



Mr Darryl Thiedeke
Hy-Tec Industries Pty Ltd
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SILVERWATER NSW 1811

Dear Mr Thiedeke

**State Significant Development – Director-General's Requirements
Austen Quarry Extension (SSD-6084)**

Please find attached a copy of the Director-General's environmental assessment requirements (DGRs) for the preparation of an Environmental Impact Statement (EIS) for the Austen Quarry Expansion. These requirements have been prepared in consultation with relevant government agencies and are based on the information that you have provided to date.

I have attached a copy of the agencies' comments (see Attachment 2), and you should ensure these comments are appropriately considered in the EIS. Please note that the Department of Primary Industries has only provided draft comments to date, and the Department will send you the final comments in due course.

Please note that the Department may alter these requirements at any time, and that you must consult further with the Department if you do not lodge a development application and an EIS within two years of the date of issue of these DGRs. The Department will review the EIS for the development carefully before putting it on public exhibition, and will require you to submit an amended EIS if it does not adequately address the DGRs.

Your development may require separate approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Department encourages you to confirm whether such an approval will be required as soon as possible (<http://www.environment.gov.au> or 6274 1111). If an EPBC Act approval is required, I would appreciate it if you would advise the Department accordingly, as the Commonwealth approval process may be integrated into the NSW approval process, and supplementary DGRs may need to be issued.

I would appreciate it if you would contact the Department at least two weeks before you propose to submit the development application and EIS. This will enable the Department to:

- confirm the applicable fee (see Division 1AA, Part 15 of the *Environmental Planning and Assessment Regulation 2000*); and
- determine the number of copies (hard-copy and CD-ROM) of the EIS required for review.

If you have any enquiries about these requirements, please contact Brendan Liew at the details listed above.

Yours sincerely

 3/9/13

David Kitto
Director Mining & Industry Projects
As delegate of the Director-General

Director General's Environmental Assessment Requirements

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

State Significant Development

Application Number	SSD-6084
Development	<p>Austen Quarry Extension, which includes:</p> <ul style="list-style-type: none"> • extracting up to 1.1 million tons per annum of quarry materials; • extending the existing extraction area by 8.6 hectares (ha); • extending the existing overburden emplacement area by 5.8 ha; • transporting quarry products off-site by road to local and to Sydney markets; • blasting (9 am to 5 pm weekdays); and • rehabilitating the site.
Location	Jenolan Caves Road Hartley, approximately 10 km south of Lithgow
Applicant	Hy-Tec Industries Pty Ltd
Date of Issue	3 September 2013
General Requirements	<p>The Environmental Impact Statement (EIS) for the development must meet the form and content requirements in clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p> <p>In addition, the EIS must include:</p> <ul style="list-style-type: none"> • a detailed description of the development, including: <ul style="list-style-type: none"> – justification for the proposed development; – alternatives considered; – likely components and staging of the development - including construction, operational stage/s and rehabilitation; and – plans of any proposed building works; • consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments; • a risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment; • detailed assessment of the key issues specified below, and any other significant issues identified in the risk assessment, which includes: <ul style="list-style-type: none"> – a description of the existing environment, <u>using sufficient baseline data</u>; – an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes; and – a description of the measures that would be implemented to avoid, minimise and if necessary, offset the potential impacts of the development, including proposals for adaptive management and/or contingency plans to manage any significant risks to the environment; and • a statement of commitments, outlining all the proposed environmental management and monitoring measures included in the EIS. <p>The EIS must be accompanied by a report from a qualified quantity surveyor providing:</p> <ul style="list-style-type: none"> • a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the proposal, including details of all the assumptions and components from which the CIV calculation is derived; • a close estimate of the jobs that will be created by the development during the construction and operational phases of the development; and • certification that the information provided is accurate at the date of preparation.

Key Issues

The EIS must address the following specific issues:

- **Land Resources** – including a detailed assessment of the potential impacts on:
 - soils and land capability;
 - landforms and topography, including rock formations, steep slopes, land slippage, etc; and
 - land use, including forestry use;
 - extractive material resources, including assessment of the size and quality of the resource and description of the methods used to assess the resource and its suitability for the intended applications;
- **Water Resources** – including:
 - detailed assessment of potential impacts on the quality and quantity of existing surface and ground water resources, including:
 - o detailed modelling of potential groundwater impacts;
 - o impacts on riparian, ecological, geo-morphological and hydrological values of watercourses, including environmental flows, in particular Coxs River;
 - o whether the development can operate to achieve a neutral or beneficial effect on water quality in the drinking water catchment, consistent with the provisions of *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011*;
 - a detailed assessment of the potential impacts of the development on:
 - o the quantity and quality of regional water supplies;
 - o regional water supply infrastructure; and
 - o affected licensed water users and basic landholder rights (including downstream water users);
 - a detailed site water balance, including a description of site water demands, water disposal methods (inclusive of volume and frequency of any water discharges), water supply infrastructure and water storage structures;
 - 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) or water source embargo;
 - a description of the measures proposed to ensure the development can operate in accordance with the requirements of any relevant WSP;
 - a detailed description of the proposed water management system (including upgraded sewage system), water monitoring program and other measures to mitigate surface and groundwater impacts; and
 - a flood impact assessment, which identifies impacts on local and regional flood regimes and resultant impacts on infrastructure and public safety, including any measures proposed to mitigate potential flood impacts;
- **Biodiversity** – including:
 - accurate estimates of proposed vegetation clearing and impacts on regionally significant remnant vegetation, or vegetation corridors;
 - a detailed assessment of potential impacts of the development on any terrestrial or aquatic threatened species or populations and their habitats, endangered ecological communities and groundwater dependent ecosystems; and
 - a detailed description of the measures that would be implemented to avoid, reduce or mitigate impacts on biodiversity, including an appropriate biodiversity offset strategy;
- **Traffic & Transport** – including:
 - accurate predictions of the road traffic generated by the construction and operation of the development;
 - an assessment of potential traffic impacts on the safety and efficiency of the road network; and
 - a detailed description of the measures that would be implemented to maintain and/or improve the capacity, efficiency and safety of the road networks in the surrounding area over the life of the development;
- **Noise** – including a quantitative assessment of potential:

- construction, operational and off-site transport noise impacts;
- reasonable and feasible mitigation measures, including evidence that there are no such measures available other than those proposed; and
- monitoring and management measures, in particular real-time and attended noise monitoring;
- **Blasting** – including proposed hours, frequency, methods and impacts;
- **Air Quality** – including a quantitative assessment of potential:
 - construction and operational impacts, with a particular focus on dust emissions;
 - dust generation from blasting and processing, as well as diesel emissions;
 - reasonable and feasible mitigation measures to minimise dust and diesel emissions, including evidence that there are no such measures available other than those proposed; and
 - monitoring and management measures, in particular real-time air quality monitoring;
- **Heritage** – including:
 - an Aboriginal cultural heritage assessment (including both cultural and archaeological significance) which must:
 - o demonstrate effective consultation with Aboriginal communities in determining and assessing impacts, and developing and selecting mitigation options and measures;
 - o outline any proposed impact mitigation and management measures (including an evaluation of the effectiveness and reliability of the measures); and
 - a historic heritage assessment (including archaeology) including a statement of heritage impact (including significance assessment) for any State significant or locally significant historic heritage items and outlining any proposed mitigation and management measures.
- **Visual** – including:
 - a detailed assessment of the:
 - o changing landforms on site during the various stages of the development; and
 - o potential visual impacts of the development on private landowners in the surrounding area as well as key vantage points in the public domain including Hassans Wall Lookout;
 - a detailed description of the measures that would be implemented to minimise the potential visual impacts of the development;
- **Waste** – including:
 - accurate estimates of the quantity and nature of the potential waste streams of the development;
 - a waste disposal strategy;
 - details of the importation of materials onto the site; and
 - a description of measures that would be implemented to minimise production of other waste, and ensure that that waste is appropriately managed;
- **Greenhouse Gases** – including:
 - a quantitative assessment of potential Scope 1, 2 and 3 greenhouse gas emissions and an assessment of reasonable and feasible measures to minimise greenhouse gas emissions and ensure energy efficiency;
- **Hazards** – paying particular attention to public safety, including bushfires;
- **Social & Economic** – including:
 - an assessment of potential impacts on local and regional communities, including impacts on social amenity;
 - a detailed description of the measures that would be implemented to minimise the adverse social and economic impacts of the development, including any infrastructure improvements, or contributions and/or voluntary planning agreement or similar mechanism; and
 - a detailed assessment of the costs and benefits of the development as a whole, and whether it would result in a net benefit for the NSW community;
- **Rehabilitation** – including the proposed rehabilitation strategy for the site having regard to the key principles in the *Strategic Framework for Mine*

	<p><i>Closure</i>, including:</p> <ul style="list-style-type: none"> - 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.
Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i> . These documents should be included as part of the EIS rather than as separate documents.
Consultation	<p>During the preparation of the EIS, you must consult with relevant local, State and Commonwealth Government authorities, service providers, community groups and affected landowners.</p> <p>In particular you must consult with the:</p> <ul style="list-style-type: none"> • Commonwealth Department of Sustainability, Environment, Water, Population and Communities; • Office of Environment and Heritage (including the Heritage Branch); • Environment Protection Authority; • Division of Resources and Energy within the Department of Trade and Investment, Regional Infrastructure and Services; • Department of Primary Industries (including the NSW Office of Water, NSW Forestry, Agriculture and Fisheries sections, and Catchments and Lands (Crown Lands Division)); • Rural Fire Service; • Roads and Maritime Services; • Sydney Catchment Management Authority; • Blue Mountains City Council; and • Lithgow City Council. <p>The EIS must:</p> <ul style="list-style-type: none"> • 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.
Further consultation after 2 years	If you do not lodge a DA and an EIS for the development within 2 years of the issue date of these DGRs, you must consult further with the Director-General in relation to the requirements for lodgement.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, Attachment 1 contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this development.

ATTACHMENT 1 Technical and Policy Guidelines

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>

Policies, Guidelines & Plans

Risk Assessment	
	AS/NZS 4360:2004 Risk Management (Standards Australia)
	HB 203: 203:2006 Environmental Risk Management – Principles & Process (Standards Australia)
Land Resources	
	Agricultural Impact Assessment Guidelines 2012 (DP&I)
	Agfact AC25: Agricultural Land Classification (NSW Agriculture)
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)
	Agricultural Issues for Extractive Industries (NSW Department of Trade and Investment, Regional Infrastructure and Services)
	Soil and Landscape Issues in Environmental Impact Assessment (DLWC)
Water Resources	
	NSW Water Management Act 2000
	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)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	State Water Management Outcomes Plan
<i>Surface Water</i>	Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009
	NSW Government Water Quality and River Flow Objectives (DECC)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
	Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volume 2E: Mines and Quarries.
	Managing Urban Stormwater: Treatment Techniques (DECC)
	Managing Urban Stormwater: Source Control (DECC)
	Floodplain Development Manual (DIPNR)
	Floodplain Risk Management Guideline (DECC)
	A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)
	Technical Guidelines: Bunding & Spill Management (DECC)
Environmental Guidelines: Use of Effluent by Irrigation (DECC)	
<i>Groundwater</i>	NSW Water Management Act 2000
	NSW Water Act 1912
	Office of Water Guidelines for Controlled Activities (2012)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document (DLWC, 1997)
	NSW State Groundwater Quality Protection Policy (DLWC, 1998)

NSW State Groundwater Quantity Management Policy (DLWC, 1998)

Guidelines for the Assessment & Management of Groundwater Contamination (DECC, 2007)

Any relevant Water Sharing Plan for groundwater and surface water resources

NSW Aquifer Interference Policy (2012)

Biodiversity

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 (DECC 2004)

Guidelines for Threatened Species Assessment (DoP 2005)

BioBanking Assessment Methodology and Credit Calculator Operational Manual (DECCW 2011)

The Threatened Species Assessment Guideline – The Assessment of Significance (DECC 2007)

NSW State Groundwater Dependent Ecosystem Policy (DLWC)

Policy & Guidelines - Aquatic Habitat Management and Fish Conservation (NSW Fisheries)

State Environmental Planning Policy No. 44 – Koala Habitat Protection

Principles for the Use of Biodiversity Offsets in NSW (OEH)

Traffic & Transport

Guide to Traffic Generating Development (RTA)

Road Design Guide (RTA)

Noise & Blasting

NSW Industrial Noise Policy (DECC)

Environmental Noise Management – Assessing Vibration: a technical guide 2006 (DEC)

NSW Road Noise Policy 2011 (DECCW)

Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZECC)

Environmental Criteria for Road Traffic Noise (EPA)

Air Quality

Protection of the Environment Operations (Clean Air) Regulation 2002

Approved Methods for the Modelling and Assessment of Air Pollutants in NSW 2005 (DEC)

Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)

Guidelines from the USEPA, the California EPA Office of Environmental Health and EPA Victoria relating to respirable crystalline silica

Heritage

Aboriginal

Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (DEC 2005)

The Burra Charter (The Australia ICOMOS charter for places of cultural significance)

Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (OEH)

Code of Practice for Archaeological Investigations of Objects in New South Wales 2010 (OEH)

Historic

NSW Heritage Manual (NSW Heritage Office)

The Burra Charter (The Australia ICOMOS charter for places of cultural significance)

Waste

Waste Classification Guidelines (EPA)

Greenhouse Gases

National Greenhouse Accounts Factors (Australian Department of Climate Change (DCC))

Guidelines for Energy Savings Action Plans (DEUS)

Hazards

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
<i>Bushfire</i>	Planning for Bush Fire Protection 2006
	Guide for Developing a Bush Fire Emergency Evacuation Plan
Socio-Economic	
	Draft Economic Evaluation in Environmental Impact Assessment (DoP)
	Techniques for Effective Social Impact Assessment: A Practical Guide (Office of Social Policy, NSW Government Social Policy Directorate)
Rehabilitation	
	Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth of Australia)
	Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth of Australia)
	Strategic Framework for Mine Closure (ANZMEC-MCA)

ATTACHMENT 2
Agency Input into Key Assessment Issues