

WINCHESTER SOUTH PROJECT

.

GEORGE

KingGeo

Environmental Impact Statement



Resource Strategies



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1 INTRODUCTION

This document is an Environmental Impact Statement (EIS) for the Winchester South Project (herein referred to as the Project).

The Project involves the development of an open cut metallurgical coal mine in an existing mining precinct. Products would include metallurgical coal for the steel industry and thermal coal for energy production.

The Project is located approximately 30 kilometres (km) south-east of Moranbah, in the Isaac Regional Council Local Government Area (LGA) (Figure 1-1), within the Bowen Basin Coalfield (Figure 1-2), in Queensland.

The Project would include construction and operation of a mine infrastructure area (MIA), including a coal handling and preparation plant (CHPP), train load-out facility and rail spur, which would be used for the handling, processing and transport of coal. An infrastructure corridor would also form part of the Project, including a raw water supply pipeline connecting to the Eungella pipeline network, an electricity transmission line (ETL) and a mine access road.

Whitehaven WS Pty Ltd (Whitehaven WS) is the proponent for the Project, and is a wholly owned subsidiary of Whitehaven Coal Limited (Whitehaven).

1.1 PURPOSE OF THIS REPORT

This EIS has been prepared to fulfil the requirements of an EIS in accordance with the provisions of the *State Development and Public Works Organisation Act 1971* (SDPWO Act) and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The potential environmental impacts of the Project have been considered in this EIS in accordance with the Terms of Reference prepared by the Coordinator-General.

The draft Terms of Reference were issued on 24 June 2019, in accordance with the requirements of section 29 of the SDPWO Act. The final Terms of Reference were issued on 4 September 2019 under section 30 of the SDPWO Act (Attachment 1).

A summary of the final Terms of Reference is provided in Section 1.5, with a detailed reconciliation table indicating where the final Terms of Reference have been addressed in the EIS provided in Attachment 2. A delegate of the Commonwealth Minister for the Environment (Commonwealth Minister) determined on 17 July 2019 for the Project's ETL, and 18 July 2019 for the Project's mine site and access road, and the water pipeline, that these components of the Project were 'controlled actions'. Therefore, the Project also requires approval under section 133 of the EPBC Act.

A delegate of the Commonwealth Minister also determined on 17 and 18 July 2019 that, pursuant to section 87 of the EPBC Act, the Project components are to be assessed under the Queensland accredited assessment process under Part 4 of the SDPWO Act. The final Terms of Reference issued on 4 September 2019 provides guidelines for preparing assessment documentation relevant to the EPBC Act under the Queensland accredited assessment.

Therefore, this EIS provides an assessment of potential impacts, in accordance with the final Terms of Reference, with respect to the following EPBC Act controlling provisions for the Project:

- listed threatened species and communities (sections 18 and 18A); and
- a water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E).

1.1.1 Document Structure

This EIS comprises a main text component and supporting studies, which includes Appendices A through to N. An overview of the main text is presented below:

Section 1	Provides an introduction to the Project, the EIS and approvals process, and describes the consultation process for this EIS.
Section 2	Describes the various components and stages of the Project.
Section 3	Describes the alternatives considered in the design of the Project.
Section 4	Details the assessment of Project-specific matters, including a description of the environmental values, an assessment of potential impacts and a description of measures that would be implemented to avoid, minimise, mitigate, offset, manage and/or monitor the potential impacts of the Project.





LEGEND Mining Lease Application Boundary Approved/Operating Proposed Care and Maintenance Local Government Area Boundary Railway Road Source: The State of Queensland (2018 - 2020); Geoscience Australia (2018).

WHITEHAVEN COAL WINCHESTER SOUTH PROJECT Project Location





LEGEND Bowen Basin Coal Measures (DNRME, 2020) Road Railway Coal Terminal

Source: The State of Queensland (2018 - 2020); Geoscience Australia (2018).

WINCHESTER SOUTH PROJECT **Regional Location**



Section 5	Details the assessment of Matters of National Environmental Significance (MNES) protected by controlling provisions under the EPBC Act.
Section 6	Provides a summary of the proposed rehabilitation strategy for the Project.
Section 7	Provides a summary of the environmental protection commitments and model conditions for the Environmental Authority.
Section 8	Provides a conclusion for the EIS and describes how the Project is in the public interest and balances impacts, strategic needs and benefits.
Section 9	Lists documents referenced in Sections 1 to 8 of this EIS.
Section 10	Defines abbreviations, acronyms and terms used in Sections 1 to 8 of this EIS.
Attachments to follows:	o the main text are also provided as
Attachment 1	Terms of Reference.
Attachment 1 Attachment 2	
Attachment 2	
Attachment 2 Attachment 3	Terms of Reference Reconciliation Table.
Attachment 2 Attachment 3 Attachment 4	Terms of Reference Reconciliation Table. Peer Review Letters.
Attachment 2 Attachment 3 Attachment 4 Attachment 5 Appendices A t	Terms of Reference Reconciliation Table. Peer Review Letters. Public Consultation Report.
Attachment 2 Attachment 3 Attachment 4 Attachment 5 Appendices A t	Terms of Reference Reconciliation Table. Peer Review Letters. Public Consultation Report. Offset Management Strategy. to N contain supporting documentation,
Attachment 2 Attachment 3 Attachment 4 Attachment 5 Appendices A t including a nur	Terms of Reference Reconciliation Table. Peer Review Letters. Public Consultation Report. Offset Management Strategy. to N contain supporting documentation, mber of specialist reports:
Attachment 2 Attachment 3 Attachment 4 Attachment 5 Appendices A t including a nur Appendix A	Terms of Reference Reconciliation Table. Peer Review Letters. Public Consultation Report. Offset Management Strategy. to N contain supporting documentation, mber of specialist reports: Groundwater Assessment.
Attachment 2 Attachment 3 Attachment 4 Attachment 5 Appendices A t including a nur Appendix A Appendix B	Terms of Reference Reconciliation Table. Peer Review Letters. Public Consultation Report. Offset Management Strategy. to N contain supporting documentation, mber of specialist reports: Groundwater Assessment. Surface Water and Flooding Assessment.

- Assessment. Appendix F Integrated Assessment of Impacts on Groundwater Dependent Ecosystems.
- Appendix G Noise and Vibration Assessment.
- Appendix H Air Quality and Greenhouse Gas Assessment.
- Appendix I Road Transport Assessment.

Appendix J	Soils and Land Suitability Assessment.
Appendix K	Economic Assessment.
Appendix L	Non-Indigenous Cultural Heritage Assessment.
Appendix M	Geochemistry Assessment.
Appendix N	Preliminary Risk Assessment (PRA).

1.2 PROJECT PROPONENT

The proponent for the Project is Whitehaven WS (ABN: 87 625 165 004), a wholly owned subsidiary of Whitehaven.

The registered office and postal address for Whitehaven WS is:

Whitehaven WS Pty Ltd Level 22, 12 Creek St BRISBANE QLD 4000 Phone: (07) 3738 2000

The entities in Whitehaven's corporate structure have significant experience in the mining industry, in both Queensland and New South Wales (NSW). This experience dates back to 1999, when Whitehaven Coal Mining Limited (now a wholly owned subsidiary of Whitehaven), was established and began operations at its first mine, Canyon Mine, in 2000. Since then, through its acquisitions and development of new mines, Whitehaven has successfully grown to become Australia's largest independent coal producer and the leading coal producer in north-west NSW.

Whitehaven currently has four operating mines in the Gunnedah Basin of north-west NSW: three open cut mines located at Maules Creek, Tarrawonga and Werris Creek, and one underground mine at Narrabri. These sites produce coal primarily for export markets in North and South Asia. Whitehaven's overall workforce is more than 2,500 personnel, with approximately 75 percent (%) of employees living in the local communities around operations.

In addition to progressive rehabilitation at all operating mines, Whitehaven is currently conducting ongoing rehabilitation works at non-operating open cut mines (e.g. Sunnyside, Rocglen and Canyon Mine).

Whitehaven also owns the Vickery Coal Mine, in the Gunnedah Basin, which is approved although not currently operating.



Over the last five years, Whitehaven has contributed over \$1.5 billion to the local economies in which it operates, and has worked with over 350 local businesses.

Environmental Record

Whitehaven WS has adhered to its regulatory responsibilities associated with the exploration activities undertaken at the Project. Whitehaven WS has not been the subject of any environmental legal proceedings.

Whitehaven Coal Limited, Whitehaven WS's parent company takes its regulatory and environmental obligations seriously. Whitehaven has successfully operated multiple mining operations for many years in the North-Western region of New South Wales and is required to comply with an extensive range of conditions within multiple regulatory approvals granted by State and Federal regulatory agencies.

While Whitehaven continually works to improve its environmental performance, systems and compliance there have been some instances of non-compliance with environmental regulation over the past decade. Whitehaven's performance is in line with NSW sector-wide performance.

Health, Safety, Environmental and Community Policy

Whitehaven has a documented Health, Safety, Environmental and Community Policy that applies to Whitehaven WS. This policy states that Whitehaven aims to:

- Achieve zero workplace injuries and illnesses.
- Achieve zero environmental incidents.
- Maintain mutually beneficial relationships with the communities which host our operations.

Furthermore, Whitehaven intends to conduct business in a way that maintains a safe and healthy workplace for its workers, visitors, and the surrounding community, and also protects the environmental, community, and cultural heritage values of the area throughout all stages of the Project – exploration, development, operation, progressive rehabilitation, closure and associated activities.

Whitehaven strives to achieve the above goals by:

- Considering health, safety, environment and community matters when planning and undertaking work activities.
- Consulting and communicating health, safety, environment and community matters in a fair and effective manner.
- Having processes in place for identifying and eliminating or minimising health, safety, environment and community risks and impacts, and sharing and applying learnings in a timely manner.
- Working to continuously improve health, safety, environment and community performance.
- Providing an effective injury management and return to work program for workers.
- Complying with applicable health, safety, environment and community legislation and other requirements.
- Providing workers with necessary health, safety, environment and community information, instruction, training and supervision to enable effective performance of the work.
- Utilising health, safety, environment and community resources and processes to implement and maintain the requirements of the policy and associated management systems.



In regards to workers responsibilities, the Health, Safety, Environmental and Community Policy states:

- Workers have a responsibility to comply with applicable legislation, this policy and associated management systems.
- No work is to be undertaken without a clear understanding of a safe method that minimises the risk of injury or illness, plant or equipment damage, environmental, community or cultural harm.
- Workers must present for work in a fit and healthy state, take reasonable care for their own health and safety and have an obligation to take reasonable care for the health and safety of others.
- Workers must report any workplace incidents or injuries to their supervisors in a timely manner.
- Workers must also comply with any reasonable instruction given by Whitehaven Coal.

The policy applies to all workers and visitors at sites managed by Whitehaven and its subsidiaries.

1.3 PROJECT CONSULTANTS

This EIS was prepared by Whitehaven WS and Resource Strategies Pty Ltd with specialist input provided by the following organisations:

- Whitehaven (project design, alternatives and justification, background data, resource economics, consultation, rehabilitation and environmental monitoring and management, mine scheduling, sequencing and final landform);
- GHD Group Pty Ltd (infrastructure design);
- SLR Consulting Australia Pty Ltd (SLR) (groundwater modelling and assessment);
- Hydrogeologist.com.au (groundwater and surface water monitoring and investigations);
- WRM Water & Environment Pty Ltd (WRM) (surface water assessment, flood modelling and assessment and site water balance);
- Fluvial Systems Pty Ltd (Fluvial Systems) (geomorphology assessment);

- SMEC Australia Pty Limited (SMEC) (social impact assessment);
- E2M Pty Ltd (E2M) (terrestrial ecology assessment, baseline flora study and baseline fauna study);
- Renzo Tonin & Associates (Renzo Tonin) (noise and blast modelling and assessment);
- Katestone Environmental Pty Ltd (Katestone) (air quality modelling and assessment and greenhouse gas assessment);
- The Transport Planning Partnership (TTPP) (road transport assessment);
- GT Environmental Pty Ltd (GTE) (soil survey and soils and land suitability assessment);
- Deloitte Access Economics (economic assessment);
- Extent Heritage Pty Ltd (Extent) (non-indigenous cultural heritage assessment);
- Ecological Service Professionals (ESP) (aquatic ecology and stygofauna assessment);
- Terrenus Earth Sciences (Terrenus) (geochemistry assessment);
- Risk Mentor Pty Ltd (Risk Mentor) (preliminary risk assessment facilitation);
- Blackrock Mining Solutions Pty Ltd (Blackrock Mining Solutions) (preliminary geotechnical assessment); and
- MinterEllison (*legal input*).

In addition to the above, peer review was undertaken by the following specialists (Attachment 3):

- Dr Noel Merrick (groundwater assessment); and
- Tony Marszalek (surface water and flooding assessment).

The experience and qualifications of consultants who prepared specialist studies for the Project are detailed in Table 1-1.



Table 1-1 EIS Consultants

Consultant	Qualifications/Experience
Wim Du Toit Study Manager (GHD)	Over 20 years' global experience in the delivery of large scale projects; concept, feasibility and detailed studies; life extension assessments; plant enhancements; technical due diligence; modification works and greenfield projects, including the following resource projects:
Infrastructure design	 Phu Kham Copper Gold Expansion Project, principal project engineer for the design, procurement, construction and commissioning for additional process equipment on the copper concentrator.
	 Moatize Coal Project, consultant engineer for the design and implementation of the CHPP.
	Benga Coal Project, consultant engineer for the design and implementation of the CHPP.
Brett Logan Civil/Roads Lead	Over 25 years' experience within consulting and major EPCM teams with a focus on delivering study to execution completion in the mining and resources sector:
(GHD) Infrastructure design	 Broad skills in delivery of mine projects specialising in infrastructure, management of multidisciplinary design teams and constructive management.
	 Wide range and depth of experience across mine infrastructure, hydrocarbon facilities, process infrastructure and non-process infrastructure such as building waste management, power generation and transmission and ports.
	 Construction manager for the Rolleston Coal Expansion Project and Hail Creek Product Coal Stockpile Expansion, and civil lead for the Hail Creek Expansion Project and Goonyella Riverside MIA Expansion.
Derwin Lyons	BSc (Hydrogeology) (Hons), BSc (Hydrology and Water Resource Science).
Principal Hydrogeologist (SLR)	Over 13 years' experience in groundwater resource development and management.
Groundwater Assessment	
Dr Noel Merrick	BSc, MSc (Geophysics), PhD (Hydrogeology), GradDip (DataProc).
Principal (HydroAlgorithmics Pty Ltd)	Over 45 years' experience in hydrogeology, geophysics and groundwater modelling in all Australian States:
Groundwater Assessment	Co-author of modelling guidelines.
Peer Reviewer	 Authoring and/or peer review of groundwater models and assessments for numerous mining projects across Queensland and NSW.
	Extensive knowledge of Bowen Basin (e.g. Olive Downs Project EIS).
	 Long-term Technical Advisory Panel member for Office of Groundwater Impact Assessment (Surat Basin).
	Former Associate Professor and Research Scientist.
	• Over 300 peer reviews for water supply, mine and quarry groundwater assessments.



Consultant	Qualifications/Experience
Daniel Barclay	BAppSc (Hons), BAppSc (Geology), International Association of Hydrogeologists.
Principal Hydrogeologist (hydrogeologist.com.au) Groundwater and surface water	Over 20 years' experience as a hydrogeologist within the consulting, government and mining sectors, with hydrogeological exposure within the mining environment in Australia, Asia and North America including:
monitoring and investigations	 Groundwater resource assessments, including desktop assessments, program design and conceptualisation studies for a number of projects in Queensland (Vulcan Complex Project, Bauxite Mine, Clarence-Moreton Basin, Surat Basin, Lady Annie, Great Artesian Basin Recharge Project), South Australia (Olympic Dam) and Papua New Guinea (the town of Anogram, Lihir Gold Mine).
	 Conceptual model development, design and installation of bores and hydrochemical assessments, groundwater sampling and mine activity simulations for a number of projects in Queensland (Wilson Creek Project, Dawson Mine, Surat Basin, Gregory-Crinum Mine, Isis and Gordon Mines), South Australia (Olympic Dam) and Canada (Oil Sands Mine).
	 Groundwater impact assessments for mining projects in Queensland (Aurukun Bauxite, Moronbah South, Taroborah, Broughton), NSW (Rocky Hill Project, Glennies Creek Colliery), South Australia (Olympic Dam) and Papa New Guinea (Frieda River).
	 Annual groundwater monitoring reviews, borefield performance reports and exceedance investigation repots to assist mining companies with regulatory conditions and reporting obligations in Queensland (Meteor Downs South, Callide Mine, Norwich Park Mine, Oaky Creek Mine, Gregory Crinum Mine, Cameby Downs, Surat Basin, Grassdale Feedlot, Ernest Henry Mine, Lady Loretta Mine) and NSW (work at several coal mines).
	 Mine site dewatering and depressurisation projects in Queensland (Burton Widening Project, Ernest Henry Mine), Papua New Guinea (Lihir Gold Mine, Frieda River) and Laos (Phu Kham Mine).
	 Development of numerical flow models for mines and development activities in Queensland (Vulcan Complex Project, Ernest Henry Mine, King Vol Mine, Mt Dromedary, Surat Basin, Lady Annie), South Australia (Olympic Dam), Western Australia (Waldon Pit), Papua New Guinea (Ok Tedi) and Laos (Phu Kham Mine).
	Co-authoring Groundwater Recharge in the Great Artesian Basin Intake Beds, Queensland.
Dr David Newton	BEng (Hons), MEngSt, PhD (Urban Stormwater), CPEng, RPEQ.
Director/Senior Principal Engineer	Over 30 years' experience in water resource management, including:
(WRM) Surface Water and Flooding	 Extensive experience in surface water assessment and infrastructure design for mining projects in Queensland and NSW.
Assessment	 Provision of advice on numerous Queensland projects including Middlemount, Curragh, Central Queensland Coal, Baralaba and Ensham.
	 Project manager for mine EIS studies throughout New South Wales, including Maules Creek, Watermark, Moolarben and Bengalla.
Matthew Briody	BEng (Civil) (Hons), RPEQ.
Principal Engineer (WRM)	Over 18 years' experience in water resource management, primarily in the Queensland and NSW mining sector, recent experience includes:
Surface Water and Flooding Assessment	 Preparation of the Surface Water Assessment for the neighbouring Olive Downs Project EIS.
	 Involved in water management studies (approvals and operational) for many operations within the Bowen Basin, including: Isaac Plains; Lake Vermont; Millennium; Moranbah North; Burton; Saraji; Norwich Park; and Middlemount.



Consultant	Qualifications/Experience
Tony Marszalek	BEng (Civil) (Hons), M (EngSc).
Director (Hydro Engineering & Consulting Pty Ltd) Surface Water and Flooding	Over 28 years' experience in water resource management, working on projects relating to water resources, mining and civil and environmental engineering. Provision of expert advice for legal proceedings as well as to government agencies in regard to water resource assessments.
Assessment Peer Reviewer	
Dr Christopher Gippel Director/Geomorphologist/ Hydrologist	BSc (Geography) (Hons Class 1), PhD (Geography) (Oceanography), High-end Foreign Recruitment Programme Visiting Fellowship (2013-2015), Australian Bicentennial Fellowship and British Council Academic Links and Interchange Scheme Grant (1992-1993).
(Fluvial Systems)	Over 30 years' experience in the water industry, including:
Geomorphology Assessment	 Preparation of geomorphology assessments for numerous projects across Queensland, NSW and Western Australia, including the Central Queensland Coal Project, Maxwell Project, Olive Downs Project, Mount Pleasant Operation Modification 4, Abel Underground Project Modification 4, Marillana Creek, Tahmoor South Project, Mount Penny Project, Vickery Coal Project, Stratford Extension Project and Bickham Mine Project.
	 Provision of advice for the Department of Planning and Infrastructure regarding remediation of subsidence effects for South Wambo Creek and for Xstrata Coal regarding remediation of Goulburn Creek diversion.
	 Designing Bowmans Creek Diversion and Goonbri Creek Alignment for Ashton Mine and Tarrawonga Mine, respectively and preparing a stream risk assessment for Tasman Extension Project and diversion constraints analysis of Yorks Creek.
	Co-authoring Stream Hydrology: An Introduction for Ecologists.
Chris Mahoney	BInternational Economic Relations, MUrban and Regional Planning (Environmental Planning).
Principal Social Scientist – Environment (SMEC)	Over 20 years' experience across the government, infrastructure, resources and international development sectors.
Social Impact Assessment	
Brad Dreis	BEnvMgmt, MEIANZ, MESA.
Principal Ecologist (E2M) Terrestrial Ecology Assessment	Over 15 years' experience as an ecologist through Queensland, NSW, Northern Territory and South Australia:
	 Recent projects include the Caval Ridge Mine, Grasstree Mine, Australian Pacific LNG Project, Granite Belt Irrigation Scheme and Carmichael Coal Mine.
	 Provision of expert advice to court relating to ecological assessment and impacts in Assessment of Ecology Issues in the Matter of Conway v Origin and Malcolm Burke v Moreton Bay Regional Council & The Village at Redcliffe Pty Ltd & Department of Main Roads.
	 Peer review of ecological assessments, ecological management plans and ecological impact assessments.
Lauren Thorburn	BSc (Ecology and Marine Biology), BSc (Hons).
Principal Ecologist (ESP)	Over 15 years' experience as an aquatic ecologist, including:
Aquatic Ecology and Stygofauna Assessment	 Provision of expert evidence to the Planning and Environment Court relating to aquatic ecology (freshwater and marine).
	 Preparation of aquatic ecology assessments for a variety of water resource projects, tourism projects and various coal mine developments and expansions including (but not limited to) the Baralaba South Project and the Poitrel, Caval Ridge, Saraji and Oaky Creek Mines.



Consultant	Qualifications/Experience
Paul Johnson	BEng (Mechanical), MIEAust, RPEQ.
State Manager – Queensland	Over 25 years' experience in acoustic consulting, including:
(Renzo Tonin) Noise and Vibration Assessment	 Experience in large infrastructure projects across Queensland, NSW and Victoria, recent projects include the Middlemount Mine, Olive Downs Project, Hale Creek Mine and Brisbane Cross River Rail.
	 Provision of expert advice on legal matters relating to noise and vibration predictions and associated impacts.
	 Peer review of noise and vibration modelling and impact assessments.
Andrew Vernon	BSc (Environmental Science), MSc (Air Pollution Control and Management).
Senior Air Quality Consultant	Over 13 years' experience as an air quality consultant:
(Katestone) Air Quality and Greenhouse Gas Assessment	 Recent projects include the Vulcan Complex Project, Tallawarra B Power Station Permit Modification, Gemini Project, Olive Downs Project, Cameby Downs Continued Operations Project, Smithfield Energy Facility, Maules Creek Coal Mine, Australian Pacific LNG Facility EA Amendment, New Acland Stage 3 Project, Isaac Plains East Coal Mine and China Stone Coal Project.
	Provision of expert advice on legal matters relating to air quality predictions and impacts for the following matters: Pembroke Olive Downs Pty Ltd v Sunland Cattle Co Pty Ltd & Ors; Taroom Coal Pty Ltd v Richard Shorland Moffat, Margaret Lindsay Moffat and Angus Shortland Moffat; Taroom Coal Pty Ltd v Robert Graham Adams and Terri Lorelle Adams-Munn; Colton Coal Pty Ltd v Aldershot and District Against Mining and Ors; New Acland Coal Pty Ltd v Frank Ashman & Ors, and Department of Environment And Heritage Protection; Xstrata Coal Queensland Pty Ltd & Ors v Friends of the Earth Brisbane Co-Op Ltd & Ors, and Department of Environment and Resource Management; Woolcott Group Pty Ltd v Rostry Pty Ltd & Tamworth Regional Council (Nos. 10605 to 10609/2014); Wilks-Gilbert V Wagga Wagga City Council (No. 14015/2014); and Dellara Pty Ltd v Minister Of Planning and Penrith City Council (No. 10928/2010).
	 Involvement with development of NSW Coal Mining Benchmarking Study: International Best Practice Measures to Prevent and/or Minimise Emissions of Particulate Matter from Coal Mining for the former Office of Environment and Heritage.
	 Peer review of fair quality modelling and impacts assessments for the City of Rockingham (East Rockingham Waste to Energy Project), Allens (Next Generation Energy form the Waste Facility Eastern Creek), Transurban Queensland (Clem7 Tunnel), Stanmore Coal Pty Ltd (Isaac Plains East Project), Gold Coast Landfill Unit Trust (Stapylton Resource Recovery Facility) and EPA Victoria (West Gate Tunnel Project).
Penny Dalton	BEng (Civil) (Hons), MIEAust CPEng, NER, RPEQ.
Associate Director (TTPP) Road Transport Assessment	Over 25 years' experience as a consultant in traffic and transport planning for a broad cross-section of clients across the Australian private and public sector, with particular expertise in the assessment of road transport implications of major mining and quarrying projects in rural and regional locations, and the development of traffic management plans to mitigate impacts. Recent projects include:
	 Road Use Management Plan and demand forecasting for the Olive Downs Project in the Bowen Basin.
	 Road transport assessments for new and expanded coal mining projects, including the Vickery Extension Project, Maxwell Project, Narrabri Coal Mine, Tarrawonga Coal Mine, Dendrobium Mine and Moolarben Mine, other mining projects including Bowdens Silver Mine, Snapper Mine, Atlas-Campaspe Mine, Cadia Gold Mine, Cowal Gold Mine and Sunnay Corner Mine reclamation.
	 Road transport assessments for numerous new and expanded quarry developments across regional NSW to supply construction of the Inland Rail between Melbourne and Brisbane.



Consultant	Qualifications/Experience	
Reece McCann	BEnvTech.	
Director/Associate Environmental Scientist (GTE)	Over 15 years' experience in soil, land suitability and contaminated land consulting throughout Queensland, New South Wales and Northern Territory, including:	
Soils and Land Suitability Assessment	 Preparation of soils and land suitability assessments for the Olive Downs Project, Saint Elmo Vanadium Project, Narrabri Underground Mine Stage 3 Extension Project. 	
	 Providing technical advice and review of existing soil reports and conducting data gap analysis to meet current guideline standards. 	
Paul Liggins	BEc, Chamber of Commerce Prize (Macroeconomics).	
Partner (Deloitte Access Economics)	Over 30 years' experience in economic policy, regulation, program evaluation and review, business case development and cost benefit analysis.	
Economic Assessment		
Eamon McGinn	B Comm. Hons (USyd), M. Ec. (UNSW), current PhD Candidate (UTS).	
Director (Deloitte Access Economics)	Over 10 years' experience in economic analysis, particularly relating to coal mining proposals in Queensland and NSW.	
Economic Assessment		
Dr Andrew Sneddon	BA (Hons), BLaw (Hons), PhD (Archaeology).	
Director (Extent)	Over 25 years' commercial consulting experience in cultural heritage management, including	
Non-Indigenous Cultural Heritage Assessment	heritage assessments and impact mitigation for built heritage and archaeology in the resources sector, including:	
	 Contemporary experience in large, complex projects across Australia including the Great Ocean Road and Scenic Environs Heritage Impact Assessment, Lake Burley Griffin Heritage Management Plan, Mount Pleasant (Muswellbrook) Historic Heritage Assessment, heritage impact assessments and conservation management plan for the Vickery Extension Project, Fremantle Prison Heritage Management Plan. 	
	 Provision of expert advice on legal matters relating to heritage management and impacts, including provision of expert evidence in relation to the Wakaman native title claim in North Queensland for Queensland Crown Law; preparation of an expert report on a contested site near Geelong, Victoria; expert evidence in the Federal Court of Australia in relation to the Boonthamurra native title claim; and co-author of expert opinion for Parks Victoria in relation to Federal Court proceedings concerning feral horse management in the Australian Alps. 	
	 Development/review of industry guidelines and policies relating to heritage management, including being an author of <i>Registering Sites of Significance According to Aboriginal Tradition – Guidelines for Cultural Heritage Assessors and Managers</i>; member of the Burra Charter Working Group, which revised and updated the <i>Burra Charter</i> in 2013; co-author of <i>Practice Note – Burra Charter and Indigenous Heritage Management</i> for Australia International Council on Monuments and Sites (ICOMOS); peer reviewing <i>Why Cultural Heritage Matters</i>; and co-authoring 14 case studies illustrating 'best practice' heritage management in relation to places and issues across Australia, for the former Commonwealth Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC). 	
	 Peer review of cultural heritage assessments, such as the heritage management documents for the Narrabri Gas Project for the NSW Government and the heritage management documentation for the Queens Wharf development for the Queensland Government. 	



Consultant	Qualifications/Experience
Dr lan Swane	BEnvSc (Geology) (Hons), PhD (Hydrogeochemistry).
Director and Principal Geochemist (Terrenus) Geochemistry Assessment	Environmental geochemist with over 25 years' experience in consulting, technical and project management in the mining, petroleum and agricultural sectors. Extensive Bowen Basin coal experience, having completed (or currently working on) dozens of environmental geochemical assessments for Bowen Basin coal projects. Recent examples include:
	 Expansion of Caval Ridge Horse Pit.
	Expansion of South Walker Creek Mine.
	 Isaac Downs Project.
	 Geochemical (AMD) risk assessments at all of BHP Coal's Australian operations.
	Olive Downs Project.
	 Isaac Plains Mine and Isaac Plains East Project.
Dr Peter Standish	BEng (Mine), PhD (Mining Engineering).
Principal Consultant (Risk Mentor) Preliminary Risk Assessment	Over 30 years' experience in professional roles, including conducting risk analyses for a range of subject areas (environmental, construction, underground development, fire and financial) for over 20 years across various jurisdictions within Australia and globally.
Ty Grantham	BAppSc, MEngSc (Geomechanics), CP (Geotechnical) AusIMM, RPEQ.
Principal Consultant (Blackrock Mining Solutions) Preliminary geotechnical assessment	Over 20 years' experience in the mining and civil industries, and has prepared final void studies for several coal projects in the Bowen Basin, including the Walton Project and the Burton Complex.
Tim Hanmore	BLaw (Hons), Client Choice Energy & Natural Resources Award (2018), Recommended
Partner (MinterEllison)	Environment & Heritage Lawyer <i>Doyle's Guide 2020,</i> Recommended Energy and Resources Lawyer <i>Doyle's Guide 2020, Best Lawyers Australia 2020,</i> Ranked in Chambers and Partners <i>Asia-Pacific 2020</i> for Environmental Law.
Legal advice	Over 18 years' experience in the resources sector, acting on project approvals, project delivery and regulatory advice for mining and gas companies at all stages of the exploration, development and production lifestyle, relevantly including providing advice on environmental authority applications and impact assessment processes under the <i>Environmental Protection</i> <i>Act 1994</i> (EP Act) including those coordinated under the SDPWO Act and approval processes under the EPBC Act, including with respect to the approval and development of complex mining projects in the coal, copper, gold, uranium, bauxite, gas and renewable energy industries.



1.4 PROJECT SUMMARY

The Project involves mining the coal reserves associated with the Rangal and Fort Cooper Coal Measures (Leichhardt Seams, Vermont Upper Seam and Vermont Middle Lower Seam) within mining lease application (MLA) 700049, MLA 700050 and MLA 700051. Run-of-mine (ROM) coal would be mined by open cut methods at a forecast rate of approximately 15 million tonnes per annum (Mtpa) and a peak forecast rate of up to 17 Mtpa for approximately 30 years.

The Project would involve the development of an open cut coal mine and associated infrastructure, including the construction and operation of a MIA (coal handling and preparation facilities, dams, etc.) and an infrastructure corridor (raw water supply pipeline, ETL and mine access road).

The MIA would be located close to the Norwich Park Branch Railway on land currently used for cattle grazing (Plate 1-1).

A detailed description of the Project is provided in Section 2, and consideration of alternatives provided in Section 3.

1.5 ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

This section details the environmental impact assessment process and outlines any opportunities for input and participation, including how and when a properly made submission on the EIS will be addressed and taken into account. An outline of the approval process for the Project is described in Section 1.7.2.

1.5.1 Coordinated Project Declaration and Terms of Reference

On 17 April 2019, the Coordinator-General declared the Project to be a 'coordinated project' for which an EIS is required under section 26(1)(a) of Part 4 of the SDPWO Act.

Draft Terms of Reference for an EIS for the Project were subsequently issued by the Coordinator-General on 24 June 2019. The Coordinator-General finalised the Terms of Reference on 4 September 2019 under section 30 of the SDPWO Act.

The Terms of Reference set out the matters Whitehaven WS is to address in this EIS for the Project. A summary of the Terms of Reference and where they have been addressed in this EIS is provided in Table 1-2. A detailed reconciliation table is provided in Attachment 2.



Plate 1-1 – Location of the Mine Infrastructure Area



Table 1-2		
Terms of Reference – Reconciliation Summary		

Summary of Terms of Reference Requirements	EIS Reference			
Part A. About these Terms of Reference				
Part B. General approach and requirements				
General Approach	N/A			
Mandatory Requirements of an EIS	Sections 1 to 9; Attachments 3 and 4			
Part C. EIS Content and Suggested Structure				
Executive Summary	Executive Summary			
Introduction	Section 1			
Project Proponent	Sections 1.2 and 1.3			
The Environmental Impact Assessment Process	Section 1.5			
Project Approvals Process	Section 1.7			
Project Description	Section 2			
Proposed Development	Section 2.1			
Site Description	Sections 1.7, 2.2 and 4			
Climate	Section 2.3			
Proposed Construction and Operations	Sections 2.4, 2.5, 2.6 and 6			
Infrastructure Requirements	Sections 2.7, 2.8, 2.9 and 3			
Assessment of Project-Specific Matters	Section 4			
Land	Section 4.10; Appendix J			
Flora and Fauna	Section 4.5; Attachment 5; Appendices D and E			
Biosecurity	Section 4.14; Appendices D and E			
Water Quality	Section 4.1; Appendices A and B			
Water Resources	Section 4.2; Appendices A and B			
Air	Section 4.8; Appendix H			
Noise and Vibration	Section 4.7; Appendix G			
Waste Management	Section 4.15			
Transport	Section 4.9; Appendix I			
Social	Section 4.4; Appendix C			
Cultural Heritage	Section 4.12; Appendix L			
Economic	Section 4.11; Appendix K			
Hazards, Health and Safety	Section 4.13; Appendices M and N			
Flooding and Regulated Dams	Section 4.3; Appendix B			
Matters of National Environmental Significance	Section 5; Attachment 5; Appendices A, B, D and E			
Appendices to the EIS	Sections 9 and 10; Attachments 1, 2 and 3; Appendices A to N			

Note: Attachment 2 provides a detailed reconciliation of the final Terms of Reference.



1.5.2 Objectives of the EIS

This EIS has been prepared to fulfil the requirements of an EIS in accordance with the provisions of the SDPWO Act and the EPBC Act, pursuant to a bilateral agreement between the Commonwealth of Australia and the State of Queensland.

The key objective of this EIS is to ensure that the Commonwealth and State authorities and affected stakeholders have sufficient information to assess the potential adverse and beneficial environmental, social and economic impacts of the Project, as well as the management, monitoring and mitigation measures proposed to avoid and minimise any adverse impacts.

This EIS is specifically designed to allow the Coordinator-General to evaluate the environmental effects of the Project, decide whether it may proceed, and make recommendations and state or impose conditions about how the Project should be undertaken. This assessment will be detailed in the Coordinator-General's 'Evaluation Report', which is published and considered by the relevant State and Commonwealth authorities involved in the grant of those environmental approvals required to undertake the Project. As a result, the EIS is prepared to ensure that there is sufficient information to enable primary and secondary approvals to be granted for the Project.

The scope of the approvals sought through the EIS process is described in Section 1.7. A more detailed demonstration of the relevance of the EIS in the primary approvals process is illustrated on Figure 1-3.

1.5.3 How To Make a Public Submission

In accordance with section 33 of the SDPWO Act, Whitehaven WS will publicly notify in a newspaper circulating the Project region and the greater surrounds (EIS Notice):

- where a copy of this EIS is available for inspection;
- where a copy of this EIS may be obtained at a stated reasonable cost;
- that submissions may be made to the Coordinator-General about the EIS; and
- the submission period, set by the Coordinator-General, during which a submission may be made.

Copies of the EIS will be made available for inspection at several locations including, but not necessarily limited to, the following:

Isaac Regional Council Library Grosvenor Complex, Batchelor Parade MORANBAH QLD 4744

Isaac Regional Council Library Shannon Crescent DYSART QLD 4745

Isaac Regional Council Library Shopping Centre, Carter Place MIDDLEMOUNT QLD 4746

Isaac Regional Council Library 10 Reynolds Street NEBO QLD 4742

State Library of Queensland Cultural Centre, Stanley Place, Southbank BRISBANE QLD 4101

National Library of Australia Parkes PI W CANBERRA ACT 2600

Any properly made written submission in relation to this EIS must be received by the Coordinator-General within the EIS submission period, which will be stipulated in the EIS Notice (e.g. both the commencement and conclusion dates for the EIS submission period).

A 'properly made' submission is one that is:

- made in writing to the Coordinator-General;
- signed by each person ('signatory') who made the submission;
- states the name and address of each signatory;
- states the grounds of the submissions and the facts and circumstances relied on in support of the grounds; and
- received on or before the last day of the EIS submission period.

Submissions can be made online at: <u>https://haveyoursay.dsd.qld.gov.au/coordinatorgeneral/</u> winchestersouth-deis



LEGEND Opportunities for Public Comment Source: Whitehaven (2020).

WINCHESTER SOUTH PROJECT Project Approval Process and Consultation Process



Submissions can also be posted to the Office of the Coordinator-General at the following address:

EIS Project Manager – Winchester South Project Office of the Coordinator-General PO Box 15517 CITY EAST QLD 4002

Alternatively, submissions can be emailed to the Office of the Coordinator-General at: winchestersouth@coordinatorgeneral.qld.gov.au

All submissions will be provided to Whitehaven WS so that each submission can be considered and a response provided by Whitehaven WS to the Coordinator-General. Following its consideration of the matters raised in the submissions, Whitehaven WS may seek to make amendments to the submitted EIS in response to those submissions. This EIS, along with the public submissions and Whitehaven WS's responses to the public submissions, are considered in the Coordinator-General's evaluation of the Project.

For further information regarding the environmental impact assessment process, visit: http://www.statedevelopment.qld.gov.au/coordinator-general/assessments-and-approvals.html

1.6 CONSULTATION PROCESS

Consultation with key Queensland Government agencies, specifically in relation to the Project, has been conducted during preparation of the Initial Advice Statement (IAS), draft Terms of Reference, finalisation of the Terms of Reference and the draft EIS.

Engagement with relevant stakeholders has included:

- briefings on the Project;
- discussion of key assessment considerations;
- discussion of community and social impacts, including proposed accommodation and employment strategies;
- formation of land access agreements to conduct baseline environmental surveys and install environmental monitoring equipment;
- description of the environmental assessment process; and
- presentation of the findings of the environmental assessments and Project development schedules.

Stakeholders consulted to date include, but are not limited to, the following:

- Iocal landholders;
- Iocal community members and groups;
- local businesses and service providers (including housing providers, emergency services, social and public service providers and public health providers);
- local and regional employment and training providers;
- Barada Barna Aboriginal Corporation (the prescribed body corporate for the Barada Barna People, the Aboriginal party for the purposes of Indigenous cultural heritage management);
- Isaac Regional Council;
- Mackay Regional Council;
- Office of the Coordinator-General;
- Commonwealth Department of Agriculture, Water and the Environment (DAWE) (formerly known as the Department of the Environment and Energy [DEE]);
- Department of Environment and Science (DES);
- Department of State Development, Infrastructure, Local Government and Planning (DSDILGP) (formerly known as the Department of State Development, Manufacturing, Infrastructure and Planning [DSDMIP]);
- Department of Natural Resources, Mines and Energy (DNRME) (now the Department of Resources [DoR]);
- Department of Aboriginal and Torres Strait Island Partnerships (DATSIP) (now part of the Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships [DSDSATSIP]);
- Department of Agriculture and Fisheries (DAF);
- Department of Transport and Main Roads (DTMR);
- Department of Housing and Public Works (DHPW) (now the Department of Communities, Housing and Digital Economy [DCHDE]);
- Department of Communities, Disability Services and Seniors (DCDSS) (now DSDSATSIP);
- Department of Employment, Small Business and Training (DESBT);



- Queensland Health;
- Queensland Treasury;
- Queensland Ambulance Service;
- Queensland Police Service;
- Construction, Forestry, Maritime, Mining and Energy Union (CFMEU);
- overlapping tenure holders (Arrow Energy Pty Ltd [Arrow], South32 Limited [South32] and Aquila Resources Pty Ltd [Aquila Resources]);
- Quarrico Products Pty Ltd (Quarrico) (operator of Winchester Quarry);
- infrastructure service providers (including Sunwater Limited [Sunwater], Powerlink Queensland [Powerlink], Aurizon Holdings Limited [Aurizon]) and Ergon Energy and Yurika Pty Ltd [part of Energy Queensland]); and
- nearby mining companies (BHP Mitsubishi Alliance [BMA], South32, Pembroke Resources [Pembroke], Peabody Energy, Stanmore Coal Limited [Stanmore], Jellinbah Group Pty Ltd and Aquila Resources).

Whitehaven WS continues to consult with relevant government agencies on a regular basis in relation to the Project.

The public consultation process has been undertaken cognisant of the requirements of *Preparing an Environmental Impact Statement: Guideline for Proponents* (Department of State Development, Tourism and Innovation [DSDTI], 2020a).

A Public Consultation Report is provided in Attachment 4 of this EIS.

Consultation undertaken during development of the EIS has influenced the design of the Project. Key feedback from the consultation that has been incorporated into the design of the Project includes:

- targeting local employment and limiting the use of a fly-in fly-out (FIFO) workforce;
- encouraging the Project workforce to live locally;

- minimising the extent of the waste rock emplacement to avoid disturbance of MNES and Matters of State Environmental Significance (MSES);
- minimising the surface disturbance associated with the Project (co-locating the ETL, raw water pipeline and mine access road within an infrastructure corridor);
- maximising feasible opportunities to backfill residual voids;
- constructing an overpass over the Norwich Park Branch Railway to avoid realignment of the railway and minimise surface disturbance;
- utilising existing accommodation options rather than constructing a temporary on-site accommodation camp for the construction workforce;
- maintaining operations at the existing on-site quarry (Winchester Quarry); and
- offsetting impacts to biodiversity.

In addition, a key concern of stakeholders was the potential for reduced availability, affordability and accessibility of housing and accommodation. To ensure the Project does not adversely affect the affordability and availability of housing and accommodation in local communities, Whitehaven WS is committed to increasing permanent housing stock through the construction of new housing stock and contributing to the Isaac Affordable Housing Trust and/or Emergency and Long-Term Accommodation Moranbah Inc.

Whitehaven WS is committed to establishing itself as a long-term community partner in the area which will make a positive contribution to community development.

Further, Whitehaven WS has developed a comprehensive Community and Stakeholder Engagement Plan which details Whitehaven WS' approach to engaging with potentially impacted communities and other Project stakeholders, and to establish constructive relationships that can continue throughout the life of the Project.



1.7 STATUTORY CONTEXT

This section describes the statutory context relevant to the Project, including the requirements and application of Commonwealth and State legislation, and the context of the Project with regard to planning schemes, regional plans, State policies and government priorities.

This section also provides a summary of the approvals sought through this EIS process and those that will be sought separately (Section 1.7.9).

1.7.1 Project Approvals Process and Assessment Pathway

This EIS has been prepared to fulfil the requirements of an EIS in accordance with the provisions of the SDPWO Act and the EPBC Act (Section 1.1). The SDPWO Act provides for State planning and development through a coordinated system of public works organisation, for environmental coordination.

This EIS is the key document supporting the primary approvals required for the Project under Queensland legislation, including the SDPWO Act, EP Act and the *Mineral Resources Act 1989* (MR Act), as well as secondary approvals under other Acts, such as the *Water Act 2000* (Water Act), the *Nature Conservation Act 1992* (NC Act), the *Environmental Offsets Act 2014* (EO Act) and the *Waste Reduction and Recycling Act 2011* (WRR Act). The EIS also assesses potential impacts on MNES protected by controlling provisions under the EPBC Act.

An overview of the assessment pathway for the Project under Part 4 of the SDPWO Act and the key steps involved in obtaining the primary approvals for the Project are outlined below and illustrated in Figure 1-3.

Assessment Under the Bilateral Agreement

The Project comprises three related but separate proposed actions under the EPBC Act:

- the mine site and access road (EPBC 2019/8460);
- the water pipeline (EPBC 2019/8459); and
- the ETL (EPBC 2019/8458).

These proposed actions were referred to the Commonwealth Minister on 24 May 2019. On 17 July 2019 (for the action relating to the ETL) and 18 July 2019 (for the actions relating to the mine site and access road and the water pipeline), a delegate of the Commonwealth Minister declared the Project components were controlled actions and, therefore, the Project requires approval under the EPBC Act.

The delegate of the Commonwealth Minister also advised that the Project will be assessed under the bilateral assessment agreement between the Commonwealth of Australia and the State of Queensland, in accordance with section 45 of EPBC Act.

The Commonwealth of Australia and the State of Queensland signed a bilateral agreement in December 2014 (Bilateral Agreement) which accredits the Queensland assessment regime under Part 4 of the SDPWO Act.

Further detail on the EPBC Act and approval process is provided in Section 1.7.3.

EIS Assessment Regime under Part 4 of the SDPWO Act

As described in Section 1.5.1, on 17 April 2019 the Coordinator-General declared the Project to be a 'coordinated project' for which an EIS is required under section 26(1)(a) of Part 4 of the SDPWO Act.

The SDPWO Act provides for project proposals to be assessed through a public EIS process. The Coordinator-General coordinates whole-of-government environmental assessment of a coordinated project under Part 4 of the SDPWO Act.

Terms of Reference

Draft Terms of Reference were prepared by the Coordinator-General and placed on public notification from 24 June 2019 to 19 July 2019.

A total of 33 submissions were received during public notification of the draft Terms of Reference, and considered by the Coordinator-General. Twenty-one submissions were received from advisory agencies, six submissions from private individuals, and six submissions from interest groups and businesses.

The Coordinator-General finalised the Terms of Reference on 4 September 2019 under section 30 of the SDPWO Act.



Preparation of the EIS

Whitehaven WS has prepared this EIS in accordance with the requirements of the Terms of Reference (Attachment 1). Technical assessment reports were prepared by relevant specialists to assist in determining the environmental impact of the Project (technical assessments are available in Appendices A to N).

Peer reviews of key technical assessments, specifically the Groundwater Assessment and Surface Water and Flooding Assessment have also been conducted (Attachment 3).

Public Notification

This EIS will be placed on public notification for a period of at least 28 days and notices will be placed in a newspaper circulating the Project region and the greater surrounds.

During this period the public will be able to comment on the EIS and make submissions to the Coordinator-General. All submissions made to the Office of the Coordinator-General will then be made available to Whitehaven WS which will have an opportunity to respond and provide the Coordinator-General with any additional information to the EIS.

Coordinator-General's Evaluation Report

The Coordinator-General will evaluate the EIS, including any adverse and beneficial environmental, social and economic impacts of the Project, any submissions received in relation to the EIS, and any additional information the Coordinator-General considers is relevant.

If the Coordinator-General decides to accept the draft EIS as the final EIS, the Coordinator-General will produce an Evaluation Report under section 34D of the SDPWO Act.

The Evaluation Report will evaluate the environmental effects of the Project, decide whether it may proceed, and make recommendations and state or impose conditions to be included in approvals required under the EP Act, the MR Act and other State and local government approval processes. If the Coordinator-General decides not to accept the draft EIS as the final EIS because additional information is needed, a further revised draft EIS will be provided and further public notification may take place at the discretion of the Coordinator-General.

Further detail on the SDPWO Act and approval process is provided in Section 1.7.2.

Environmental Authority and Mining Leases

The EP Act regulates prescribed environmentally relevant activities (ERAs) and resource activities (which includes a mining activity) through the issuing of environmental authorities and the enforcement of the conditions of granted authorities, the general environmental duty on all persons in the State, and executive officer liability for non-compliance with the EP Act by corporations.

As the Project is a mining activity, being the development of an open cut metallurgical (predominantly) coal mine, an environmental authority is required for the Project.

The requirements of the EP Act and approval process are further detailed in Section 1.7.4.

Mining leases under Chapter 7 of the MR Act are required to allow mining activities and the development of the Project infrastructure corridor located outside of mineral development licence (MDL) 183.

Whitehaven WS has lodged mining lease applications with the DNRME (now the DoR). Whitehaven WS has lodged an application for an environmental authority for the Project. Following completion of the Coordinator-General's EIS evaluation process, DES will prepare and issue a draft environmental authority for the Project.

The mining lease application documentation and draft environmental authority decision will be advertised for a minimum of 20 business days. During this period the public may lodge objections to the draft environmental authority and mining lease application.

Subject to the regulatory support as part of the above described processes, if there are no public objections, the environmental authority and the mining leases will be granted by the DES and the DoR, respectively.



If there are objections to the mining lease applications and/or the draft environmental authority that cannot be resolved, they will be referred to the Land Court of Queensland. The application (mining lease and/or environmental authority) will either be granted or refused.

Other Approvals

Relevant licences or approvals required under other Acts would be obtained for the Project as required.

Additional details on these relevant licences or approvals are provided in Section 1.7.6 and 1.7.9.

Ongoing Public Consultation

In addition to the designated public consultation periods, consultation and input from the public will continue to be encouraged by Whitehaven WS throughout the environmental impact assessment process.

This will continue to be achieved through regular community information sessions, community newsletters, a dedicated Project officer as a community contact point and the Project-specific website, in accordance with the community and stakeholder engagement plan detailed in the SIA (Appendix C).

1.7.2 State Development and Public Works Organisation Act 1971

The SDPWO Act gives the Coordinator-General power to declare a project to be a 'coordinated project' and coordinate the Environmental Impact Assessment process for the project.

Declaration as a Coordinated Project

Whitehaven WS, a wholly owned subsidiary of Whitehaven, submitted an application to the Coordinator-General for declaration of the Project as a 'coordinated project' under Part 4 of the SDPWO Act in February 2019. The application was supported by an Initial Advice Statement (IAS), which detailed information about the Project to inform the Coordinator-General's decision. In accordance with paragraph 27(2)(b) of the SDPWO Act, it is open to the Coordinator-General to declare a project to be a 'coordinated project' if the project has at least one of the following criteria:

- (i) complex approval requirements imposed by a local government, the State or the Commonwealth;
- strategic significance to a locality, region or the State, including for the infrastructure, economic and social benefits, capital investment or employment opportunities it may provide;
- (iii) significant environmental effects;
- (iv) significant infrastructure requirements.

As described in Section 1.5.1, on 17 April 2019 the Coordinator-General declared the Project to be a 'coordinated project' for which an EIS is required under section 26(1)(a) of Part 4 of the SDPWO Act.

Approval Process

The EIS is the key document supporting the primary approvals required for the Project under Queensland legislation, including the SDPWO Act, the EP Act and the MR Act, as well as secondary approvals under other Acts.

The "terms of reference" set out the matters a proponent must address in an EIS for a project. The Coordinator-General finalised the Terms of Reference for the Project on 4 September 2019 under section 30 of the SDPWO Act.

Whitehaven WS has prepared this EIS in accordance with the requirements of the Terms of Reference (Attachment 1).

This EIS has been submitted to the Office of the Coordinator-General for assessment. Once this EIS has been prepared to the satisfaction of the Coordinator-General, this EIS will be publicly notified in accordance with section 33 of the SDPWO Act. The EIS will be on public notification for a period of at least 28 days and the relevant notices would be placed in a newspaper circulating the Project region and the greater surrounds. During this period the public will be able to comment on the EIS and make submissions to the

Coordinator-General. All submissions made to the Office of the Coordinator-General on the EIS will then be made available to Whitehaven WS and the

Coordinator-General will decide either to accept the draft EIS as the final EIS or to request additional information from Whitehaven WS, which may trigger another round of public notification at the discretion of the Coordinator-General.

The Coordinator-General will then evaluate the EIS, including the environmental effects of the Project and any other related matters, and produce an Evaluation Report deciding whether it may proceed, considering all submissions made on the EIS during the public notification period. The Coordinator-General may also make recommendations and state conditions for the Project approvals.

1.7.3 Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act defines a proposal that is likely to have a significant impact on a matter of national environmental significance as a 'controlled action'. A proposal that is, or may be, a controlled action must be referred to the Commonwealth Minister for a determination as to whether or not the action is a controlled action.

Matters of national environmental significance are set out in Part 3 of Chapter 2 of the EPBC Act as follows:

- world heritage properties;
- national heritage places;
- wetlands listed under the Ramsar Convention;
- listed threatened species and communities;
- listed migratory species;
- nuclear actions;
- the Commonwealth marine environment;
- the Great Barrier Reef Marine Park; and
- water resources, in relation to coal seam gas development and large coal mining developments.

As described in Section 1.7.1, the Project, as three separate but related actions (mine site and access road, water pipeline and ETL), was referred to the Commonwealth Minister in May 2019 (the Proposed Actions). A delegate of the Commonwealth Minister determined on 17 July 2019 and 18 July 2019 that the Proposed Actions are 'controlled actions' and require approval under the EPBC Act to protect the following matters of national environmental significance under Part 3 of Chapter 2 of the EPBC Act:

- listed threatened species and communities (sections 18 and 18A); and
- a water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E).

The delegate of the Commonwealth Minister also determined on 17 July 2019 and 18 July 2019 that, pursuant to section 87 of the EPBC Act, the Proposed Actions are to be assessed under the Queensland accredited assessment process under Part 4 of the SDPWO Act.

Approval Process

The Commonwealth of Australia and the State of Queensland signed the Bilateral Agreement under section 45 of the EPBC Act, which accredits the Queensland assessment regime under Part 4 of the SDPWO Act. As that process is accredited, an assessment under Part 8 of the EPBC Act is not required for the Project.

Clause 3.1 of Class 2, Schedule 1 of the Bilateral Agreement relevantly states:

- 3.1 In preparing the terms of reference for an EIS, the Coordinator-General must ensure that the EIS will meet the requirement of sub-section 35(1) of the State Development and Public Works Organisation Regulation 2010 and that the terms of reference are designed to ensure that the EIS:
 - (a) assesses all relevant impacts that the action has, will have or is likely to have;
 - (b) provides enough information about the action and its relevant impacts to allow the Commonwealth Environment Minister to make an informed decision whether or not to approve the action under Part 9 of the Environment Protection and Biodiversity Conservation Act 1999; and
 - (c) addresses the matters mentioned in Division 5.2 of the Environment Protection and Biodiversity Conservation Regulations 2000 for an EIS.



The Terms of Reference for the Project require information about the controlled action and its relevant impacts, and the matters outlined in Division 5.2 of the Commonwealth *Environment Protection and Biodiversity Conservation Regulations 2000* to be addressed in this EIS.

A summary of the Terms of Reference is provided in Table 1-2, as well as the relevant section of the EIS where the Terms of Reference are addressed.

In addition, a detailed reconciliation table, indicating where the Terms of Reference have been addressed in the EIS, is provided in Attachment 2.

Following receipt of the Coordinator-General's Evaluation Report, the Commonwealth Minister will consider the report when making the decision whether to grant approval under the EPBC Act.

Consideration of the Project against the objects of the EPBC Act is provided in Section 5.9.

An assessment of the potential impacts of the Project on the controlling provisions is provided in Section 5.

1.7.4 Environmental Protection Act 1994

Environmental Authority

The object of the EP Act, as set out in section 3 of the Act is:

... to protect Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends (ecologically sustainable development).

The *Environmental Protection Regulation 2019* (EP Regulation) prescribes ERAs (other than mining activities) that would, or have the potential to, release contaminants into the environment which may cause environmental harm.

The ERAs listed in Schedule 2 of the EP Regulation proposed to be undertaken a part of the Project are identified in Table 1-3, with corresponding aggregate environmental scores (AESs).

	Environmentally Relevant Activity (ERA)	Aggregate Environmental Score (AES)
Schedule 3 of the EP Regulation	on	
ERA 13 – Mining Black Coal		128
Schedule 2 of the EP Regulation	2n	
ERA 8 – Chemical Storage	Storing more than 500 m ³ of chemicals of class C1 or C2 combustible liquids under AS 1940 or dangerous goods class 3 under subsection (1)(c).	85
ERA 16 – Extractive and Screening Activities	Extracting, other than by dredging, in a year, more than 1,000,000 t.	57
ERA 31 – Mineral Processing	Processing 1,000 t or more of coke in a year.	148
	Processing, in a year, more than 100,000 t of mineral products, other than coke.	280
ERA 60 – Waste Disposal	Operating a facility for disposing of, in a year, more than 200,000 t of waste mentioned in subsection (1)(a).	119
ERA 63 – Sewage Treatment	Operating a sewage treatment works, other than no-release works, with a total daily peak design capacity of more than 100 but not more than 1,500 EP, if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme.	27

Table 1-3 Environmentally Relevant Activities to be Conducted for the Project

m³ – cubic metres.

AS – Australian Standard.

t – tonnes.

EP – equivalent persons.



Those activities identified in Table 1-3 are ancillary activities proposed to be carried out as part of the resource activity of mining black coal.

The environmental authority for the Project would seek to authorise mining activities including the ERAs listed in Table 1-3.

Approval Process

Generally, the approval process for an environmental authority comprises of four stages:

- the application stage;
- the information stage;
- the notification stage; and
- the decision stage.

In June 2019, Whitehaven WS lodged an application for a site-specific environmental authority in accordance with the requirements listed in Division 3 of Part 2 of the EP Act (being, the application stage).

Pursuant to section 139 of the EP Act, the information stage will not apply if both the Coordinator-General's Evaluation Report includes stated conditions for the proposed environmental authority, and the environmental risks of the Project and the way the Project is to be carried out have not changed since the Evaluation Report was completed. Separately, and notwithstanding section 139 of the EP Act, the DES notified Whitehaven WS on 1 August 2019 that further information was required to assess the environmental authority application.

In September 2020, Whitehaven WS requested a change to the environmental authority application to include MLA 700065. On 19 October the DES notified Whitehaven WS that further information was required to assess the changed environmental authority application. This further information request is addressed by this EIS.

In accordance with section 152 of the EP Act, the public notification of the Project mining lease applications (Section 1.7.1) and environmental authority application will occur simultaneously.

Upon receiving the Coordinator-General's Evaluation Report and completion of all other stages applying to the application have ended, the decision stage will commence for the Project environmental authority application. The DES will make a decision on whether to approve the environmental authority application, and if the decision is to approve the application, the DES will issue a draft environmental authority for the Project. The draft environmental authority must include any stated conditions included in the Coordinator-General's Evaluation Report.

In deciding the application, the DES must consider the relevant requirements of the EP Act, including the 'standard criteria'. The standard criteria, as defined in Schedule 4 of the EP Act, includes the following principles of environmental policy as set out in the Intergovernmental Agreement on the Environment:

- the precautionary principle;
- intergenerational equity; and
- conservation of biological diversity and ecological integrity.

Consideration of these principles is provided in Section 3.9.

Notice of a decision by the DES to approve the draft environmental authority application must be provided to the applicant and submitters with a copy of the draft environmental authority.

Any person who makes a properly made submission on the environmental authority application may request that the submission be taken to be an objection to the environmental authority application. If a submitter gives an objection notice to the DES, the grant of the environmental authority must be referred to the Land Court for consideration.

After the Land Court hears any objection, the Court will make its recommendation to the DES, and will give a copy of its decision to the MRA Minister (currently the Minister for Resources) and the State Development Minister (currently the Deputy Premier and Minister for State Development, Infrastructure, Local Government and Planning).



The Minister for the Environment and the Great Barrier Reef and Minister for Science and Youth Affairs (EPA Minister) will consider the recommendation of the Land Court (and any advice from the MRA Minister or the State Development Minister), before a final decision is made on the grant of an environmental authority.

The conditions of the environmental authority must include, and be consistent with, the stated conditions provided in the Coordinator-General's Evaluation Report, in accordance with section 205 of the EP Act.

Progressive Rehabilitation and Closure Plan

The EP Act requires mining operators to develop and implement a Progressive Rehabilitation and Closure Plan (PRC Plan), which sets out a detailed schedule of binding and enforceable milestones for mine rehabilitation (Schedule).

As a result of transitional provisions in the EP Act for the *Mineral and Energy Resources (Financial Provisioning) Act 2018* (MERFP Act) that apply to the environmental authority application for the Project, the environmental authority application for the mining leases nor the EIS are required to contain a proposed PRC Plan and Schedule. Whitehaven WS would, if the environmental authority is granted, be required to prepare and submit a PRC Plan and Schedule to the DES for approval of the Schedule, in accordance with the EP Act requirements.

Once the Schedule has been approved, Whitehaven WS would be bound to implement PRCP Schedule.

Notifiable Activities

Activities that have been determined as having the potential to cause land contamination, otherwise known as 'notifiable activities', are listed in Schedule 3 of the EP Act.

Under section 371 of the EP Act, the DES may record particulars of land in the Environmental Management Register at any time if it is satisfied that a notifiable activity has been or is being carried out on the land. Whitehaven WS would notify the DES of any activities listed in Schedule 3 of the EP Act that have the potential to cause land contamination one week prior to the activity occurring. Notifiable activities that are likely to be undertaken as part of the Project include:

- 1 Abrasive blasting.
- 7 Chemical storage (other than petroleum products or oil under item 29).
- 15 Explosives production or storage.
- 24 Mine wastes.
- 29 Petroleum product or oil storage.
- 37 Waste storage, treatment or disposal.

1.7.5 Mineral Resources Act 1989

The principal objectives of the MR Act are to:

- encourage and facilitate prospecting and exploring for and mining of minerals;
- enhance knowledge of the mineral resources of the State;
- minimise land use conflict with respect to prospecting, exploring and mining;
- encourage environmental responsibility in prospecting, exploring and mining;
- ensure an appropriate financial return to the State from mining;
- provide an administrative framework to expedite and regulate prospecting and exploring for mining of minerals; and
- encourage responsible land care management in prospecting, exploring and mining.

The MR Act provides for the granting, conditioning and management of mining tenements, being prospecting permits, exploration permits, mineral development licences, mining leases and mining claims. The DoR and the Queensland Treasury are the administering authorities for the MR Act.



Under section 4A of Part 3 of the MR Act, development authorised under the MR Act is not subject to the provisions of the Planning Act, with the exception of building work under the *Building Act 1975* (Building Act) and development on a Queensland heritage place under the *Queensland Heritage Act 1992*.

Production mining leases would be required under Chapter 7 of the MR Act for the operational land within MDL 183. A transportation mining lease under section 316 of the MR Act would also be required for the part of the Project infrastructure corridor located outside of MDL 183, and within mining lease (ML) 70389 and petroleum lease (PL) 485, which are owned by South32 Eagle Downs Pty Ltd.

After the mining leases applications have been publicly notified, any person may object to the application for the grant of the mining leases prior to the last objection day.

All properly made objections must be referred to the Land Court. The Land Court will then hear the matter before deciding whether to recommend the grant or refusal of the mining lease applications. The Land Court will normally hear objections to the grant of the mining lease together with any objections under the EP Act relating to the associated environmental authority application.

The MRA Minister must consider any Land Court recommendation and matters under subsection 269(4) of the MR Act before deciding the application(s).

The mining lease applications will not be granted until compensation has been agreed between Whitehaven WS and the underlying landholders, or determined by the Land Court.

Mineral and Energy Resources and Other Legislation Amendment Act 2020

On 20 May 2020, the *Mineral and Energy Resources and Other Legislation Amendment Act 2020* (MROLA Act) was passed by the Queensland Government.

The MROLA Act seeks to improve financial assurance and mine rehabilitation reforms and the administration and efficiency of the regulatory framework applying to resource projects, as well as strengthen safety laws in the resources sector. Whitehaven WS will comply with the requirements of the relevant amended Acts as they apply to the Project.

1.7.6 Other Applicable Statutory Approvals and Legislation

State Legislation

The following Queensland Acts may be applicable to the Project:

- Mineral and Energy Resources (Common Provisions) Act 2014 (MERCP Act);
- MERFP Act;
- EO Act;
- Water Act;
- NC Act;
- Aboriginal Cultural Heritage Act 2003 (ACH Act);
- Transport Infrastructure Act 1994 (TI Act);
- WRR Act;
- Explosives Act 1999 (Explosives Act);
- Biosecurity Act 2014;
- Stock Route Management Act 2002;
- Vegetation Management Act 1999 (VM Act);
- Regional Planning Interests Act 2014 (RPI Act);
- Fisheries Act 1994 (Fisheries Act);
- Planning Act 2016 (Planning Act);
- Queensland Heritage Act 1992;
- Strong and Sustainable Resource Communities Act 2017 (SSRC Act);
- Coal Mining Safety and Health Act 1999;
- Local Government Act 2009;
- Building Act; and
- Human Rights Act 2019 (Human Rights Act).

Detail on each of the above Acts is provided below.

Mineral and Energy Resources (Common Provisions) Act 2014

The MERCP Act includes a statutory regime regulating overlapping coal tenures and petroleum tenures, and is administered by the DoR.



Chapter 4 of the MERCP Act relates to overlapping coal and petroleum tenements and provides mandatory requirements which apply to all overlapping coal and petroleum tenements.

Land covered by Authority to Prospect (ATP) 1103 held by CH4 Pty Ltd (now Arrow) overlaps land within MLA 700049, MLA 700050 and MLA 700051. Accordingly, Whitehaven WS has engaged with Arrow in accordance with sections 121 and 122 of the MERCP Act. Arrow confirmed that Whitehaven WS has 'right of way', and will decommission pilot wells located within land covered by the mining lease applications.

Whitehaven WS has engaged with South32 and Aquila Resources regarding MLA 700065, as it traverses tenements associated with the Eagle Downs (Underground) Mine.

Mineral and Energy Resources (Financial Provisioning) Act 2018

The MERFP Act is administered by the Queensland Treasury and the main purposes of the Act are:

- (a) to provide for holders of authorities to pay a contribution to the scheme fund, or give a surety, for the authorities; and
- (b) to provide a way to manage the risk to the State of incurring costs and expenses if the holder of an authority or small scale mining tenure does not comply with the holder's obligations under the authority or tenure; and
- (c) to provide a source of funds to the State for costs and expenses relating to preventing or minimising environmental harm, or rehabilitating or restoring the environment, or securing compliance with an authority or small scale mining tenure; and
- (d) to provide a source of funds to the State for -
 - (i) remediation activities in relation to mining activities previously carried out on an abandoned mine site; and
 - (ii) remediation activities in relation to an abandoned operating plant; and
 - (iii) research that may contribute to the rehabilitation of land on which resource activities have been carried out; and
- (e) to administer payments received by the State under the Environmental Protection Act 1994 for residual risks of land on which resource activities have been carried out.

The EP Act was amended by the MERFP Act to replace the previous financial assurance framework. The new financial provisioning scheme requires that a holder of an environmental authority obtain:

- an estimated rehabilitation cost (ERC) decision from the DES; and
- a risk category allocation decision from the scheme manager,

which determine the amount and form (i.e. whether eligible for contributions to the pooled scheme fund or whether a surety is required) of financial provisioning.

A holder of an environmental authority for a resource activity must not carry out, or allow the carrying out, of a resource activity unless:

- an ERC decision is in effect for the resource activity when the activity is carried out;
- the holder has paid a contribution to the scheme fund or given surety for the authority under the MERFP Act; and
- the holder has complied with the requirements under the MERFP Act for paying a contribution to the scheme fund, or giving a surety for the authority, as required from time to time.

As a result, following grant of the environmental authority and before the commencement of any mining activities, the DES will determine the initial ERC for the Project and the scheme manager will determine the holder's risk category allocation. The risk category allocation is largely dependent upon the scheme manager's opinion of the probability of the State incurring expenses for rehabilitating the land because the holder of the authority has failed to do so, which is formed by considering the financial soundness of the holder (with a 75 percent [%] weighting) and resource project characteristics (with a 25% weighting).

If Whitehaven WS's risk category allocation is very low, low, or moderate, and the scheme manager does not otherwise stipulate that a surety is required to protect the financial viability of the pooled fund, Whitehaven WS will be eligible to make annual contributions (for a portion of the total ERC amount) to the pooled scheme fund.



It is expected that Whitehaven WS will be eligible for the pooled fund, in which case it will pay its contribution amount determined with reference to the ERC and risk category allocation decisions, before commencing activities under the environmental authority.

If Whitehaven WS is deemed to be ineligible for the pooled fund, it will provide a surety for the full ERC amount before commencing activities under the environmental authority.

Queensland Environmental Offsets Framework

The following legislation and policies govern the Queensland Environmental Offsets Framework:

- the EO Act;
- the Environmental Offsets Regulation 2014 (EO Regulation); and
- the Environmental Offsets Policy (Version 1.9) (DES, 2020c).

The DES is the administering authority of the EO Act.

The EO Act establishes the framework for delivery of environmental offsets at the State level. An environmental offset is an activity undertaken to counterbalance significant residual impacts of particular activities on prescribed environmental matters, which are defined in section 10 of the EO Act to include:

- a matter of national environmental significance;
- a matter of State environmental significance; and
- a matter of local environmental significance.

The EO Act does not itself impose any offset requirements; its provisions are enlivened by virtue of an offset condition, which may be contained in any number of State environmental approvals.

Such offset conditions can generally only be imposed on an authority if the same, or substantially the same, impact has not already been assessed under the relevant Commonwealth legislation (being, the EPBC Act). This is to avoid duplication under the State and Commonwealth offsets regime.

The offset management strategy for the Project is described in Attachment 5.

Water Act 2000

The Water Act provides for the sustainable management of Queensland's water resources, and establishes and governs the operation of water authorities. The Department of Regional Development, Manufacturing and Water (DRDMW) is the administering authority for much of the Water Act.

The key prohibition under the Water Act is contained in section 808, which states that a person must not take, supply or interfere with water unless authorised. There is a similar provision provided in sections 334ZR and 334ZZ of the MR Act.

Given that the Project is located within the Fitzroy River Catchment, it is subject to the *Water Plan (Fitzroy Basin) 2011* (Water Plan). Section 110 of the Water Plan limits the taking of overland flow water from within the Fitzroy Basin, by virtue of section 101(2) of the Water Act. However, in accordance with section 100 of the Water Act, the limitations contained in the Water Plan will not affect the take of overland flow water where that is done in order to carry out the activities permitted by virtue of an authority granted under section 97 of the Water Act.

Section 97(1) of the Water Act provides a general statutory authorisation for a person to take overland flow water that is not more than the volume necessary to satisfy the requirements of an environmental authority if:

- the impacts of the take or interference were assessed as part of a grant of an environmental authority; and
- 2. the environmental authority was granted a condition about the take or interference with water.

The Surface Water and Flooding Assessment (Appendix B) has assessed the impacts of the take of overland flow water for use within the site water management systems as required for the Project operations. This includes the take and interference of overland flow water entering the water storage dams and up-catchment diversions. Whitehaven WS will seek an environmental authority with a condition permitting the take or interference with this water.



Assuming that the condition is inserted in the environmental authority for the Project, Whitehaven WS will be authorised to take the volume of overland flow water that is required for operations as approved under the environmental authority. Any volume of overland flow outside of the scope of any requirements of the environmental authority for the Project is subject to the limitations in the Water Plan.

Provided the underground water management framework is complied with, section 334ZP of the MR Act gives resource operators the right to take underground water (which is defined to be 'associated water'), where the taking or interference happens during the course of, or results from, the carrying out of activities authorised under the mining leases.

Whitehaven WS will be required to measure and report the volume of any 'associated water' taken, using the Queensland Digital Exploration Reports System within 21 days after the end of the reporting period (which ends on 31 October). The *Mineral Resources Regulation 2013* stipulates further details on the reporting requirements.

Whitehaven WS would obtain licences for any take from the Isaac River, if required.

The development of infrastructure associated with the Project (including the infrastructure corridor and proposed up-catchment diversion drain) has been identified as being likely to result in the destruction, excavation or placement of fill, over part of a watercourse. The impacts of these activities are assessed in the Surface Water and Flooding Assessment (Appendix B).

Accordingly, Whitehaven WS will seek an environmental authority with a condition that permits the infrastructure over the upstream reaches of a watercourse, in the northern part of the Project area. Assuming that this condition is inserted in the environmental authority, Whitehaven WS will be authorised to undertake this activity.

Nature Conservation Act 1992

The NC Act and its associated Regulations set up a framework for the management and conservation of native wildlife and its habitat, and protected areas (such as National Parks) in Queensland.

DES is the administering authority for the NC Act.

Permits and licences may be required to authorise impacts to, or authorise the handling of, native flora and fauna, unless an exemption applies. Matters regulated under the NC Act may also be addressed in the conditions of an environmental authority granted for the Project.

An 'endangered' plant species is located within the Project area. A protected plant clearing permit is required to clear this plant species.

No other threatened, near threatened or least concern plant species (under the NC Act) are located within the Project disturbance area.

Development of the Project is predicted to result in disturbance of animal breeding places. Whitehaven WS will prepare a species management program in accordance with section 335 of the *Nature Conservation* (*Animals*) Regulation 2020 (NC Animals Regulation) for approval by the DES prior to undertaking any activities that would disturb animal breeding places.

Aboriginal Cultural Heritage Act 2003

The main purpose of the ACH Act is to provide for the effective recognition, protection and conservation of Aboriginal cultural heritage. The ACH act is administered by the DSDSATSIP (formerly the DATSIP).

Section 23(1) of the ACH Act imposes a 'cultural heritage duty of care', which obligates all persons to take all reasonable and practicable measures to ensure that their activities do not harm Aboriginal cultural heritage. A proponent will be taken to have complied with their cultural heritage duty of care if they are acting under an approved Cultural Heritage Management Plan (CHMP) or a native title agreement (such as an Indigenous Land Use Agreement [ILUA]) or other agreement with an Aboriginal party.

Given that an EIS is required for the Project, under section 87 of the ACH Act, a CHMP must be developed and approved by the Chief Executive of the DSDSATSIP (unless cultural heritage matters are dealt with under an ILUA or other form of native title agreement, which is not relevant here). Furthermore, the environmental authority and mining leases for the Project may only be granted once the CHMP has been approved.



Whitehaven WS has formed a CHMP agreement with the Barada Barna Aboriginal Corporation, which is the prescribed body corporate for the Barada Barna People (the Aboriginal party for the purposes of Indigenous cultural heritage management). The CHMP describes the assessment of the cultural heritage values within the area, and the development of appropriate management strategies.

The CHMP was approved by the DATSIP pursuant to section 107 of the ACH Act on 31 March 2020.

Transport Infrastructure Act 1994

The overall objective of the TI Act is to provide a regime that allows for, and encourages, effective integrated planning and efficient management of a system of transport infrastructure.

The TI Act is administered by the DTMR.

The Project requires the construction of an overpass over the Norwich Park Branch Railway for access to the MIA and for connection of the Project rail spur and loop to the Norwich Park Branch Railway (Section 2.4.1). Given that approval is required to interfere with a railway under the TI Act, Whitehaven WS will seek for these works to be approved by the DTMR under section 255 of the TI Act.

Waste Reduction and Recycling Act 2011

The WRR Act sets out a 'waste and resource management hierarchy' framework for prioritising waste management practices in a structured order. The DES is responsible for administering the WRR Act.

Specifically, Chapter 8 and Chapter 8A of the Act contain provisions relating to the 'end of waste' framework that allows for certain wastes to be 'reused' as a resource. Relevantly, under these Chapters of the WRR Act, a resource that has been approved under the Beneficial Use of Waste Approval is not considered waste under the EP Act.

An End of Waste Approval may be required for any waste (as defined in section 13 of the EP Act) that is to be re-used or recycled at the Project if a relevant End of Waste Code has not been established by the DES. Accordingly, Whitehaven WS is seeking an End of Waste Approval to be granted pursuant to this EIS process.

Explosives Act 1999

The Explosives Act is administered by Resources Safety and Health Queensland (RSHQ) and regulates the handling of, and access to, explosives to protect public health and safety, property and the environment.

As the Project would involve the use of explosives, Whitehaven WS is seeking to obtain the necessary authorities required to possess (section 34), store (section 44), and use (section 53) explosives in accordance with the Explosives Act.

In undertaking the Project, Whitehaven WS will also comply with section 32 of the Explosives Act. This provision places a general duty of care on any person, who is undertaking an activity that involves explosives, to take reasonable precautions and use reasonable care to avoid endangering any person's safety, health or property.

Biosecurity Act 2014

The *Biosecurity Act 2014* provides for the minimisation of biosecurity risks, including the spread of pests. This Act is administered by the DAF.

The Act does not require that Whitehaven WS obtain any approvals, but does impose a 'general biosecurity obligation':

- to take all reasonable and practical measures to prevent or minimise the biosecurity risk;
- to prevent or minimise adverse effects on a biosecurity consideration of the person's dealing with the biosecurity matter or carrier or carrying out the activity;
- to minimise the likelihood of causing a biosecurity event, or to limit the consequences of a biosecurity event caused, by dealing with the biosecurity matter or carrier or carrying out the activity; and
- not to do or omit to do something if the person knows or ought reasonably to know that doing or omitting to do that thing may exacerbate the adverse effects, or potential adverse effects, of the biosecurity matter, carrier or activity on a biosecurity consideration.

Whitehaven WS will observe its general biosecurity obligation and any subsequent duties to notify the DAF of biosecurity risks.



Stock Route Management Act 2002

The *Stock Route Management Act 2002* is designed to manage the stock route network in Queensland. It is administered by the DoR.

There are two stock routes located in the vicinity of the Project, but these are located outside the Project area. As such, no agreement would be required to alter stock routes or reserves.

Given that there are no stock routes located within the Project area, this Act does not require further consideration.

Vegetation Management Act 1999

The VM Act is administered by the DoR and, in conjunction with the Planning Act, regulates the clearing of native vegetation in Queensland for the purpose of conserving vegetation and preventing the loss of biodiversity.

Clearing native vegetation is 'exempt clearing work' where it is undertaken in the course of carrying out mining activities on a mining lease, in accordance with section 4A of the MR Act, as the consideration of impacts on native vegetation is addressed in the EIS process and regulated by the conditions of the environmental authority.

If clearing native vegetation is required outside a mining lease, development approval for clearing native vegetation may be required under the Planning Act. However, there would be no clearing of native vegetation outside the mining lease application areas for the Project, as such no approval would be required.

Regional Planning Interests Act 2014

The DSDILGP and the DAF administer the RPI Act, which manages development on areas of regional interest in Queensland. These include priority agricultural areas, priority living areas, strategic cropping areas (formerly known as strategic cropping land) and strategic environmental areas.

A Regional Interest Development Approval (RIDA) may be required when a resource or regulated activity is proposed to be located in an area of regional interest. The Project will not impact any areas of regional interest as defined in the RPI Act, and accordingly, a RIDA is not required.

Fisheries Act 1994

The Fisheries Act governs the use, conservation and enhancement of Queensland's fisheries, resources and fish habitats. The requirement to obtain a development approval under the Planning Act can be triggered by virtue of the Fisheries Act, for those aspects of a development or project that involves either:

- disturbance of protected marine plants; or
- construction of temporary or permanent waterway barriers.

'Waterway barrier works' are defined under the Fisheries Act as a dam, weir or other barrier across a waterway, if that barrier limits fish stock access and movement along a waterway.

Three unnamed ephemeral waterways are located within the Project area. ESP (2021) found that these waterways provide poor aquatic ecology value and are largely disturbed by surrounding land use. Furthermore, species that are found within the Project area are resilient and have likely established self-sustaining communities that are not reliant on connections through the Project area to other waterways (Appendix E).

ESP (2021) concluded the impact to fish passage is considered to be insignificant, meaning that no Planning Act trigger arises (Appendix E).

All proposed works are within the mining lease application areas, are to be approved under the MR Act and are exempt from the Planning Act.

Planning Act 2016

The Planning Act establishes a framework for planning and development in Queensland. In addition to the Planning Act, the *Planning Regulation 2017* and relevant local planning schemes may regulate development activities. The Planning Act is administered by the DSDILGP and Department of Energy and Public Works (DEPW).

With the exception of development on a Queensland heritage place and some requirements relating to building work, the Planning Act does not apply to development approved under the MR Act (section 4A of the MR Act and Part 5 of Schedule 6 of the *Planning Regulation 2017*).



No Project components are located outside the mining lease application areas for the Project, and no development is proposed on a Queensland heritage place under the *Queensland Heritage Act 1992*. As such, development approval under the Planning Act is not required for the Project.

Whitehaven WS will, where relevant, comply with the relevant provisions as defined under the *Building Act 1975*.

Notwithstanding, as detailed in the Terms of Reference for the Project, the information requirements in relation to development assessment in accordance with the State Development Assessment Provisions are provided for in the Terms of Reference and would be met through addressing the Terms of Reference requirements (Attachments 1 and 2).

Queensland Heritage Act 1992

The *Queensland Heritage Act 1992* provides for the conservation of Queensland's non-Indigenous cultural heritage for the benefit of the community and future generations, and establishes the Queensland Heritage Council as an independent statutory authority.

The Queensland Heritage Council provides advice on strategic and high priority matters relating to Queensland's heritage and administers the Queensland Heritage Register, which records sites of heritage significance in Queensland.

Approvals under the *Queensland Heritage Act 1992* are only required if a heritage site will be disturbed by mining activities in the course of the Project. There are no sites within the Project area that have been identified as having non-Indigenous cultural heritage significance under the *Queensland Heritage Act 1992* (Appendix L). Accordingly, no approvals would be required.

Strong and Sustainable Resources Communities Act 2017

The object of the SSRC Act is to ensure that residents of communities in the vicinity of large resource projects benefit from the construction and operation of the projects.

The SSRC Act applies to the Project as it is a 'large resource project', which is defined to include a resource project for which an EIS is required. In accordance with the requirements of the SSRC Act, a SIA for the Project has been prepared by SMEC (2021) that provides for matters mentioned in subsection 9(3) of the SSRC Act, as well as those matters stated in the *Social Impact Assessment Guideline* (DSDMIP, 2018).

The Coordinator-General may, as part of evaluating the EIS for the Project, state conditions to manage the social impact of the Project, in accordance with section 11 of the SSRC Act.

Coal Mining Safety and Health Act 1999

The RSHQ administers the *Coal Mining Safety and Health Act 1999.* This Act regulates the operation of coal mines, in order to protect the safety and health of persons at coal mines and persons who may be affected by coal mining operations, and for other purposes.

This Act provides for a number of safety and health obligations for the owner and operator of a coal mine in Queensland, and also establishes acceptable levels of risk at which the mine and its workers may operate.

Whitehaven WS is required to comply with the requirements of this Act and its subordinate legislation, and will do so in the undertaking of the Project.

Local Government Act 2009

The *Local Government Act 2009* provides a system of local government in Queensland, including the way in which a local government is constituted and the nature and extent of its responsibilities and powers.

The proposed transportation mining lease (MLA 700065) may interfere with, or require works on, a local road within the Isaac Regional Council LGA. Therefore, pursuant to section 75 of the Act, the consent of Isaac Regional Council will be required before Whitehaven WS can undertake any works on the local road, or interfere with the use of any local road. This will be obtained separately from the EIS process, if it is required.



Building Act 1975

The Building Act regulates building work, classifications and approvals in Queensland. It is used to determine when a development requires a building approval to proceed. The Act is administered by the DEPW.

Building work that is authorised under the MR Act is considered 'accepted development', if it complies with both the Building Code of Australia published by the Australian Building Codes Board, and the Queensland Development Code published by the DEPW. Building work performed on a mining lease can be performed without obtaining a development approval if the work is consistent with these Codes.

Building work associated with the Project will comply with the Codes.

Human Rights Act 2019

The Human Rights Act now forms part of the administrative law obligations and oversight mechanisms that hold government and decision-makers to account.

The objects of the Human Rights Act are:

- to protect and promote human rights, including:
 - the right of every person to recognition as a person before the law, and to enjoy their human rights and to be entitled to equality before the law and equal protection under the law, without discrimination;
 - the right to life, and to not be arbitrarily deprived of life;
 - protection from torture and cruel, inhuman or degrading treatment;
 - freedom from forced work;
 - the right of every person lawfully within Queensland to move freely within Queensland and to enter and leave it, and the freedom to choose where to live;

- the right to freedom of thought, conscience, religion and belief, including the freedom to have or to adopt a religion or belief of the person's choice; to demonstrate the person's religion or belief in worship, observance, practice and teaching, either individually or as part of a community, in public or in private; and to not be coerced or restrained in a way that limits the person's freedom to have or adopt a religion or belief;
- the right to hold an opinion without interference and the right to freedom of expression which includes the freedom to seek, receive and impart information and ideas of all kinds, whether within or outside Queensland and whether orally; in writing in print; by way of art; or in another medium chosen by the person;
- the right of peaceful assembly and the right to freedom of association with others, including the right to form and join trade unions;
- the right, and to have the opportunity, to participate in the conduct of public affairs, directly or through freely chosen representatives and to vote and be elected at periodic State and local government elections that guarantee the free expression of the will of the electors, without discrimination, and to have access, on general terms of equality, to the public service and to public office;
- the right to own property alone or in association with others and to not be arbitrarily deprived of property;
- the right not to have the person's privacy, family, home or correspondence unlawfully or arbitrarily interfered with and reputation unlawfully attacked;
- the right of every child, without discrimination, to the protection that is needed by the child, and is in the child's best interests, because of being a child and the right to a name and to be registered, as having been born, under a law of the State as soon as practicable after being born;

- the right of all persons with a particular cultural, religious, racial or linguistic background, to not be denied, in community with other persons of the background, to enjoy their culture, to declare and practice their religion and to use their language;
- the right of Aboriginal and Torres Strait Islander peoples to enjoy, maintain, control, protect and develop their identity and cultural heritage, including their traditional knowledge, distinctive spiritual practices, observances, beliefs and teachings, and to maintain and strengthen their distinctive spiritual, material and economic relationship with the land, territories, waters, coastal seas and other resources with which they have a connection under Aboriginal tradition or Island custom;
- the right to liberty and security;
- the right to humane treatment when deprived of liberty;
- the right to a fair hearing;
- rights in criminal proceedings;
- an accused child who is detained, or detained without charge, must be segregated from all detained adults, brought to trial as quickly as possible and a convicted child must be treated in a way that is appropriate for the child's age;
- the right to not be tried or punished more than once;
- the right to not be found guilty of a criminal offence because of conduct that was not a criminal offence when it was engaged in or penalised for greater than the penalty that applied to the offence when it was committed and the right to a reduced penalty after a person committed the offence but before the person is sentenced for the offence;
- the right to education; and
- the right to health services;
- to help build a culture in the Queensland public sector that respects and promotes human rights; and
- to help promote a dialogue about the nature, meaning and scope of human rights.

The protection of human rights is in part given effect by section 58(1) of the Human Rights Act which makes it unlawful for a public entity to act or make a decision in a way that is not compatible with human rights, or to fail to give proper consideration to a human right relevant to its decision.

Relevantly:

- The Project together with its local, regional and global supply chains, will create employment and wealth for individuals of this generation and future generations and for the local and regional communities and the State of Queensland.
- The supply of metallurgical coal from the Project is essential for manufacturing steel, which is critical to infrastructure and many other applications necessary to support human rights and human life here in Queensland and across the globe.
- In relation to greenhouse gas emissions:
 - Whitehaven WS would implement a suite of mitigation and management measures to minimise the Project's Scope 1 and Scope 2 greenhouse gas emissions (Section 4.8.5);
 - valuation of potential impacts of greenhouse gas emissions has been incorporated in the Economic Assessment (Appendix K) for the Project. The Economic Assessment also includes sensitivity analysis for variations in export coal prices and the social cost per tonne of carbon emissions. The sensitivity analysis shows that the Project would still generate a substantial net benefit to the Queensland community under the scenarios considered (Appendix K);
 - the greenhouse gas emissions associated with the combustion of Project product coal will be primarily addressed and regulated by the expected export countries, under their nationally determined contributions (NDCs). These NDC's reflect national priorities, including in respect of sustainable development and considering the potential benefits of providing reliable, affordable and efficient energy and electricity to different populations; and
 - the potential implications of climate change on water resources (e.g. residual void behaviour) and flooding have been considered (Appendix B).


Whitehaven WS seeks to provide a place of employment that respects and upholds every person's human rights, and is an environment free from discrimination and safe for its workers. Further:

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- a Preliminary Risk Assessment has been conducted to assess the potential hazards associated with the Project (Section 4.13 and Appendix N); and
- the Project would operate within Whitehaven's Health and Safety management system and Queensland legislation to manage risks to workers and other persons.
- Whitehaven WS has obtained expert guidance on measures that can be implemented to avoid or mitigate adverse impacts of the Project on the environment, the local community, and future generations, and has designed the Project with consideration to:
 - relevant ecologically sustainable matters (including social equity, and conservation of biological diversity and ecological integrity) (Sections 3.9 and 5.9);
 - minimising Scope 1 and 2 greenhouse gas emissions to the greatest extent practicable (Section 4.8.4);
 - management measures that minimise adverse effects of the Project on local communities and nearby landholders (Sections 4.4.4, 4.7.4 and 4.8.4); and
 - the Project's contribution to maintaining Australia's international environmental responsibilities and the potential impacts on these (e.g. consideration of greenhouse gas emissions) (Section 4.8).
- Whitehaven WS would seek consent from any owners and/or occupiers of any restricted land within the mining lease application areas for the Project, and would seek a land compensation agreement with a landowner for land within the mining lease application area for the Project that is not owned by Whitehaven WS, in accordance with the requirements of the MR Act and MERCP Act.

Whitehaven WS has sought to recognise and manage all cultural heritage within the area of the Project, and facilitate access to the Project area for persons who have a legally recognised connection with the land underlying the Project area, including by way of:

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- entering into a CHMP with the Barada Barna Aboriginal Corporation, which underpins measures that are to be implemented to recognise and manage cultural heritage (which has been approved by the DATSIP pursuant to section 107 of the ACH Act); and
- undertaking cultural heritage surveys, which determined that there were no sites of Aboriginal or non-Indigenous cultural heritage identified within the Project area.

Whitehaven WS acknowledges that (subject to the efficacy of national and international greenhouse gas abatement measures) greenhouse gas emissions contribute to the impacts of climate change. However, the development of the Project is not incompatible with human rights and the Project should proceed having regard to the considerations under the Human Rights Act.

Commonwealth Legislation

National Greenhouse and Energy Reporting Act 2007

The Commonwealth National Greenhouse and Energy Reporting Act 2007 (NGER Act) introduced a single national framework for the reporting and dissemination of information relating to corporations' greenhouse gas emissions and energy use. The NGER Act makes registration and reporting mandatory for corporations whose energy production, energy use, or greenhouse gas emissions, meet a specified threshold. DAWE is the administering authority of the NGER Act.

Whitehaven currently reports its greenhouse gas emissions and energy production and consumption under the NGER Act.

The greenhouse gas emissions and energy data reported under the NGER Act is used by the Commonwealth Government in compiling Australia's national greenhouse gas emissions inventory to meet its reporting obligations under the United Nations Framework Convention on Climate Change.



Section 3 of the NGER Act defines the objects of the Act:

- (1) The first object of this Act is to introduce a single national reporting framework for the reporting and dissemination of information related to greenhouse gas emissions, greenhouse gas projects, energy consumption and energy production of corporations to:
 - (b) inform government policy formulation and the Australian public; and
 - (c) meet Australia's international reporting obligations; and
 - (d) assist Commonwealth, State and Territory government programs and activities; and
 - (e) avoid the duplication of similar reporting requirements in the States and Territories.
- (2) The second object of this Act is to ensure that net covered emissions of greenhouse gases from the operation of a designated large facility do not exceed the baseline applicable to the facility.

The Project is anticipated to trigger the threshold value relevant to greenhouse gas emissions (25 kilotonnes of carbon dioxide equivalent [CO₂-e] per annum) under section 13(1) of the NGER Act during the Project life, based on the Scope 1 and Scope 2 greenhouse gas emission estimates provided in Appendix H.

Whitehaven is registered under section 12 of the NGER Act. In accordance with the reporting requirements under Part 3 of the NGER Act, Whitehaven reports all energy production and consumption and greenhouse gas emissions (Scope 1 and Scope 2) from its activities. This would include any emissions and energy production and consumption from the Project, and would include, for example:

- Energy production and consumption:
 - Extraction or capture of energy from natural resources (extraction of coal); and
 - Use or disposal of energy, including own-use and losses in extraction, production and transmission (e.g. consumption of diesel and electricity).
- Greenhouse gas emissions:
 - emissions as a result combustion of fuels in stationary sources (e.g. boilers, furnaces and turbines) to generate electricity, heat or steam;

- emissions resulting from the combustion of fuels in entity-owned/controlled mobile combustions sources (e.g. trucks, trains, ships, aeroplanes, buses and cars);
- emissions resulting from the manufacture or processing of chemicals and materials (e.g. the manufacture of cement, aluminium or waste processing);
- fugitive emissions; and
- emissions from the generation of 'purchased electricity', as defined in the *Greenhous Gas Protocol*, that is consumed in its owned or controlled equipment or operations.

Native Title Act 1993

The Commonwealth *Native Title Act 1993* (NT Act) provides for the recognition and protection of native title rights in Australia. The NT Act provides a mechanism to determining claims to native title, and the rights associated with a claim to native title. The NT Act is administered by the National Native Title Tribunal (NNTT).

The Project falls within the general region over which the Barada Barna People's Native Title Determination Area (QC2016/007) is registered with the NNTT. However, native title has been extinguished over all land within the area of the mining lease applications and the land does not form part of the Barada Barna People's Native Title Determination. As a result, native title is not required to be addressed in relation to the grant of the mining leases.

1.7.7 Policies and Provisions

State and Regional Planning Policies

State and regional planning instruments are also prepared and identify critical planning matters for the State. Local governments are required to consider these in the preparation of their planning schemes.

The *State Planning Policy* (Queensland Government, 2017) is a key component of Queensland's land use planning system. The *State Planning Policy* expresses the State's interests in land use planning and development to be given effect through local government planning schemes. The relevant local government planning schemes that apply to the Project are described in Section 1.7.8.



The State Development Assessment Provisions (SDAP) provide assessment benchmarks for the assessment of development applications under the Planning Act. As described in Section 1.7.6, the Planning Act does not apply as there are no activities or infrastructure proposed to occur outside the mining lease application areas for the Project.

Environmental Protection Policies

In Queensland, there are three environmental policies that are developed under the EP Act:

- Environmental Protection (Air) Policy 2019 (Air EPP);
- Environmental Protection (Noise) Policy 2019 (Noise EPP); and
- Environmental Protection (Water and Wetland Biodiversity) Policy 2019 (Water and Wetland Biodiversity EPP).

Each of the above policies provide a framework to manage development in an ecologically sustainable manner, in relation to air, acoustic, and water and wetlands environmental values. These policies are considered below.

Environmental Protection (Air) Policy 2019

The purpose of the Air EPP is to achieve the object of the EP Act (Section 1.7.4) in relation to the air environment by:

- identifying environmental values to be enhanced or protected;
- stating indicators and air quality objectives for enhancing or protecting the environmental values; and
- providing a framework for making consistent, equitable and informed decisions about the air environment.

The Air Quality and Greenhouse Gas Assessment (Appendix H) considered the following environmental values identified in the Air EPP:

- the qualities of the air environment that are conducive to human health and wellbeing; and
- the qualities of the air environment that are conducive to protecting the aesthetics of the environment, including the appearance of buildings, structures and other property.

Air quality objectives for enhancing or protecting these environmental values relate to the following indicators:

- Human health and wellbeing:
 - fine particulate matter (PM_{2.5});
 - coarse particulate matter (PM₁₀); and
 - TSP.
- Amenity:
 - dust deposition.

Assessment of potential impacts on these environmental values in relation to the air quality objectives for the above indicators is provided in Appendix H and summarised in Section 4.8.

Environmental Protection (Noise) Policy 2019

The purpose of the Noise EPP is to achieve the object of the EP Act (Section 1.7.4) in relation to the acoustic environment by:

- identifying and declaring environmental values of the acoustic environment;
- stating acoustic quality objectives that are directed at enhancing or protecting the environmental values; and
- providing a framework for making consistent, equitable and informed decisions about the acoustic environment.

The Noise and Vibration Assessment (Appendix H) considered the following environmental value identified in the Noise EPP:

- the qualities of the acoustic environment that are conducive to human health and wellbeing, including by ensuring a suitable acoustic environment for individuals to do any of the following:
 - sleep;
 - study or learn; and
 - be involved in recreation, including relaxation and conversation.

Assessment of potential impacts on these environmental values in relation to the acoustic quality objectives for residences (for outdoors and indoors), is provided in Appendix G and summarised in Section 4.7.



Environmental Protection (Water and Wetland Biodiversity) Policy 2019

The purpose of the Water and Wetland Biodiversity EPP is to achieve the object of the EP Act (Section 1.7.4) in relation to the waters and wetlands by:

- identifying environmental values for waters and wetlands to be enhanced or protected;
- identifying management goals for waters;
- stating water quality guidelines and water quality objectives for enhancing or protecting the environmental values of waters;
- providing a framework for making consistent, equitable and informed decisions about waters; and
- monitoring and reporting on the conditions of waters.

The Groundwater Assessment (Appendix A), Surface Water and Flooding Assessment (Appendix B) and the Aquatic Ecology and Stygofauna Assessment (Appendix E) considered the environmental values for the waters of the Isaac western upland tributaries, Isaac and lower Connors River main channel and Isaac northern tributaries sub-catchments, and wetlands in the Project area and surrounds.

The environmental values for the above sub-catchments as described in the *Environmental Protection (Water) Policy 2009 Isaac River Sub-basin Environmental Values and Water Quality Objectives Basin No. 130 (part), including all waters of the Isaac River Sub-basin (including Connors River)* (Department of Environment and Heritage Protection [DEHP], 2011) are:

- aquatic ecosystems;
- irrigation;
- farm supply/use;
- stock water;
- aquaculture (Isaac western upland tributaries);
- human consumption;
- primary, secondary and visual recreation;
- drinking water;
- industrial use; and
- cultural and spiritual values.

Environmental values for wetlands to be enhanced or protected under the Water and Wetland Biodiversity EPP are the qualities of a wetland that support and maintain the biodiversity of the wetland, including:

- the health of the wetland's ecosystems;
- the wetland's natural state and biological integrity;
- the presence of distinct or unique features, endemic plants or animals and their habitats, including threatened wildlife and near threatened wildlife under the NC Act;
- the wetland's natural hydrological cycle; and
- the natural interaction of the wetland with other ecosystems, including other wetlands.

Assessment of potential impacts on these environmental values is provided in Appendices A, B and E, and summarised in Sections 4.1, 4.2, 4.5 and 4.6.

Activities with environmental impacts associated with the Project will be conducted with regard to these policies.

1.7.8 Local Planning Context

It is noted that development authorised under a mining lease does not need to consider the Planning Act, associated Regulations, planning schemes and policies (Section 1.7.6). Notwithstanding, consideration of the local planning context of the Project is described below.

Mackay, Isaac and Whitsunday Regional Plan

The Project is located within the Isaac Regional Council Local Government Area, and is covered by the *Mackay, Isaac and Whitsunday Regional Plan* (Department of Local Government and Planning [DLGP], 2012). The Regional Plan establishes a vision and direction for the region to 2031.

The Mackay, Isaac and Whitsunday Regional Plan recognises the region as containing substantial, high-quality natural resources, particularly mineral resources and productive agricultural land, and acknowledges coal mining in the Bowen Basin as the major industry in the region and the largest employer. Furthermore, the Regional Plan identifies mining as a significant opportunity for growth in the region, particularly Moranbah. The Project would provide for the opportunity to develop a coal resource economic and social growth in Moranbah.



The *Mackay, Isaac and Whitsunday Regional Plan* (DLGP, 2012) has the following strategic directions:

- sustainability, climate change and natural hazard;
- environment;
- regional landscapes;
- natural resource management;
- strong communities;
- strong economy;
- managing growth;
- urban form;
- infrastructure and servicing; and
- transport.

The Project is generally consistent with the strategic directions of the Regional Plan as:

- The Project incorporates relevant ecologically sustainable development considerations (Sections 3.9 and 5.9.2).
- The Project incorporates a range of mitigation measures to minimise potential impacts on the environment (including potential impacts on groundwater and surface water resources, biodiversity and land suitability) (Section 4).
- The Project biodiversity offset management strategy has been developed to address the potential residual impacts on biodiversity values associated with the Project (Sections 4.5 and 5.7 and Attachment 5).
- A greenhouse gas assessment for the Project has been undertaken by Katestone (2021) (Appendix H). Measures to reduce the Project's direct (Scope 1) greenhouse gas emissions are described in Section 4.8 and Appendix H.
- The potential implications of climate change on surface water resources are considered in Appendix B.
- Valuation of potential impacts of Project Scope 1 and Scope 2 greenhouse gas emissions has been incorporated into the Economic Assessment (Appendix K) for the Project.

- The Project would benefit the regional economy through the creation of employment opportunities and regional expenditure (Section 4.11 and Appendix K).
- The Project includes consideration of potential social and economic impacts, including transport networks (Sections 4.4 and 4.9 and Appendices C and I).
- Whitehaven WS is committed to making an appropriate contribution to both permanent housing and affordable housing stock in Moranbah, to ensure the Project does not adversely affect the affordability and availability of housing in local communities.
- Whitehaven WS is committed to establishing itself as a long-term community partner that will make a positive contribution to community sustainability and development at a local and regional scale.

Further, a key aim of the *Mackay, Isaac and Whitsunday Regional Plan* is to manage the cumulative social impacts on the local communities that result from development. A SIA has been prepared for the Project and is presented in Appendix C, which includes consideration of cumulative impacts to the region, and mitigation measures to manage any potential impacts (Section 4.4 and Appendix C).

Local Planning Schemes

The Project is located within the local government area of the Isaac Regional Council, which was formed from the Broadsound, Nebo and Belyando Shire Councils. At its meeting on 24 February 2021, the Isaac Regional Council adopted a new planning scheme, the *Isaac Regional Planning Scheme 2021*, which was gazetted on 19 March 2021 and came into effect on 1 April 2021 (previously governed by three different planning schemes, for the Broadsound, Nebo and Belyando Shires, respectively).

The *Isaac Regional Planning Scheme 2021* provides a framework for managing development in a way that advances the establishment of an efficient, effective, transparent, integrated, coordinated, and accountable system of land use planning, development assessment and related matters that facilitates the achievement of ecological sustainability.



The Project is generally consistent with the intent of the *Isaac Regional Planning Scheme 2021*, as:

- the Project area is within land mapped as rural, of which an appropriate land use is mining;
- the majority of the land disturbed by the Project would be moderate suitable to currently unsuitable (due to the severity of one or several limitations) land for grazing (Classes 3 and 4) (Appendix J);
- Whitehaven WS will facilitate the construction of new houses in Moranbah dedicated for Project employees and provide financial contributions over the life of the Project to the Isaac Affordable Housing Trust and/or Emergency and Long-Term Accommodation Moranbah Inc for the construction of additional affordable housing in Moranbah;
- the Project would avoid or mitigate to an acceptable or tolerable level the risks associated with current and future natural hazards and is safe from other hazards affecting community health and wellbeing (Appendices A, B, C, D, M and N);
- the potential cumulative impacts of the Project on the health, safety and amenity of residents and visitors would be managed (Appendices G, H and N);
- the Project would involve the development of a coal resource in a manner that would avoid, mitigate or manage potential impacts on cultural heritage, water quality, nearby landowners and natural environmental values (Section 4);
- the CHMP for the Project includes provisions to allow the Barada Barna People access to the Project area and surrounding areas covered by the CHMP and provides management strategies to manage cultural heritage values (Section 4.12); and
- the Project would facilitate continued and additional local and regional employment and economic development opportunities (Section 4.11 and Appendix K).

The Project will comply with the Isaac Regional Council's Local Laws and Subordinates, which include Local Laws regulating the carrying out of works on a road or interfering with its operation (Section A3.8.1).

1.7.9 Approvals Sought Through this EIS Process and Required Separate to this EIS Process

Table 1-4 provides a summary of approvals and agreements sought through this EIS process for the construction and operation of the Project. Table 1-5 provides a summary of approvals required separate to this EIS process.



Legislation	Administering Authority	Relevance to the Project	Approval to be Sought Following Completion of the EIS Process	Coordinator-General's Level of Approval Sought Through This EIS	Coordinator-General's Conditions Sought Through This EIS
Commonwealth Legis	slation				
EPBC Act SDPWO Act	DAWE	The Project comprises three related but separate actions under the EPBC Act, the mine site and access road, the water pipeline and the ETL, determined to be 'controlled actions' on 17 and 18 July 2019. The potential impacts of the Project on the MNES protected by controlling provisions will be assessed under the signed bilateral agreement between the Commonwealth of Australia and the State of Queensland (Bilateral Agreement) under section 45 of the EBPC Act. The Bilateral Agreement was signed in December 2014 and accredits the Queensland assessment regime under Part 4 of the SDPWO Act for assessment purposes under the EPBC Act. Following receipt of the Coordinator-General's Evaluation Report, the Commonwealth Minister will make an approval decision for the Project.	Approvals under section 133 of the EPBC Act for the Project components (i.e. EPBC 2019/8458, EPBC 2019/8459 and EPBC 2019/8460).	Recommendation.	Conditions for inclusion in the EPBC Act approvals relating to environmental offsets for significant impacts to MNES. The Coordinator-General's report evaluating this EIS under section 34D of the SDPWO Act.
		Reference for an EIS.			Imposed, stated and recommended conditions for relevant approvals.
MR Act	DoR, Queensland Treasury	 Mining leases will be required under the MR Act for the Project within the area of the MDL 183. Whitehaven WS has applied for the production mining leases (MLA 700049, MLA 700050 and MLA 700051). A transportation mining lease under section 316 of the MR Act would also be required for parts of the Project infrastructure corridor located outside of MDL 183, and within mining lease (ML) 70389 which is owned by South32 Eagle Downs Pty Ltd. Whitehaven WS has lodged a mining lease application for this area with the DNRME (now DoR) (MLA 700065). The taking of, or interfering with, groundwater in the area of the production mining leases will be authorised pursuant to section 334ZP of the MR Act. 	Mining leases (MLA 700049, MLA 700050, MLA 700051 and MLA 700065).	Recommendation.	Stated conditions for inclusion in mining leases for the Project.

Table 1-4 Approvals Sought Through this EIS Process



Legislation	Administering Authority	Relevance to the Project	Approval to be Sought Following Completion of the EIS Process	Coordinator-General's Level of Approval Sought Through This EIS	Coordinator-General's Conditions Sought Through This EIS			
State Legislation (Cont	tate Legislation (Continued)							
EP Act EP Regulation	DES	 Whitehaven WS has lodged an application for an environmental authority for the Project production mining leases. A request to change the application was lodged in September 2020 to include the Project transportation mining lease (MLA 700065). This EIS addresses the environmental authority application requirements listed in sections 125 and 126A of the EP Act. The environmental authority would authorise ERAs (listed under the EP Regulation) relevant to the Project. The EP Regulation prescribes ERAs (other than mining activities) that would, or have the potential to, release contaminants into the environment that may cause environmental harm. ERAs to be conducted at the Project are listed in Section 1.7.4. 	Environmental authority for MLA 700049, MLA 700050, MLA 700051 and MLA 700065.	Recommendation.	Stated conditions for inclusion in a draft environmental authority for the Project.			
		Whitehaven WS would also be required to be registered as a suitable operator under section 318F of the EP Act prior to issue of the environmental authority. This registration has already occurred.						
Water Act, MR Act Water Plan Provisions of the Fitzroy Basin Resource Operations Plan taken to be included in the Water Plan (Fitzroy Basin) 2011 – ss. 1259 and 1264 of the Water Act 2000 (DNRME, 2018a)	DRDMW, DES, DoR	As part of the Project, a raw water supply pipeline is proposed to be constructed to the Project from the Eungella pipeline network. The MR Act provides that the holder of a mining lease may take or interfere with underground water (referred to as 'associated water') in the area of the lease if the taking or interference happens during the course of, or results from, the carrying out of activities authorised under the lease. In accordance with section 334ZP of the MR Act, Whitehaven WS will be required to measure and report on the volume of any 'associated water' taken (including by evaporation if relevant) using the Queensland Digital Exploration Reports System within 21 days of the reporting period. Similarly, the Water Act provides that a holder of an environmental authority may take or interfere with overland flow water, to the extent permitted under the authority. In accordance with the MR Act, the Water Act and the complementary requirements of the EP Act, this EIS assesses the impacts of Whitehaven WS exercising its right to take or interfere with associated water and overland flow water.	Mining leases (MLA 700049, MLA 700050, MLA 700051 and MLA 700065) and associated environmental authority.	Recommendation.	Stated conditions for inclusion in the mining leases and environmental authority for the Project.			

Table 1-4 (Continued)Approvals Sought Through this EIS Process



Legislation	Administering Authority	Relevance to the Project	Approval to be Sought Following Completion of the EIS Process	Coordinator-General's Level of Approval Sought Through This EIS	Coordinator-General's Conditions Sought Through This EIS			
State Legislation (Con	itate Legislation (Continued)							
Water Act	DRDMW, DES	The Project would likely result in the destruction, excavation or placement of fill, over part of a watercourse, as a result of development of infrastructure for the Project, including the infrastructure corridor and proposed up-catchment diversion drain. An assessment of the potential impacts on the watercourse is included in the Surface Water and Flooding Assessment (Appendix B) for the Project.	Environmental authority, including a condition that permits the development of infrastructure over the upstream reaches of a watercourse, in the northern part of the Project area.	Recommendation.	Stated condition for inclusion in an environmental authority for the Project.			
SSRC Act	DSDILGP	 The SSRC Act came into force in March 2018. The SSRC Act outlines mandatory requirements for a SIA in Queensland for resource projects undertaking an EIS under the EP Act or the SDPWO Act. The object of the SSRC Act is to ensure that residents in communities in the vicinity of large resource projects benefit from the construction and operation of these projects. The SSRC Act contains three main aspects: prohibition of a 100% FIFO workforce during the operational stage of large resource projects; prevention of discrimination against local residents in recruitment of workers; and requirement to carry out a SIA as part of the EIS. 	N/A –no 'approval' required.	Final.	The Coordinator-General's report evaluating the EIS under section 34D of the SDPWO Act. Coordinator-General's decision in the Evaluation Report on the application of the SSRC Act to workers for the construction phase. Stated conditions for managing social impacts of the Project.			

Table 1-4 (Continued)Approvals Sought Through this EIS Process



Legislation	Administering Authority	Relevance to the Project	Approval to be Sought Following Completion of the EIS Process	Coordinator-General's Level of Approval Sought Through This EIS	Coordinator-General's Conditions Sought Through This EIS			
State Legislation (Conti	State Legislation (Continued)							
EP Act, MERFP Act Mineral and Energy Resources (Financial Provisioning) Regulation 2019 (MERFP Regulation)	DES, Queensland Treasury	The MERFP Act also amended the EP Act to require environmental authority holders to develop a PRC Plan setting out a detailed schedule of binding and enforceable milestones for mine rehabilitation (Schedule). As a result of transitional provisions in the MERFP Act that apply to the environmental authority application for the Project, the environmental authority application for the mining leases nor the EIS are required to contain a proposed PRC Plan and Schedule. Whitehaven WS would, if the environmental authority is granted, be required to prepare and submit a PRC Plan and Schedule to the DES for approval of the Schedule in accordance with the EP Act requirements. Once the Schedule has been approved, Whitehaven WS would be bound to implement the PRC Plan and each rehabilitation milestone identified in the Schedule.	PRC Plan and Schedule.	Not applicable – as the Coordinator-General's report evaluating the EIS under section 34D of the SDPWO Act will constitute a land outcome document for the purposes of section 750 of the EP Act.	The Coordinator-General's report evaluating this EIS under section 34D of the SDPWO Act.			
EO Act, EPBC Act	DES, DAWE	Where an activity has a significant residual impact on a prescribed environmental matter, an environmental offset may be required, to counterbalance this impact. The EO Act establishes the framework for delivery of environmental offsets at the State level, without limiting the functions or powers under the SDPWO Act. The environmental offset strategy for the Project has been developed in consideration of the EO Act and the EPBC Act. This EIS describes the prescribed environmental matters that are identified as requiring an offset to be carried out (Sections 4.5 and 5.7). In accordance with section 18 of the EO Act, Whitehaven WS proposes to prepare and submit a 'notice of election' and an offset delivery plan to DES.	Approval of notice of election and offset delivery plan.	Recommendation.	Stated conditions relating to offset requirements for the Project, for inclusion in a draft environmental authority for the Project.			

Table 1-4 (Continued)Approvals Sought Through this EIS Process



Legislation	Administering Authority	Relevance to the Project	Approval to be Sought Following Completion of the EIS Process	Coordinator-General's Level of Approval Sought Through This EIS	Coordinator-General's Conditions Sought Through This EIS				
State Legislation (Cont	tate Legislation (Continued)								
Nature Conservation Act 1992 (NC Act) NC Animals Regulation Nature Conservation (Plants) Regulation 2020 (NC Plants Regulation)	DES	A species management program would be prepared in accordance with section 335 of the NC Animals Regulation for approval by the DES prior to undertaking any activities would disturb animal breeding places. A protected plant clearing permit is required to clear plants prescribed under the NC Act that are threatened, near threatened or least concern and in particular plants under the NC Plants Regulation that are threated or near threatened. <i>Solanum adenophorum,</i> an endangered wildlife under the NC Act, was recorded within the Project area. A protected plant clearing permit is required to clear this plant species.	Approval of species management program. Protected plant clearing permit.	Nil – Whitehaven WS would apply separately to th DES for approval of the species management program and a protected plant clearing permit.					
ACH Act	DSDSATSIP	 Whitehaven WS has entered a CHMP agreement with the Barada Barna Aboriginal Corporation. The CHMP describes the assessment of the cultural heritage values within the area, and the development of appropriate management strategies. The CHMP was approved by the DATSIP pursuant to section 107 of the ACH Act on 31 March 2020. 	СНМР.	Nil – CHMP has been app	roved by the DATSIP.				
WRR Act	DES	An End of Waste Approval may be required for any waste (as per the definition of waste in section 13 of the EP Act) that is to be re-used or recycled at the Project if a relevant End of Waste Code has not been established by DES.	End of Waste Approval.	Nil – Whitehaven WS would apply separately to the DES for an End of Waste approval.					
Explosives Act Explosives Regulation 2017	RSHQ	As the Project would involve the use of explosives, Whitehaven WS is seeking to obtain the necessary authorities to possess (section 34), store (section 44), and use (section 53) explosives in accordance with the Explosives Act.	Authorities to possess, store and use explosives.	Nil – the authorities requ Explosives Act would be the EIS process.	ired under the obtained separately from				

Table 1-5 Approvals Required Separate to this EIS Process



Legislation	Administering Authority	Relevance to the Project	Approval to be Sought Following Completion of the EIS Process	Coordinator-General's Level of Approval Sought Through This EIS	Coordinator-General's Conditions Sought Through This EIS
State Legislation (Cont	tinued)				
TI Act	DTMR	Approval is required under the TI Act to interfere with a railway. The Project requires the construction of an overpass over the Norwich Park Branch Railway for access to the MIA and for connection of the Project rail spur and loop to the Norwich Park Branch Railway. Approval for these works is required under section 255 of the TI Act.	Approval for works interfering with a railway.	Nil – Whitehaven WS wo DTMR for an approval un TI Act.	
Other Approvals and C	Consents	-			
Local Government Act 2009	DSDILGP, Isaac Regional Council	The proposed transportation mining lease may interfere with, or require works on, a local road within the Isaac Regional Council LGA. Therefore, pursuant to section 75 of the Act, the consent of the Isaac Regional Council will be required before Whitehaven WS can undertake any works on the local road, or interfere with the use of any local road.	Consent from the Isaac Regional Council.	Nil – the Isaac Regional Council's consent (if required would be obtained separately to the EIS process, prior to commencement of any works on a local road (including works that interfere with the road or its operation).	
MR Act, MERCP Act	DoR, Queensland Treasury	Where the area of a proposed mining lease includes 'restricted land' (e.g. land within 50 metres [m] laterally of artesian wells, bores, dams, stockyards or water storages or land within 200 m laterally of permanent buildings used as a residence or for business), the tenement holder must obtain consent from the owners of the restricted land, for the inclusion of the restricted land areas in the surface area of the mining lease.	Consent from owners and/or occupiers of restricted land.	Nil – any relevant consents from the landown be sought separately from this EIS process.	
		Whitehaven WS would seek consent from any owners and/or occupiers of any restricted land within the mining lease application areas for the Project in accordance with the MR Act and MERCP Act.			

Table 1-5 (Continued) Approvals Required Separate to this EIS Process



Legislation	Administering Authority	Relevance to the Project	Approval to be Sought Following Completion of the EIS Process	Coordinator-General's Level of Approval Sought Through This EIS	Coordinator-General's Conditions Sought Through This EIS
Other Approvals and Co	onsents (Continued)				
MR Act	DoR, Queensland Treasury	 Under section 85 the MR Act, a mining lease cannot be granted unless: compensation has been determined (whether by agreement or by determination of the Land Court) between the applicant and each person who is the owner of land the surface of which is the subject of the mining lease application and of any surface access to the mining lease application; and 	Land compensation agreements.	the Project will be negot	ion agreements required for iated separately to the EIS ncement of any activities
		 the conditions of the agreement or determination have been or are being complied with by the applicant. 			
		Whitehaven WS would seek a land compensation agreement with a landowner for land within the mining lease application area for the Project that is not owned by Whitehaven WS in accordance with the requirements of the MR Act.			

Table 1-5 (Continued) Approvals Required Separate to this EIS Process