

Secretary's Environmental Assessment Requirements

State Significant Development

Section 78A(8A) of the *Environmental Planning and Assessment Act 1979*

Application Number	SSD 6437
Proposal	The Old Northern Road Quarry Expansion Project, which includes: • continuing existing approved development on site; • developing a new friable sandstone extraction area east of the existing extraction area; • developing a range of associated infrastructure to support this expansion; • increasing the maximum sand production rate to 800,000 tonnes per annum; • extending the lifespan of the quarry by a further 20 years; • transporting the product from the quarry via road; and • progressively rehabilitating the site.
Location	Old Northern Road, Maroota (Lot 1 and 2 DP 547255, Lot 29 and Lot 196 DP 752025)
Applicant	Dixon Sand (Penrith) Pty Ltd
Date of Issue	22 May 2017
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: • a full description of the development, including: – the need for the development; – the resource to be extracted, including the amount, type and composition; – the site layout and extraction plan, including cross-sectional plans; – the production process and processing activities, including the in-flow and out-flow of materials and points of discharge to the environment; – surface infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process); – a waste (overburden, rejects, tailings etc) management strategy; – a water management strategy; – a rehabilitation strategy to apply during, and after completion of, extraction operations, and proposed final use of site; and – the likely interactions between the development and any existing, approved or proposed development in the vicinity of the site; • a list of any approvals that must be obtained before the development may commence; • an assessment of the likely impacts of the development on the environment, focussing on the key issues identified below, including: – a description of the existing environment likely to be affected by the development, using sufficient baseline data; – an assessment of the likely impacts of all stages of the development, including any cumulative impacts, taking into consideration any relevant laws, environmental planning instruments, guidelines, policies, plans and industry codes of practice; – a description of the measures that would be implemented to avoid, minimise, mitigate and/or offset the likely impacts of the development, and an assessment of: ○ whether these measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented;

	○ the likely effectiveness of these measures; and ○ whether contingency measures would be necessary to manage any residual risks; and – a description of the measures that would be implemented to monitor and report on the environmental performance of the development if it is approved; • a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; • consideration of the development against all relevant environmental planning instruments (including Part 3 of the <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>); • 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. 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. In addition to the matters set out in Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i>, the development application must be accompanied by a signed report from a suitably qualified expert that includes an accurate estimate of the: • capital investment value (as defined in Clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the development, including details of all the assumptions and components from which the capital investment value calculation is derived; and • jobs that would be created during each stage of the development.
Consultation	During the preparation of the EIS, you must consult with relevant local, State and Commonwealth Government authorities, service providers, Aboriginal stakeholders, community groups and affected landowners. In particular, you must consult with: • affected landowners; • community groups; • Hills Shire Council; • Office of Environment and Heritage (including the Heritage Branch); • Environment Protection Authority; • Division of Resources and Energy within the Department of Industry; • Department of Primary Industries (including the DPI Water, NSW Forestry, Agriculture and Fisheries sections and Crown Lands division); • Roads and Maritime Services; and • NSW Rural Fire Service. The EIS must: • describe the consultation process used and demonstrate that effective consultation has occurred; • describe the issues raised by public authorities, service providers, community groups and landowners; • identify where the design of the development has been amended in response to issues raised; and otherwise demonstrate that issues raised have been appropriately addressed in the assessment.
Key Issues	The EIS must address the following key 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 under the *Water Act 1912* and/or *Water Management Act 2000*;
 - 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 WSP or water source embargo;
 - an assessment of any likely flooding impacts of the development;
 - a detailed consideration of maintenance of an adequate buffer between all excavations at the highest predicted regional groundwater table;
 - 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 (including sewage), water monitoring program and other measures to mitigate surface and groundwater impacts;
- **Noise** – including a quantitative assessment of potential:
 - construction, operational and off-site transport noise impacts in accordance with the *Interim Construction Noise Guideline*, *NSW Industrial Noise Policy* and the *NSW Road Noise Policy* respectively;
 - reasonable and feasible mitigation measures to minimise noise emissions; and
 - monitoring and management measures, in particular real-time and attended noise monitoring;
- **Air Quality** – including a quantitative assessment of potential:
 - construction and operational impacts, in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW*, and with a particular focus on dust emissions including PM_{2.5} and PM₁₀;
 - dust and other emissions generated from blasting, processing, operational activities and transportation of quarry products;
 - reasonable and feasible mitigation measures to minimise dust and emissions; and
 - monitoring and management measures, in particular, real-time air quality monitoring;
- **Biodiversity** – including:
 - accurate predictions of any vegetation clearing on site;
 - a detailed assessment of the potential biodiversity impacts, paying particular attention to threatened species, populations and ecological communities and groundwater dependent ecosystems and having regard to the relevant policies and guidelines listed in Attachment 1; and
 - an offset strategy (depending on the outcomes of the assessment of biodiversity impacts) to ensure the development maintains or improves the biodiversity values of the region in the medium to long term, including evidence that the appropriate type and quantum of offsets will be available;
- **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;
 - a detailed assessment of potential traffic impacts on the capacity, condition, safety and efficiency of the local and State road network (as identified above), including a road safety audit; and
 - a detailed description of the measures or works (including concept plans) that would be used and/or implemented to upgrade, maintain and improve the capacity, efficiency and safety of the road network over the life of the development;
- **Land Resources** – including a detailed 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);
 - potential impacts on areas of regionally significant farmland and associated industries; and
 - the compatibility of the development with other land uses in the vicinity of the development in accordance with the requirements in Clause 12 of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*;
- **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, 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** – including:
 - a detailed assessment of the likely social impacts of the development on the local and regional community; and
 - a detailed assessment of the likely economic impacts of the development, paying particular attention to:
 - the significance of the resource;
 - the costs and benefits of the project; identifying whether the development as a whole would result in a net benefit to NSW, including consideration of fluctuation in commodity markets and exchange rates; and
 - the demand for the provision of local infrastructure and services; and
- **Rehabilitation** – including the proposed rehabilitation strategy for the site having regard to the key principles in the *Strategic Framework for Mine Closure*, including:
 - rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria;
 - nominated final land use, having regard to any relevant strategic land use planning or resource management plans or policies; and
 - the potential for integrating this strategy with any other rehabilitation and/or offset strategies in the region.

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Air	
	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)
	Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System for Inclusion into the 'Approved Methods for the Modelling and Assessments of Air Pollutants in NSW, Australia'
	National Greenhouse Accounts Factors (Commonwealth)
Noise	
	NSW Industrial Noise Policy and associated Application Notes (EPA)
	Interim Construction Noise Guideline (DECC 2009)
	NSW Road Noise Policy (EPA)
Water	
Groundwater	NSW State Groundwater Policy Framework Document (NOW)
	NSW State Groundwater Quality Protection Policy (NOW)
	NSW State Groundwater Quantity Management Policy (NOW)
	NSW Aquifer Interference Policy 2012 (NOW)
	Office of Water Guidelines for Controlled Activities (2012)
	Groundwater Monitoring and Modelling Plans – Information for prospective mining and petroleum exploration activities (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 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)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC)
	NSW Water Conservation Strategy (2000)
	State Water Management Outcomes Plan
	NSW State Rivers and Estuary Policy (1993)
	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 (EPA)
	Managing Urban Stormwater: Treatment Techniques (EPA)
	Managing Urban Stormwater: Source Control (EPA)
	Technical Guidelines: Bunding & Spill Management (EPA)
	Environmental Guidelines: Use of Effluent by Irrigation (EPA)
	A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)
	NSW Guidelines for Controlled Activities on Waterfront Land (NOW)
Land	
	Soil and Landscape Issues in Environmental Impact Assessment (NOW)
	Agfact AC25: Agricultural Land Classification (NSW Agriculture)
	Agricultural Issues for Extractive Industries (NSW Trade and Investment)
	State Environmental Planning Policy No. 55 – Remediation of Land

	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)
Traffic	
	Guide to Traffic Generating Development (RMS)
	Road Design Guide (RMS) & relevant Austroads Standards
Biodiversity	
	Framework for Biodiversity Assessment (OEH)
	NSW Biodiversity Offsets Policy for Major Projects (OEH)
	Guidelines for Threatened Species Assessment (DP&E)
	NSW State Groundwater Dependent Ecosystem Policy (NOW)
	Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW)
	State Environmental Planning Policy No. 44 – Koala Habitat Protection
Heritage	
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
	Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation (DP&E)
	Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH)
	NSW Heritage Manual (OEH)
	Statements of Heritage Impact (OEH)
	The Hills Local Environmental Plan 2012
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
Waste	
	Waste Classification Guidelines (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)
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
	The Hills Local Environmental Plan 2012
	Sydney Regional Environmental Plan No 9—Extractive Industry
	Sydney Regional Environmental Plan – Hawkesbury-Nepean River

ATTACHMENT 2

Agency Correspondence