evans Plains

I refer to your emails dated 16 and 30 June 2016 regarding a proposed quarry expansion at the abovementioned property.

Listed below are the site specific factors which Council would like addressed in an Environmental Impact Statement for a quarry expansion at this location:

- i) How the visual amenity of the site as viewed from the Mid Western Highway and nearby dwellings will be addressed;
- ii) If the operations of the proposed extractive industry will impact on Evans Plains Creek (a key waterway and fish habitat);
- iii) How land use conflict has been addressed, particularly with noise and dust at the closest residences. A detailed noise impact assessment is required;
- iv) What short term and long term rehabilitation methods will be employed, together with anticipated final landform illustrations & revegetation;
- v) How the proposal will impact on existing flora and fauna. A detailed flora and fauna impact assessment is required;
- vi) How the proposed development will impact on traffic movements to and from the site. A detailed traffic report is required;
- vii) A detailed description of the development including, but not limited to, annual extraction amounts, life expectancy of the quarry and hours of operation;
- viii) The site has been identified by Council as having High Groundwater Vulnerability. The EIS is to outline measures to mitigate or avoid environmental impacts on ground water; and

Reference: RD:KJD:22.01809/022 & 024
Enquiries: Mr R Denyer 02 6333 6276
lrd.evans.docx

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Department of Planning & Environment
30 June 2016

- ix) What methods the proponent intends to employ for appropriate dust suppression and erosion and sediment control.

If you have any queries please contact Council's Manager Development Assessment, Mr Richard Denyer on 02 6333 6276.

Yours faithfully



J E Bingham

ACTING DIRECTOR

ENVIRONMENTAL, PLANNING & BUILDING SERVICES

Per:





Department of
Primary Industries
Water

Contact: Jeanette Nestor
Phone: 02 6841 7447
Fax: 02 6884 0096
Email: Jeanette.nestor@dpi.nsw.gov.au

Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Our ref: 80 ERM2016/0470
File No:
Your Ref: EAR 1053

Attention: Lauren Evans

24 June 2016

Dear Lauren

Re: Request for Secretary's Environmental Assessment Requirements – EAR 1053 for proposed Quarry at 1329 Mid-Western Highway, Evans Plains (Lot 241 DP1185616) – including Existing unauthorised Quarry and Expansion.

DPI Water appreciates the opportunity to input into the Secretary's Environmental Assessment Requirements (SEARS) for the existing unauthorised Quarry and proposed Expansion. DPI Water has reviewed the proposal and provides the following advice to be addressed in preparation of the Environmental Impact Statement (EIS). Detailed comments are provided in Attachment A.

It is recommended that the EIS be required to include:

Key Issues

- Complete an audit of existing water management infrastructure and works within waterfront land to identify compliance issues under the *Water Management Act 2000*. This is to focus on works within waterfront land, groundwater interception/use and surface water capture and extraction.
- The identification of an adequate and secure water supply for the life of the project. Confirmation that water can be sourced from an appropriately authorised and reliable supply. This is to include an assessment of the current market depth where water entitlement is required to be purchased.
- 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.
- Details of existing and proposed works in or within 40 metres of a watercourse and measures to mitigate degradation of the watercourse. These works may require a Controlled Activity Approval under the *Water Management Act 2000* and the works are to be in accordance with the Guidelines for Controlled Activities on Waterfront Land. Implementation of adequate buffers is a key aspect and the buffer relevant for a third order watercourse is 30m from the high bank.

2

- Identify water licensing or approval requirements under the *Water Management Act 2000*. This may include a Controlled Activity Approval, Flood Work Approval, Water Supply Work Approval and relevant entitlement in a Water Access Licence.
- A geomorphic assessment to demonstrate stability of waterfront land by the proposed activity and any works to rehabilitate existing activities.
- Assessment of the hydrological and hydraulic impacts on the potential redistribution of floodwater along with the impacts on neighbouring properties. This is to take into account the influence of any proposed bunds and other infrastructure within the modelled flood extent.
- A detailed assessment against the NSW Aquifer Interference Policy (2012) using DPI Water's assessment framework for groundwater interception. Also refer to NSW Aquifer Interference Policy Fact Sheet 7 available at <http://www.water.nsw.gov.au/water-management/law-and-policy/key-policies/aquifer-interference>
- An assessment of existing and proposed 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 include proposed surface and groundwater monitoring activities and methodologies.
- Details of proposed management systems to ensure separation of dirty and clean water including stormwater runoff and erosion and sediment control measures. Works need to be consistent with industry guidelines such as "*Managing Urban Stormwater: Soils and Construction Volume 2E Mines and Quarries* (DECC 2008)".
- A detailed and consolidated site water balance.
- Full technical details and data of all surface and groundwater modelling, and an independent peer review.
- Details of the final landform of the site, including final void management (where relevant) and rehabilitation measures.
- Consideration of relevant policies and guidelines.
- A statement of where each element of the SEARs is addressed in the EIS (i.e. in the form of a table).

Further information regarding licensing, approvals and Water Sharing Plans can be obtained from DPI Water's website: <http://www.water.nsw.gov.au/water-licensing>. Please direct any questions or correspondence to **Jeanette Nestor**,
Jeanette.nestor@dpi.nsw.gov.au.

Yours sincerely



Tim Baker
Senior Water Regulation Officer
Water Regulatory Operations, WR Operations North - Central & Far West
NSW Department of Primary Industries – Water

ATTACHMENT A

DPI Water Detailed Requirements – Proposed Quarry – Lot 21 DP1185616 – 1329 Mid-Western Hwy, Evans Plains:

DPI Water requires the EIS for the proposal to demonstrate and address the following:

1. Buffers

Adequate buffers between Evans Plains Creek and the pit should be applied to ensure stability of Evans Plains Creek and the adjacent flood plain is not compromised. The recommended buffer from the high bank of the creek to the pit is 30m. Vegetated buffers are recommended and buffer areas should be established prior to operation commences.

Identify stock pile locations including overburden stock piles. Consideration should be given to the proximity of stock piles to Evans Plains Creek and address any potential flood impacts. Consideration should be given to the DPI Water guidelines for riparian corridors which can be accessed on the DPI website:

<http://www.water.nsw.gov.au/water-licensing/approvals/controlled-activity>

2. Pit Operation

Demonstrate pit operation will be carried in accordance with best practice. Best practice includes excavation starting from the downstream end of the site. Maintaining a suitable batter within the pit to ensure pit stability and where necessary include a fuse plug, Stage operations and rehabilitate as each stage is completed.

3. Water Balance

Identify site water demands including water sources (surface and groundwater, water recycling and water reuse. Collection, distribution and disposal methods of water, including dams, sediment dams, storage structures and water reticulation infrastructure that distributes water from or around the site or infrastructure that supplies water to the site.

Reference should be made to existing surface water management controls and identify any modification to surface water management controls and provide an assessment of impacts where amendments are required. Details are requested on the capacity of water management infrastructure capturing runoff and identification of dirty and clean water catchments. Final landform in terms of the potential for surface water capture is also requested.

Assessment of likely cumulative impacts relating to the relevant water sources, nearby groundwater users and downstream surface water users and proposed operations.

4. Water Licensing and Approval

Existing and proposed water licensing requirements in accordance with the *Water Management Act 2000* and the *Water Act 1912* (whichever is relevant) also include reference to existing licenses and/or approval numbers that will be utilised in this proposal. Identify where additional licenses and/or approvals are proposed and demonstrate consistency with the relevant Water Sharing Plans.

Where water is proposed to be captured and used under the Harvestable Rights Policy, calculations are required to be carried out to demonstrate that the dams do not exceed the total Maximum Harvestable Rights of the property.

4

The annual water requirements need to be regularly reviewed through modelling and review of data. Any additional water needs are to be met via the purchase of additional water entitlement. The proponent will be required to ensure they hold adequate licensed entitlement prior to commencement.

5. Interception of Groundwater

Extent and staging of proposed extraction, including dredging operations, annual rate of extraction, batters (above and below water level) and final depth. Assessment needs to be in accordance with the requirements of the NSW Aquifer Interference Policy. Assessment of the cumulative impacts and management of the intercepted groundwater system including predicted dewatering volumes, contamination and water quality, groundwater dependent ecosystems, assessment of impacts on adjacent licensed water users, basic landholder rights, also include disposal methods. Identify anticipated annual volume of groundwater to be taken via the quarry pit including the evaporative loss during and post mining. The volumes and source of inflow via local groundwater systems and any potential connection with surface water systems during the operational period and after operations have ceased until equilibrium is reached is also requested.

6. Flood Works - Flood Impacts

Details of any proposed levee/bunds. Assessment of the hydrological and hydraulic impacts on the redistribution of floodwater along with the overall environmental impacts on neighbouring properties, taking into account proposed bunds. Consideration should be given to the requirements under current new legislation. Information can be accessed on the DPI website:

<http://www.water.nsw.gov.au/water-licensing/approvals/flood-work-approvals>

7. Haul Roads and Crossings on Waterfront Land

Clearly identify haul roads and crossings in relation to Evans Plains Creek. Demonstrate that the haul roads and crossings meet with DPI Guidelines for riparian corridors, instream works and watercourse crossings which can be accessed on the DPI website:

<http://www.water.nsw.gov.au/water-licensing/approvals/controlled-activity>

8. Geomorphic Assessment

A detailed impact assessment of any existing or proposed works and infrastructure within or adjacent to watercourses against relevant legislation and policies. This is to include any requirements for additional infrastructure and demonstrate the ability to achieve the principles of the *Water Management Act 2000* and the requirements of the "Guidelines for Controlled Activities on Waterfront Land". The relevant guidelines can be accessed at the following link: <http://www.water.nsw.gov.au/water-licensing/approvals/controlled-activity>.

The assessment is to include but not be limited to:

- The relationship of the project to any river management plan eg: Rivercare plan.
- Longitudinal and cross sections of the river and floodplain.
- Evidence of river stability, is the river in equilibrium?
- The effect on riparian vegetation which is aiding in channel stability and maintaining water quality.
- Proposed works to stabilise the system and their justification if the river is not in equilibrium.
- Assessment of impacts within the site, upstream and downstream.
- Are there natural features of the landscape that will stop the river diverting through the site for at least the same amount of time as it would have naturally.
- The likely scenario if the river does reach the site of development and the risk of degradation to waterfront land.

5

- The cumulative effect with other similar activities, with other stream management works and other development in the area.

9. Monitoring and Maintenance

Potential impacts and key issues to be identified and details of adequate mitigating and monitoring requirements and measures to address surface water, groundwater and flood impacts through the life of the quarry operation and post operation. Monitoring and maintenance plan to demonstrate pit and floodplain stability and stability of Evans Plains channel.

10. Rehabilitation and Final Land Form

Rehabilitation details, including stabilisation methods and final land form post operation. Include final topography, proposed land use, vegetation management plan in accordance with DPI Water guidelines for Vegetation Management Plans. Method and material to be used in any land reclamation. Decommissioning of any infrastructure, including dams, storages, draining, erosion and sediment controls.

Relevant Legislation

The assessment is required to take into account the requirements of the following legislation (administered by DPI Water), as applicable:

Water Management Act 2000 (WMA, 2000)

In particular, proposals and management plans should be consistent with the Objects (s.3) and Water Management Principles (s.5) of the WMA 2000.

- Licensing and Approvals under relevant sections of the WMA 2000 (examples of approvals that may be required. Note this list is not exclusive).
 - Water Access Licences
 - Water Supply Work Approvals
 - Flood Work Approvals
 - Controlled Activity Approvals
- Basic Landholder Rights
- Harvestable Rights

Water Management (General) Regulation 2011

- Provides additional detail in relation to all applications and exemptions which may or may not apply to this proposal.

Water Act 1912 (WA, 1912)

- Aquifer interference activities (currently licensed under the WA, 1912)
- Monitoring bores.

Water Sharing Plans

Gazetted Water Sharing Plans (WSPs) prepared under the provisions of the WMA 2000 establish rules for access to, and the sharing of water between the environmental needs of the surface or groundwater source and water users. If the proposal is within a gazetted WSP area the assessment is required to demonstrate how the proposal is consistent with the relevant access and trading rules of the WSP including rules for the management of local impacts in respect to groundwater sources, ecosystem protection – including groundwater dependent ecosystems, water quality and surface/groundwater connectivity. Refer to:

<http://www.water.nsw.gov.au/water-management/water-sharing>

Relevant Policies

The assessment is required to take into account the following NSW Government policies, as applicable:

- NSW Aquifer Interference Policy (2012)

6

- *NSW Groundwater Policy Framework Document – General (August 1997)*
- *NSW Groundwater Quality Protection Policy (1998)*
- *NSW State Groundwater Dependent Ecosystem Policy (2002)*
- *NSW State Rivers and Estuaries Policy (1993)*
- *NSW Sand and Gravel Extraction Policy for Non-Tidal Rivers (1992)*
- *NSW Wetlands Management Policy (1996)*
- *Guidelines for the Assessment and Management of Groundwater Contamination (2007)*
- *Guidelines for Groundwater Protection in Australia (1995)*
- *Australian Groundwater Modelling Guidelines (2012)*
- *Water Sharing Plan for the Macquarie Bogan Unregulated and Alluvial Water Sources (2012)*
- *Water Sharing Plan for the NSW Murray Darling Basin Fractured Rock Groundwater Sources 2011*

These documents can be found at:

<http://www.water.nsw.gov.au/Water-Management/Law-and-Policy/Key-policies/default.aspx> and

<http://www.water.nsw.gov.au/Water-Management/Water-availability/Groundwater/default.aspx>

Guidelines

The assessment is required to take into account the following Guidelines for Controlled Activities (July 2012), as applicable:

- Riparian corridors (and associated Vegetation Management Plans)
- Watercourse crossings
- Laying pipes and cables in watercourses
- Outlet structures
- In-stream works

Refer to:

<http://www.water.nsw.gov.au/Water-Licensing/Approvals/Controlled-activities/default.aspx>

End of Attachment A