

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979* Schedule 2 of the Environmental Planning and Assessment Regulation 2000

Application Number	SSD-9349
Project Name	Glendell Continued Operations Project
Location	20 kilometres north-west of Singleton
Applicant	Glendell Tenements Pty Ltd
Date of Issue	12/08/2019
Proposal	<p>The Glendell Continued Operations Project, includes:</p> <ul style="list-style-type: none">· extension of open cut coal mining to the north of the existing Glendell Mine until approximately 2044;· extraction of approximately 140 million tonnes of run-of-mine (ROM) coal until approximately 2044;· increase in production rate from 4.5 to 10 million tonnes per annum later in the mine life;· continued integration of the mine with the wider Mount Owen Complex, including use of the Mount Owen coal handling and preparation plant, rail loop and associated infrastructure for ROM coal processing and product coal transport;· demolition/relocation of the existing Glendell Mine Infrastructure Area (MIA), construction of a new MIA and/or utilisation of the existing Liddell or Mount Owen MIAs;· continued employment of existing Mount Owen Complex employees;· progressive rehabilitation of the site including taking over the remaining rehabilitation obligations under DA 80/952;· realignment of a section of Hebden Road;· diversion of Yorks Creek;· relocation of Ravensworth Homestead; and· other ancillary infrastructure works such as the construction of a heavy vehicle access road and relocation of a pipeline and powerlines.
General Requirements	<p>The Environmental Impact Statement (EIS) for the development must comply with the requirements of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p> <p>In particular, the EIS must include:</p> <ul style="list-style-type: none">· a stand-alone executive summary;· a full description of the development, including:<ul style="list-style-type: none">- historical mining operations on and nearby the site;- the resource to be extracted, demonstrating efficient resource recovery within environmental constraints;- the mine layout and scheduling;- coal processing and transport arrangements;- infrastructure and facilities (including any existing infrastructure or infrastructure that would be required for the development, but the subject of a separate approval process);- a waste (overburden, rejects, tailings, etc) management strategy;- a water management strategy;- a rehabilitation strategy;- the likely interactions between the development and any other existing, approved or proposed mining development or power station in the vicinity of the site;· a strategic justification of the development focusing on site selection and the suitability of the proposed 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, focusing on the key issues identified below, including:
- a description of the existing environment likely to be affected by the development, using sufficient baseline/background data;
- an assessment of the likely impacts for 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:
 - o whether these measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented;
 - o the likely effectiveness of these measures; and
 - o whether contingency measures would be necessary to manage any residual risks;
- a description of the measures that would be implemented to monitor and report on the environmental performance of the development;
- 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 *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*);
- the reasons why the development should be approved, having regard to:
 - relevant matters for consideration under the *Environmental Planning and Assessment Act 1979*, including the objects of the Act;
 - the biophysical, economic and social impacts of the development, including the principles of ecologically sustainable development;
 - the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; and
 - feasible alternatives to the development (and its key components), including the consequences of not carrying out the development;
- a signed statement 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 *Environmental Planning and Assessment Regulation 2000*, the development application must be accompanied by:

- **Estimate of Capital Investment Value** – a signed report from a suitably qualified and experienced person that includes an accurate estimate of the capital investment value (as defined in Clause 3 of the *Environmental Planning and Assessment Regulation 2000*), including details of all the assumptions and components from which the capital investment value calculation is derived; and
- **Gateway Certificate** – a current gateway certificate in respect of the proposed development on Biophysical Strategic Agricultural Land, in accordance with clause 50A of the *Environmental Planning and Assessment Regulation 2000* and Part 4AA of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*.

Key Issues	<p>The EIS must address the following key issues:</p> <ul style="list-style-type: none"> • Land Resources – including: <ul style="list-style-type: none"> - an assessment of the likely impacts of the development on the soils and land capability of the site and surrounds; - an assessment of the agricultural impacts of the development, including an assessment of likely impacts (both direct and indirect) on Biophysical Strategic Agricultural Land (BSAL), and detailed consideration of potential avoidance, mitigation and rehabilitation strategies for any areas of BSAL which may be impacted by the development; and - an assessment of 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>, paying particular attention to the agricultural land use in the region; • Air Quality – including: <ul style="list-style-type: none"> - a detailed assessment of potential construction and operational air quality impacts, in accordance with the <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW</i>, and with a particular focus on dust emissions including PM_{2.5} and PM₁₀, and having regard to the <i>Voluntary Land Acquisition and Mitigation Policy</i>; and - an assessment of the likely greenhouse gas impacts of the development; • Rehabilitation and Final Landform – including: <ul style="list-style-type: none"> - a description of final landform design objectives, having regard to achieving a natural landform that is safe, stable, non-polluting, fit for the nominated post-mining land use and sympathetic with surrounding landforms; - an analysis of final landform options, including the short and long-term cost and benefits, constraints and opportunities of each, and detailed justification for the preferred option; - identification and assessment of post-mining land use options, having regard to any relevant strategic land use planning or resource management plans/policies; - rehabilitation objectives and completion criteria to achieve the nominated post-mining land use; - a detailed description of the progressive rehabilitation measures that would be implemented over the life of the development and how this rehabilitation would be integrated with surrounding mines and land uses; - a detailed description of the proposed rehabilitation and mine closure strategies for the development, having regard to the key principles in <i>Strategic Framework for Mine Closure</i>; - the measures which would be put in place for the long-term protection and/or management of the site and any biodiversity offset areas post-mining; and - a geotechnical assessment and detailed design of the proposed Yorks Creek diversion; • Noise & Blasting – including: <ul style="list-style-type: none"> - a detailed assessment of the likely construction, operational and off-site transport noise impacts of the development in accordance with the <i>Interim Construction Noise Guideline</i>, <i>NSW Noise Policy for Industry</i> and the <i>NSW Road Noise Policy</i> respectively, and having regard to the <i>Voluntary Land Acquisition and Mitigation Policy</i>; - proposed blasting hours, frequency and methods; and - a detailed assessment of the likely blasting impacts of the development (including ground vibrations, overpressure, flyrock, visual and fumes/odour) on people, animals, buildings/structures,
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infrastructure and significant natural features, having regard to the relevant ANZEC guidelines;

Visual – including:

- a detailed assessment of the likely visual impacts of the development (before, during and post-mining) on private landowners in the vicinity of the development and key vantage points in the public domain, including vehicles traveling along the New England Highway; and
- reasonable and feasible mitigation measures to minimise visual impacts (including lighting) of the development;

Waste – including estimates of the quantity and nature of the waste streams that would be generated by the project (including tailings and coarse rejects) and any measures that would be implemented to minimise, manage or dispose of these waste streams;

Water – including:

- 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 proposed 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;
- an assessment of any likely flooding impacts of the development;
- the measures which would be put in place to control sediment run-off and avoid erosion;
- an assessment of the likely impacts of the development on the quantity and quality of existing surface water resources including a detailed assessment of proposed water discharge quantities and quality against receiving water quality and flow objectives;
- an assessment of the likely impacts of the development on groundwater resources, which addresses:
 - o the recommendations of the Mining & Petroleum Gateway Panel's Conditional Gateway Certificate, and the Panel's accompanying report, both dated 24 July 2019; and
 - o the Commonwealth Department of the Environment and Energy's Assessment Requirements set out in Attachment 4; and
- an assessment of the likely impacts of the development on aquifers, watercourses, riparian land, water-related infrastructure, and other water users, including downstream impacts from the Yorks Creek diversion;

Biodiversity – including:

- accurate predictions of any vegetation to be cleared on site;
- an assessment of the likely biodiversity impacts of the development, paying particular attention to threatened species, populations and ecological communities and groundwater dependent ecosystems, undertaken in accordance with the *Biodiversity Assessment Method* and documented in a Biodiversity Development Assessment Report or, subject to agreement with OEH and the Department, undertaken in accordance with the *Upper Hunter Strategic Assessment (UHS)*;
- assessment of the likely impacts of the development on listed threatened species and communities under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (see Attachment 4);
- a strategy to offset any residual impacts of the development in accordance with the offset rules under the *Biodiversity Offsets Scheme*; and

- where the Yorks Creek diversion is proposed:
 - o demonstrate how a 'natural' system can be successfully created; and
 - o include an assessment of potential impacts to aquatic habitat and fish populations;
- **Heritage** – including:
 - an assessment of the potential impacts of the development on Aboriginal heritage (cultural and archaeological), including 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;
 - 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; and
 - in relation to Ravensworth Homestead, the EIS must include:
 - o a detailed heritage significance and historical archaeological assessment of the homestead, including consideration of its surrounding garden and landscape;
 - o an analysis of all reasonable and feasible options to preserve the Homestead (including leaving in situ); and
 - o if relocation is selected as the preferred option, please include an analysis of all feasible relocation options and how the Ravensworth Homestead Advisory Committee was involved in the decision;
- **Traffic & Transport** – including:
 - an assessment of the likely transport impacts of the development on the capacity, condition, safety and efficiency of the road and rail networks, including undertaking a road safety audit;
 - a description of the measures that would be implemented to mitigate any impacts; and
 - an assessment of the need to realign Hebden Road, and if so a conceptual design of the Hebden Road realignment, developed in consultation with Singleton Council, including a plan to avoid disruptions to existing traffic, and ensure local traffic requirements are met;
- **Hazards** – including:
 - an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks, interactions with nearby prescribed dams and the handling and use of any chemicals and dangerous goods; and
 - a health risk assessment that considers the adverse effects from human exposure to acute and cumulative project related environmental hazards, in accordance with *Environmental Health Risk Assessment: Guidelines for assessing human health risk from environmental hazards*; and
- **Social** – including a detailed assessment of the potential social impacts of the development that builds on the findings of the Social Impact Assessment Scoping Report, in accordance with the *Social impact assessment guideline for State significant mining, petroleum production and extractive industry development*, paying particular consideration to:
 - how the development might affect people's way of life, community, access to and use of infrastructure, services and facilities, culture, health and wellbeing, surroundings, personal and property rights, decision-making systems, and fears and aspirations;
 - the principles in Section 1.3 of the guideline;
 - the review questions in Appendix D of the guideline; and
 - the recommendations made in Attachment 3; and
- **Economic** – including a detailed assessment of the likely economic impacts of the development, in accordance with the *Guidelines for the*

	<p><i>economic assessment of mining and coal seam gas proposals 2015</i>, paying particular attention to:</p> <ul style="list-style-type: none"> - the significance of the coal 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 on local infrastructure and services.
Consultation	<p>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.</p> <p>In particular, you must consult with:</p> <ul style="list-style-type: none"> - affected landowners; - local community groups; - Singleton Council; - Biodiversity and Conservation Division within the Department; - Heritage Branch of the Department of Premier and Cabinet; - Environment Protection Authority; - Division of Resources and Geoscience within the Department; - Resources Regulator within the Department; - Primary Industries Group within the Department (including the Forestry, Agriculture and Fisheries branches); - Crown Lands Group within the Department; - Water Group within the Department; - Singleton Local Land Services; - Dams Safety Committee; - Roads and Maritime Services; and - Mount Owen Complex Community Consultative Committee. <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; - identify where the design of the development has been amended and/or mitigation proposed to address 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 development application and EIS for the development within 2 years of the issue date of these requirements, you must consult further with the Secretary in relation to the preparation of the EIS.

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Land	
	Interim Protocol for Site Verification & Mapping of Biophysical Strategic Land (OEH)
	Soil and Landscape Issues in Environmental Impact Assessment (NOW)
	Agfact AC.25: Agricultural Land Classification (NSW Agriculture)
	Strategic Regional Land Use Policy, Guideline for Preparing Agricultural Impact Statements 2012 (DPI) and the Agricultural Impact Statement Technical Notes 2013 (DPI)
	State Environmental Planning Policy No. 55 – Remediation of Land
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)
	Land Use Conflict Risk Assessment Guide (DPI)
	Site Investigations for Urban Salinity (DLCW)
	Landslide risk management guidelines (AGS)
Water	
Water Sharing Plans	Hunter Unregulated and Alluvial Water Sources 2009
	Hunter Regulated River Water Source
	NSW State Groundwater Policy Framework Document (NOW)
	NSW State Groundwater Quality Protection Policy (NOW)
	NSW State Groundwater Quantity Management Policy (NOW)
Groundwater	NSW Aquifer Interference Policy 2012 (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	Hunter River Salinity Trading Scheme (EPA)
	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)
	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)
	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)
	Environmental Guidelines: Use of Effluent by Irrigation (EPA)
	A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)
	NSW Guidelines for Controlled Activities (NOW)
Flooding	Floodplain Development Manual (OEH)
	Floodplain Risk Management Guideline (OEH)
Biodiversity	
	Biodiversity Assessment Method (OEH)
	Fisheries NSW policies and guidelines
	Guidelines for developments adjoining Department of Environment, Climate Change and Water (DECCW, 2010)
	Guidance to assist a decision-maker to determine a serious and irreversible impact (OEH)
	NSW State Groundwater Dependent Ecosystem Policy (NOW)
	Revocation, recategorisation and road adjustment policy (OEH, 2012)
	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)
	Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH)
	Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (OEH)
	Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH)
	Assessing Significance for Historical Archaeological Sites and Relics (OEH)

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- Archaeological Assessments Guidelines (OEH)
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- Criteria for the Assessment of Excavation Directors (OEH)
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- NSW Heritage Manual (OEH)
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- Statements of Heritage Impact (OEH)
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- Hunter Regional Environmental Plan 1989 (Heritage)

Noise & Blasting

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- NSW Noise Policy for Industry (EPA)
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- A Guide to the Noise Policy for Industry (EPA)
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- Interim Construction Noise Guideline (DECC)
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- NSW Road Noise Policy (EPA)
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- Rail Infrastructure Noise Guideline (EPA)
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- Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments (DP&E)
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- Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC)
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- Assessing Vibration: A Technical Guideline (DEC)

Air

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- Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW (EPA)
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- Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA)
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- Coal Mine Particulate Matter Control Best Practice – Site Specific Determination Guideline (EPA)
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- Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System for Inclusion in the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)
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- National Greenhouse Accounts Factors (Commonwealth)
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- Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments (DP&E)

Transport

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- Guide to Traffic Generating Development (RTA)
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- Road Design Guide (RMS) & relevant Austroads Standards
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- Draft NSW Freight and Ports Plans (TfNSW)
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- Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development
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- Future Transport 2056 (TfNSW) and supporting documents

Hazards

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- State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
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- Hazardous and Offensive Development Application Guidelines – Applying SEPP 33

	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
	Planning for Bush Fire Protection 2006 (RFS)
	Environmental Health Risk Assessment: Guidelines for assessing human health risk from environmental hazards (enHealth)
Resource	
	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (JORC)
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)
Social & Economic	
	Guidelines for the economic assessment of mining and coal seam gas proposals (NSW Government)
	Social impact assessment guideline for State significant mining, petroleum production and extractive industry development (DP&E)
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
	Singleton Local Environment Plan 2013
	The Singleton Council Community Strategic Plan (2017-2027)