



Vicki McBride Approvals Manager, Projects Xstrata Mount Owen Pty Ltd PO Box 320 Singleton NSW 2330

Dear Ms McBride

Development Assessment Systems and Approvals Mining and Industry

Contact: Matthew Sprott Phone: (02) 9228 2054 Fax: (02) 9228 6466

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Room 305 23-33 Bridge Street GPO Box 39 SYDNEY NSW 2001

Our Ref: 10/14081-2

State Significant Development – Director-General's Requirements Mount Owen Continued Operations Project (SSD-5850)

The Department has received your request for Director-General's environmental assessment requirements (DGRs) for the above development. I have attached a copy of the DGRs, which the Environmental Impact Statement (EIS) for the development must address (Attachment 1).

These requirements have been prepared in consultation with the relevant government agencies (see **Attachment 2**), and are based on the information you have provided to date. Please note that the Director-General may alter these requirements at any time, and that these requirements will expire if you do not lodge a development application (DA) and EIS for the proposed development within the next two years.

The Department will review the EIS for the proposed development before placing it on public exhibition. If the Department considers that the EIS does not adequately address the DGRs or the requirements in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*, you may be required to submit an amended EIS. Once the Department is satisfied that these requirements have been addressed, you will be contacted regarding arrangements for public exhibition.

The Preliminary Environmental Assessment notes Xstrata proposes to refer the proposed development to the Department of Sustainability, Environment, Water, Population and Communities to determine if the proposed development is a controlled action under Section 68(2) of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). 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 DA and EIS for the proposed development to determine the appropriate application fee and to make suitable arrangements for the review and subsequent public exhibition of the EIS.

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

Yours sincerely

David Kitto

Director Mining & Industry Projects as delegate for the Director-General

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Director-General's Environmental Assessment Requirements

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

State Significant Development

Application Number	SSD 5850
Proposal	 The Mount Owen Continued Operations Project, which includes: extension to the existing North Pit open cut mining area to recover an additional 60 million tonnes (Mt) of run-of-mine (ROM) coal over a period of 21 years; an increase in capacity of the Mount Owen coal handling and processing plant (CHPP) and rail loading facility from 15 to 17 Mtpa of ROM coal; construction and operation of a second rail line near the existing the Mount Owen rail spur with a northern turnout spur onto the Main Northern Railway; transportation of up to 2 Mtpa of ROM coal and crushed gravel to the Liddell and Bayswater power stations, Liddell CHPP and Ravensworth Coal Terminal via the existing conveyor system; increasing the maximum overburden height at Mount Owen by 10m to 240m AHD; continued use of the Ravensworth East voids for tailings emplacement, as well as in-pit emplacement within the North Pit at Mount Owen; a range of ancillary infrastructure upgrades, including a rail overpass at Hebden Road; consolidation of the existing development consents for the Mount Owen and Ravensworth East coal mines; and progressive rehabilitation of the site. No change to the mining method, rate of extraction, or number of personnel at Mount Owen or Ravensworth East coal mines is proposed.
Location	20 km northwest of Singleton
Applicant	Xstrata Mount Owen Pty Ltd
Date of Issue	13 March 2013
General Requirements	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 Environmental Planning and Assessment Regulation 2000. In addition, the EIS must include a: • detailed description of the development, including: - need for the proposed development; - justification for the proposed mine plan, including alternatives considered, efficiency of resource recovery, mine safety, environmental protection, and any changes to existing biodiversity offset obligations; - likely staging of the development - including construction, operational stage/s and rehabilitation; - consideration of opportunities for integration between the development and Xstrata's existing, approved and proposed mining operations in the region; and - interactions with other mines, including the Integra Underground Mine.

- consideration of all relevant environmental planning instruments (including Part 3 of the Mining, Petroleum Production and Extractive Industry State Environmental Planning Policy 2007), and identification and justification of any inconsistencies with these instruments;
- detailed assessment of the key issues specified below, and any other significant issues including:
 - a description of the existing environment, using sufficient baseline data:
 - an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines and policies; 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
- consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS.

The DA must be accompanied by a certified report from a qualified quantity surveyor providing a detailed calculation of the capital investment value (as defined in Clause 3 of the *Environmental Planning and Assessment Regulation 2000*) of the proposed development, including details of all the assumptions and components from which the capital investment value calculation is derived.

Key Issues

The EIS must address the following specific matters:

- Air Quality including a detailed quantitative assessment of potential construction, operational and cumulative air quality impacts on all potential receivers including:
 - dust impacts on privately-owned properties, mine-owned properties, and properties in the acquisition zone of Mount Owen or any other mine:
 - 24-hour cumulative PM₁₀ emissions using an appropriate probabilistic methodology, project-specific and cumulative PM_{2.5} emissions, and dust generated by the transportation of coal;
 - fumes from diesel, blasting activities and spontaneous combustion;
 - reasonable and feasible mitigation measures to minimise dust, diesel and blast fume 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 and adaptive management protocols;
- Noise, Vibration & Blasting including a detailed quantitative assessment of potential:
 - construction, operational and off-site road/rail noise impacts;
 - blasting impacts on nearby mining operations;
 - blasting impacts on people, livestock and property;
 - 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, attended noise monitoring, and predictive meteorological forecasting;
- Agricultural Resources including an Agricultural Impact Statement
 that includes a specific focused assessment of the impacts of the
 proposal on strategic agricultural land, having regard to the gateway
 criteria in the Strategic Regional Land Use Policy. The EIS must also
 include a detailed description of the potential impacts on:
 - soils and land capability;
 - landforms and topography; and
 - other land uses within the vicinity of the mine, including land within the nearby Ravensworth State Forest;

• Water Resources - including:

- detailed assessment of potential impacts (including cumulative impacts) on the quality and quantity of existing surface and ground water resources, including:
 - detailed modelling of potential groundwater impacts, including any potential impacts on alluvial aquifers;
 - impacts on affected licensed water users and basic landholder rights;
 - impacts on riparian, ecological, geo-morphological and hydrological values of watercourses, including environmental flows; and
 - a flood assessment including identification of any necessary flood impact mitigation measures;
- a detailed site water balance, including a description of site water demands, water disposal methods (inclusive of volume, salinity and frequency of any water discharges), water supply infrastructure and water storage structures;
- an assessment of proposed water discharge quantities and quality against receiving water quality and flow objectives;
- assessment of impacts of salinity from mining operations, including disposal and management of coal rejects and modified hydrogeology, a salinity budget and the evaluation of salt migration to surface and groundwater sources;
- assessment of groundwater impacts against the minimal impact considerations in the NSW Aquifer Interference Policy;
- 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;
- a detailed description of the proposed water management system (including sewage), water monitoring program and measures to mitigate surface and groundwater impacts; and
- compliance with the Hunter River Salinity Trading Scheme;

Biodiversity – including:

- measures taken to avoid, reduce or mitigate impacts on biodiversity;
- identification of existing vegetation within disturbance areas, and the ecological values of this habitat;
- accurate estimates of proposed vegetation clearing;
- 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
 - remnant vegetation, habitat corridors, and existing biodiversity offset areas; and
- a comprehensive offset strategy for the development including a
 justification of how the strategy would maintain or improve the
 terrestrial and aquatic biodiversity values of the region in the
 medium to long term, and how the strategy would be integrated with
 the Upper Hunter Strategic Assessment process.

• **Heritage** – including:

- an Aboriginal cultural heritage assessment (including both cultural and archaeological significance) which must:
 - demonstrate effective consultation with Aboriginal communities in determining and assessing impacts, and developing and selecting mitigation options and measures; and
 - 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) which must:
 - include a statement of heritage impact (including significance assessment) for any State significant or locally significant heritage items; and
 - outline any proposed mitigation and management measures (including an evaluation of the effectiveness and reliability of the measures);

• Greenhouse Gases - including:

- a quantitative assessment of potential Scope 1, 2 and 3 greenhouse gas emissions;
- a qualitative assessment of the potential impacts of these emissions on the environment; and
- an assessment of reasonable and feasible measures to minimise greenhouse gas emissions and ensure energy efficiency;

• Traffic & Transport – including:

- accurate predictions of the road and rail traffic generated by the development;
- justification for the proposed road or rail upgrade works, and a clear description of how the upgraded road/rail operations would be integrated with the existing road/rail network;
- a detailed assessment of the potential impacts of the development on the capacity, efficiency and safety of the:
 - local and regional rail network, having regard to the strategic objectives and cumulative impacts for the passenger and freight rail network, and the impacts of coal trains on level crossings; and
 - local and regional road network, with particular regard to a cumulative traffic impact assessment; condition assessment of the existing network; and the operation of the proposed new infrastructure on Hebden Road;
- details of mine to port or other domestic customer transport movements, train path availability and any required rail infrastructure works on the Main Northern Railway; and
- a detailed description of the measures that would be implemented to maintain and/or improve the capacity, efficiency and safety of the road and rail networks in the surrounding area over the life of the development, including consideration of road maintenance contributions to Singleton Shire Council;

Visual – including:

- a detailed assessment of the:
 - changing landforms on the site during the various stages of the development; and
 - potential visual impacts of the development on private landowners in the surrounding area as well as key vantage points in the public domain, including lighting impacts; and
- a detailed description of the measures that would be implemented to minimise the visual impacts of the development;

• Waste – including:

- accurate estimates of the quantity and nature of the potential waste streams of the development, including tailings and coarse reject;
- a tailings and coarse reject disposal strategy; and
- a description of measures that would be implemented to minimise production of other waste, and ensure that that waste is appropriately managed;
- Hazards including bushfires and public safety:
- Social & Economic including an assessment of the:
 - potential direct and indirect economic benefits of the development for local and regional communities and the State;
 - potential impacts on local and regional communities, including increased demand for local and regional infrastructure and services;

	 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 mechanisms; 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; 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 uses and land forms (including cross sections), 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, including the Upper Hunter Strategic Assessment.
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	During the preparation of the EIS, you must consult with relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with the: 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 the Crown Lands Division); NSW Roads and Maritime Services; NSW Health; NSW Rural Fire Service; Australian Rail Track Corporation and the Hunter Valley Coal Chain Co-ordinator; Dams Safety Committee; Hunter-Central Rivers Catchment Management Authority; and Singleton Shire Council. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.
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)
	Risk Management Handbook for the Mining Industry (DPI)
	Risk Management Policy Framework for Dam Safety (Dam Safety Committee)
Biodiversity	Separation of the property of the property of the separate series of the series of the separate series of the separate series of the sepa
	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)
	Threatened Species Assessment Guidelines: the Assessment of Significance (DECC 2007)
	Guidelines for Threatened Species Assessment (DoP 2005)
	BioBanking Assessment Methodology and Credit Calculator Operational Manual (DECCW 2008)
	NSW State Groundwater Dependent Ecosystem Policy (DLWC)
	Policy & Guidelines - Aquatic Habitat Management and Fish Conservation (NSW Fisheries)
	Policy & Guidelines - Fish Friendly Waterway Crossings (NSW Fisheries)
	Principles for the Use of Biodiversity Offsets in NSW (OEH)
	Environmental Offsets Policy (SEWPaC 2012)
	Upper Hunter Strategic Assessment – Interim Policy (DP&I 2012)
Water Resources	
	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)
0	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
Surface Water	State Water Management Outcomes Plan
	Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009
	NSW Government Water Quality and River Flow Objectives (DECC)
	Hunter River Salinity Trading Scheme (EPA)
	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)
	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)
Groundwater	Murray-Darling Basin Groundwater Quality. Sampling Guidelines. Technical Report No 3 (MDBC)
	Murray-Darling Basin Commission. Groundwater Flow Modelling Guideline (Aquaterra Consulting Pty Ltd)
	Guidelines for the Assessment & Management of Groundwater Contamination (DECC, 2007)
	NSW Aquifer Interference Policy 2012 (NOW)
	Any relevant Water Sharing Plan for groundwater and surface water resources
Air Quality	
MINE PHILE BY INCHES	The Assessment and Management of Odour from Stationary Sources in NSW: Technical Framework and Notes (OEH)
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
Noise & Blasting	natification from the mattheory of the property of the control of
	NSW Industrial Noise Policy (DECC)
	Environmental Noise Management Manual (RTA) Dec 2001
	Environmental Noise Management – Assessing Vibration: A Technical Guide (DEC)
	NSW Road Noise Policy (DECCW)
	Interim Guidelines for the Assessment of Noise From Rail Infrastructure Projects (DECC)
	Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZECC)
Land Resources	
	Agricultural Impact Statement 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)
	Interim Guidelines for the Assessment of Noise From Rail Infrastructure Projects (DECC)
Traffic & Transport	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)
Heritage	
	Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community
	Consultation (DEC 2005)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
	Ask First; A Guide to Respecting Indigenous Heritage Places and Values (AHC)
Aboriginal	2002 Aboriginal Cultural Heritage; Standards and Guidelines Kit (NSW NPWS) Working Draft 1997
	Aboriginal History and Heritage: A Guide (NSW Heritage Office)
	NPW Act 1974: Part 6 Approvals: Interim Community Consultation Requirements for Applicants (NSW NPWS) 2004
	Aboriginal Cultural Heritage Consultation and Investigation (RTA) 2008

	NSW Heritage Manual (NSW Heritage Office)
Historic	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
	The Australian Natural Heritage Charter (For the Conservation of Places of Natural Heritage Significance) 2nd ed. 2002
	Standard Exemptions for Works Requiring Heritage Council Approval (NSW Heritage Office) 2006
	How to Prepare Archival Records Of Heritage Items (NSW Heritage Office)
	Photographic Recording of Heritage Items Using Film or Digital Capture (NSW Heritage Office) 2006
, motor ro	Statements of Heritage Impact (NSW Heritage Office)
; ;	Skeletal Remains: Guidelines for Management of Human Skeletal Remains under the Heritage Act 1977 (NSW Heritage Office) 1998
	NSW Heritage Manual: Assessing Heritage Significance (NSW Heritage Office) 2001
	NSW Heritage Manual: Conservation Management Documents 1996
	NSW Heritage Manual: Heritage Terms and Abbreviations 1996
	Historical Archaeology Code of Practice (NSW Heritage Council DoP) 2006
Greenhouse Gases	
	National Greenhouse Accounts Factors (Australian Department of Climate Change (DCC))
	Guidelines for Energy Savings Action Plans (DEUS)
	AGO Factors and Methods Workbook (AGO)
Waste	والأعلى الأعبار والمراجع والبران والمراجع والمراجع والمراجع المراجع والمراجع والمراجع والمراجع والمراجع والمراجع
	Waste Classification Guidelines (DECC)
Hazards	
	Hazardous and Offensive Development Application Guidelines - Applying SEPP 33
.50	Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis
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)
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)
	Singleton Council Community Strategic Plan - Our Place: A Blueprint for 2022 (Singleton Council 2012)



Development Assessment Systems & Approvals Mining Projects

Contact: Matthew Sprott Phone: (02) 9228 2054 Fax: (02) 9228 6466

Email: matthew.sprott@planning.nsw.gov.au

Ms Vicki McBride Approvals Manager Mount Owen Pty Limited PO Box 320 SINGLETON NSW 2330 Our Ref: 10/14081

Dear Ms McBride

State Significant Development – Supplement to Director-General's Requirements Mount Owen Continued Operations Project (SSD-5850)

I refer to the Director-General's requirements issued for the Mount Owen Continued Operations Project on 13 March 2013.

As you are aware, this project has been declared a controlled action under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). The Commonwealth Department of the Environment has accredited the NSW Part 4 State Significant Development assessment process for the Project.

To ensure that sufficient information is provided to enable an appropriate level of assessment of relevant matters of National Environmental Significance, the Director-General has issued supplementary requirements for the Environmental Impact Statement (EIS) under section 78A(8A) of the Environmental Planning and Assessment Act 1979. A copy of the supplementary requirements is attached.

You must ensure that the EIS adequately addresses the Director-General's requirements issued on 13 March 2013, as well as the attached supplementary requirements.

To facilitate the accredited assessment process, the EIS must provide a clear assessment of all State and Commonwealth matters. While these matters may be assessed in an integrated manner in the main EIS report, this document must be accompanied by a separate appendix that deals with all relevant Commonwealth matters of National Environmental Significance in a single discrete location.

If you have any enquiries about these requirements, please contact Matthew Sprott on the details above.

Yours sincerely

OBKitto 8/11/13

David Kitto

Director

Mining Projects

as delegate for the Director-General

Supplementary Director General's Requirements

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

A delegate for the Commonwealth Minister for the Environment has determined the Mt Owen Continued Coal Mining Operation Project, NSW (EPBC 2013/6978), involving the continuation of the existing Mt Owen Mine, approximately 20 kilometres north-west of Singleton in the Upper Hunter Valley, NSW, to be a controlled action under section 75 of the *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act).

The action is likely to have a significant impact on the EPBC Act listed endangered Spotted-tailed Quoll, Swift Parrot and Regent Honeyeater. Significant impacts are also considered possible for a number of other species protected by the EPBC Act including, but not limited to, those listed in <u>Appendix A</u>. The action is also likely to have a significant impact on a water resource, as defined under the EPBC Act.

In accordance with the one-off accredited assessment process for this project, the environmental assessment of the impacts of the controlled action must be assessed under the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The assessment should include enough information about the action and its relevant impacts to allow the Minister for the Environment to make an informed decision on whether or not to approve the action under the EPBC Act.

The following assessment requirements concerning matters in the EPBC Act and schedule 4 of the *Environment Protection and Biodiversity Conservation Regulations 2000* should be integrated into the assessment requirements of the EP&A Act.

General information

- 1. The background of the action, including:
 - a. the title of the action
 - b. the full name and postal address of the designated proponent
 - c. a clear outline of the objective of the action
 - d. the location of the action
 - e. the background to the development of the action
 - f. how the action relates to any other actions (of which the proponent should reasonably be aware) that have been, or are being, taken or that have been approved in the region affected by the action
 - g. the current status of the action, and
 - h. the consequences of not proceeding with the action

Description of the controlled action

- 2. A description of the action, including:
 - a. all the components of the action
 - b. the precise location of any works to be undertaken, structures to be built or elements of the action that may have relevant impacts
 - c. how the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts
 - d. the timing and duration of the works to be undertaken, and
 - e. to the extent reasonably practicable, a description of any feasible alternatives to the controlled action that have been identified through the assessment, and their likely impact, including:

- i. if relevant, the alternative of taking no action
- ii. a comparative description of the impacts of each alternative on the matters protected by the controlling provisions for the action, and
- iii. sufficient detail to clarify why any alternative is preferred to another

Description of the existing environment

- 3. A description of the existing environment of the proposal location and the surrounding areas that may be affected by the action, including but not limited to:
 - a. surveys using accepted methodology for targeting listed threatened species, ecological communities and their respective habitat, including but not limited to OEH's Survey and assessment guidelines (2009), available at: http://www.environment.nsw.gov.au/threatenedspecies/surveymethodsfauna.htm and the Department of the Environment's species-specific survey guidelines for nationally threatened species, available at: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl
 - b. a description of the distribution and abundance of threatened species and ecological communities, as well as suitable habitat (including breeding, foraging, roosting habitat, habitat critical to the survival of threatened species) within the site and in surrounding areas that may be impacted by the proposal. Specifically, this must include but not be limited to the species at <u>Appendix A.</u>
 - c. the regional distribution and abundance of suitable and potential habitat for threatened species and ecological communities surrounding the site
 - d. a description of the important water resources within the site and in surrounding areas, including detailed information addressing the department's Water Resources Terms of Reference, currently in preparation, and
 - e. a description of water related assets that are dependent on any important water resources, including an estimation of the water requirements of those assets (i.e. regional water use).

Description of the relevant impacts of the controlled action

- 4. An assessment of all relevant impacts¹ with reference to the EPBC Act Policy Statement 1.1 Significant Impact Guidelines Matters of National Environmental Significance (2009), Draft significant impact guidelines: Coal seam gas and large coal mining developments impacts on water resources and species specific guidelines as relevant (available at: www.environment.gov.au/epbc/guidelines-policies.html) that the controlled action has, will have or is likely to have. Information must include:
 - a. a description of the relevant impacts of the action on matters of national environmental significance:
 - listed species and communities (including, but not limited to, those listed in <u>Appendix A</u>), and
 - water resources (...)
 - b. a detailed assessment of the nature and extent of the likely short term and long term relevant impacts

¹ The term "relevant impact" is defined in section 82 of the EPBC Act. Note that the action has been found to be likely to have a significant impact on listed species and communities, under sections 18 and 18A of the EPBC Act, and water resources, under sections 24D and 24E of the Act.

- c. a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible
- d. analysis of the significance of the relevant impacts, and
- e. any technical data and other information used or needed to make a detailed assessment of the relevant impacts
- 5. Where there is a potential habitat for EPBC Act listed species (Appendix A), surveys must be undertaken. These surveys must be timed appropriately and undertaken for a suitable period of time by a qualified person². A subsequent description of the relevant impacts on such EPBC Act listed species should include, inter alia, direct, indirect, cumulative and facilitative impacts on the:
 - a. population of the species at the site
 - b. area of occupancy of the species
 - c. habitat critical to the survival of the species
 - d. breeding cycle of the population, and
 - e. availability or quality of habitat for the species

If an endangered ecological community or threatened species listed at <u>Appendix A</u> is not believed to be present on the proposed site, detailed information must be included in the Environmental Impact Assessment to demonstrate that this community will not be impacted.

- 6. Under sections 24D and 24E of the EPBC Act, a water resource in relation to coal seam gas and large coal mining development has been determined a controlling provision in relation to this project. The documentation provided must include information addressing all relevant impacts on water resources and water related values. The information must be consistent with the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development's Information Guidelines for Proposals Relating to the Development of Coal Seam Gas and Large Coal Mines where there is a Significant Impact on Water Resources. The Guidelines are available at: http://www.environment.gov.au/coal-seam-gas-mining/pubs/iesc-information-guidelines.pdf. The information must include:
 - a detailed assessment of potential impacts (including cumulative impacts) on the quality and quantity of existing surface and ground water resources, including:
 - a. detailed modelling of potential groundwater impacts, including any potential impacts on alluvial aquifers
 - b. impacts on affected licensed water users and basic landholder rights
 - c. impacts on riparian, ecological, geo-morphological and hydrological values of watercourses, including environmental flows, and
 - d. a flood assessment including identification of any necessary flood impact mitigation measures
 - a detailed site water balance, including a description of site water demands, water disposal methods (inclusive of volume, salinity and frequency of any water discharges), water supply infrastructure and water storage structures
 - an assessment of proposed water discharge quantities and quality against receiving water quality and flow objectives
 - assessment of impacts of salinity from mining operations, including disposal and management of coal rejects and modified hydrogeology, a salinity budget and the evaluation of salt migration to surface and groundwater sources

² Where available, species-specific survey guidelines can be obtained on the department's *Species Profile and Threats Database*: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl

- assessment of groundwater impacts against the minimal impact considerations in the NSW Aquifer Interference Policy
- 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
- a detailed description of the proposed water management system (including sewage), water monitoring program and measures to mitigate surface and groundwater impacts, and
- information on how the project will comply with the Hunter River Salinity Trading Scheme

Proposed safeguards and mitigation measures

- 7. A description of feasible mitigation measures, changes to the action or procedures, which have been proposed by the proponent or suggested in public submissions, and which are intended to prevent or minimise relevant impacts on matters of national environmental significance. Information must include:
 - a description of the mitigation measures that will be undertaken to prevent or minimise the relevant impacts of the action. These mitigation measures should be justified and based on best available practices
 - b. an assessment of the expected or predicted effectiveness of the mitigation measures including the effect on abundance and condition of species, suitable habitat and ecological communities
 - c. any statutory or policy basis for the mitigation measures
 - d. the cost of the mitigation measures
 - e. an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs (including any relevant thresholds for corrective actions) for the relevant impacts of the action. Include the person or agency responsible for implementing these programs and the effectiveness of all mitigation measures, including any provisions for independent environmental auditing
 - f. the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program
 - g. identification of mitigation measures proposed to be undertaken by State governments, local governments or the proponent, and
 - h. any changes to the action which prevent or minimise relevant impacts on listed threatened species and communities

Offsets

8. Where impacts cannot be avoided or mitigated, an offset package to compensate for any predicted or potential residual significant impacts on matters of national environmental significance. Offsets should demonstrate consistency with the Commonwealth EPBC Act Environmental Offsets Policy (October 2012, or subsequent versions), available at: www.environment.gov.au/epbc/publications/environmental-offsets-policy.html. The department's information requirements in relation to EPBC Act offset proposals is provided at Appendix B. Information must include:

- a. the description of any offset package should include how the offset compensates for the residual impacts, when the offset will be delivered and how the offset will be managed
- b. an assessment of the impact of the offsets on other matters of environmental, economic, or social significance and
- c. analysis of cost, both financial and other, related to offsets.

Other approvals and conditions

- 9. Any other requirements for approval or conditions that apply, or that the proponent reasonably believes are likely to apply, to the proposed action. Information must include:
 - a. details of any local or State government planning scheme, or plan or policy under any local or State government planning system that deals with the proposed action, including:
 - i. what environmental assessment of the proposed action has been, or is being, carried out under the scheme, plan or policy, and
 - ii. how the scheme provides for the prevention, minimisation and management of any relevant impacts
 - b. a description of any approval that has been obtained from a State, Territory or Commonwealth agency or authority (other than an approval under the EPBC Act), including any conditions that apply to the action
 - c. a statement identifying any additional approval that is required, and
 - d. a description of the monitoring, enforcement and review procedures that apply, or are proposed to apply, to the action

Economic and social matters

10. A description of the short-term and long-term social and economic implications and/or impacts of the project.

Environmental record of person proposing to take the action

- 11. Details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:
 - a. the proponent, and
 - b. for an action for which a person has applied for a permit, the person making the application.
- 12. Details of the proponent's environmental policy and planning framework.

Information sources

- 13. For information given in an environment assessment, the draft must state:
 - a. the source of the information
 - b. how recent the information is
 - c. how the reliability of the information was tested, and
 - d. what uncertainties (if any) are in the information.

Consultation

- 14. Any consultation about the action, including:
 - a. any consultation that has already taken place
 - b. proposed consultation about relevant impacts of the action, and

- c. if there has been consultation about the proposed action any documented response to, or result of, the consultation
- 15. Identification of affected parties, including a statement mentioning any communities that may be affected and a description of their views.

Appendix A

Threatened Fauna

- Dasyurus maculatus maculatus (Spotted-tailed Quoll, endangered)
- Lathamus discolor (Swift Parrot, endangered, migratory)
- Anthochaera phrygia (Regent Honeyeater, endangered, migratory)
- Phascolarctos cinereus (Koala, vulnerable)
- Litoria aurea (Green and Golden Bell Frog, vulnerable)
- Chalinolobus dwyeri (Large-eared Pied Bat, vulnerable)

Appendix B

Information requirements for EPBC Act offset proposals

- Details in relation to the proposed offsets package, including:
 - the location and size, in hectares, of any offset site(s)
 - maps clearly showing for each offset site:
 - the relevant ecological features
 - the landscape context, and
 - the cadastre boundary
 - the current tenure arrangements (including zoning and ownership) of any proposed offset sites
 - confirmed records of presence (or otherwise) of relevant protected matter(s) on the offset site(s), and
 - detailed information regarding the presence and quality of habitat for relevant protected matter(s) on the offset site. The quality of habitat should be assessed in a manner consistent with the approach outlined in the document titled *How to use the offset assessment guide* available at:

 www.environment.gov.au/epbc/publications/environmental-offsets-policy.html.
- Provide information and justification regarding how the offsets package will deliver a
 conservation outcome that will maintain or improve the viability of the protected matter(s)
 consistent with the EPBC Act environmental offsets policy (October 2012) including:
 - management actions that will be undertaken that improve or maintain the quality of the proposed offset site(s) for the relevant protected matter(s). Management actions must be clearly described, planned and resourced as to justify any proposed improvements in quality for the protected matter(s) over time
 - the time over which management actions will deliver any proposed improvement or maintenance of habitat quality for the relevant protected matter(s)
 - the risk of damage, degradation or destruction to any proposed offset site(s) in the absence of any formal protection and/or management over a foreseeable time period (20 years). Such risk assessments may be based on:
 - presence of pending development applications, mining leases or other activities on or near the proposed offset site(s) that indicate development intent
 - average risk of loss for similar sites, and
 - presence and strength of formal protection mechanisms currently in place, and
 - the legal mechanism(s) that are proposed to protect offset site(s) into the future and avert any risk of damage, degradation or destruction
- Provide information regarding how the proposed offsets package is additional to what is already required, as determined by law or planning regulations, agreed to under other schemes or programs or required under an existing duty-of-care
- The overall cost of the proposed offsets package; including costs associated with, but not limited to:
 - acquisition and transfer of lands/property

- o implementation of all related management actions, and
- o monitoring, reporting and auditing of offset performance



EPBC Ref: 2013/6978

Mr Stephen Hubert Director Mt Owen Pty Ltd PO Box 320 SINGLETON NSW 2330

Dear Mr Hubert

DECISION ON REFERRAL MT OWEN CONTINUED COAL MINING OPERATIONS (EPBC 2013/6978)

Thank you for submitting a referral under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This is to advise you of my decision about the proposed action to expand and continue the existing Mt Owen open-cut coal mine operations in the Hunter Valley region in New South Wales, located approximately 20 km north-west of Singleton.

As a delegate of the Minister for the Environment, I have decided that the proposed action is a controlled action and, as such, requires assessment and a decision on approval under the EPBC Act before it can proceed.

It appears that the proposed action is likely to have a significant impact on the following matters protected by the EPBC Act:

- Listed threatened species and communities (s18 & s18A);
- Listed migratory species (s20 & s20A);
- A water resource, in relation to coal seam gas development and large coal mining development (s24D & s24E).

For example, based on the information available in the referral, the proposed action is likely to have a significant impact in relation to:

- the removal, fragmentation and/or isolation of potential habitat for three EPBC Act listed endangered species; Spotted-tailed Quoll (*Dasyurus maculatus*), Swift Parrot (*Lathamus discolor*) and Regent Honeyeater (*Acanthochaera Phrygia*); and
- a likely significant impact on water resources, including Main Creek and Bettys Creek, as a result of surface and/or ground water impacts.

Please note that this decision only relates to the potential for significant impact on the specific matters protected by the Australian Government under Chapter 2 of the EPBC Act.

I understand your project is being assessed as a State Significant Development under Part 4 of the *Environment Assessment and Planning Act 1979* and I have decided that the project will be assessed through accredition of the NSW Government process. We will liaise and work with the Department of Planning and Infrastructure to ensure the assessment meets the requirements of the EPBC Act.

A copy of the document recording these decisions is enclosed.

If you have any questions about the process please contact the EPBC project manager Carl Zimmermann on telephone (02) 6275 9959 and quote the EPBC reference number shown at the beginning of this letter or alternatively you may wish to contact Matt Sprott at the NSW Department of Planning and Infrastructure on 9228 2094.

Yours sincerely

James Tregurtha

Assistant Secretary

South-Eastern Australia Environment Assessments

24/10/2013



date of decision

24 October 2013

Notification of REFERRAL DECISION AND DESIGNATED PROPONENT – controlled action DECISION ON ASSESSMENT APPROACH

Referral Decision – Mt Owen continued Coal Mining Operations – EPBC 2013/6978

This decision is made under section 75 and section 87 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

proposed action	To extend an existing open-cut coal mine, located approximately 20 km north-west of Singleton in the Upper Hunter Valley of New South Wales. [See EPBC Act Referral 2013/6978].
decision on proposed	The proposed action is a controlled action.
action	The project will require assessment and approval under the EPBC Act before it can proceed.
relevant controlling provisions	 Listed threatened species and communities (sections 18 & 18A)
higaisigns	 Listed migratory species (sections 20 & 20A)
	 A water resource, in relation to coal seam gas development and large coal mining development (sections 24D & 24E)
designated	Mt Owen Pty Limited
proponent	(ACN: 003 827 361)
assessment approach	The project will be assessed by Accredited Assessment
Decision-maker	
Name and position	James Tregurtha
	Assistant Secretary
	South-Eastern Australia Environment Assessments
Signature	An John

