

Introduction 1



CONTENTS

1	Introduction	1-1
1.1	Introduction	1-1
1.2	Project Overview	1-1
1.3	Project Site	1-1
1.4	The Proponent	1-2
1.5	Project Need and Objectives	1-2
1.5.1	Project Need	1-2
1.5.2	Project Objectives	1-3
1.6	Status of Regulatory Approvals	1-3
1.6.1	Northern Territory Approval Process	1-3
1.6.2	EPBC Act Approval Process	1-3
1.7	EIS Document	1-4
1.7.1	Purpose of EIS Document	1-4
1.7.2	EIS Preparation	1-4
1.7.3	EIS Structure	1-5
1.7.4	How to Read the EIS	1-6
1.7.5	How to Make a Submission on the EIS	1-6
1.8	Acknowledgements	1-6

Tables

Table 1-1	Proponent Contact Details
-----------	---------------------------

Figures

Figure 1-1	Location Plan
Figure 1-2	Local Setting

Attachments

Attachment 1-1	Environmental Scoping Assessment
----------------	----------------------------------

1 INTRODUCTION

1.1 INTRODUCTION

This section provides an introduction to the Environmental Impact Statement (EIS) for the Eastern Leases Project (the project). It includes a discussion of the background to the project, the project proponent, project need and objectives, and an explanation of the structure of the EIS document.

1.2 PROJECT OVERVIEW

The Groote Eylandt Mining Company Pty Ltd (GEMCO) operates a manganese mine (the existing mine) on Groote Eylandt in the Northern Territory (NT) (Figure 1-1). The mine has been operating for more than 50 years. Operations at the existing mine involve mining manganese ore by open cut mining methods, and then washing the ore in a concentrator. The ore is transported from the mine by road train to GEMCO's port facility at Milner Bay (Figure 1-2).

The project will provide access to additional mining areas, located east of the existing mine. The additional mining areas comprise two exploration tenements termed the Eastern Leases. The project will use the same open cut mining methods used at the existing mine. Project mining areas will be connected to the existing mine via a new haul road (Figure 1-2). Manganese ore will be transported via this haul road to the existing mine for processing. Ore mined as part of the project will be blended with ore from the existing mine, and sold as a single product.

Project mining operations will take place concurrently with mining operations at the existing mine. The project will increase the life of the existing mine by four years. The project will not increase GEMCO's existing production rate of 5 Million tonnes per annum (Mtpa) of manganese ore.

The project is an additional mining area that will be operated as part of the existing mine, rather than an independent mine. Where possible, the project will make use of infrastructure at the existing mine and no upgrades of this infrastructure will be required. The project workforce will be drawn from the workforce at the existing mine, and the project will make use of the mine's existing equipment fleet.

1.3 PROJECT SITE

The project site, for the purposes of this EIS document, comprises the Eastern Leases and the proposed haul road corridor connecting them to the existing mine, shown in Figure 1-2.

The project site is characterised by elevated rocky outcrops and gently sloping valleys. The Emerald River and Amagula River traverse the project site. The land within and surrounding the project site comprises natural bushland that is mainly eucalypt dominated open forest, woodland and shrubland. The land within the project site is used for GEMCO's ongoing mineral exploration activities. There is no infrastructure within the project site, although there are a number of unsealed tracks. These include exploration tracks, and an unsealed 4WD access road to Dalumba Bay. The land is also used for traditional Aboriginal practices, such as such as hunting and gathering.

Groote Eylandt is Aboriginal land, scheduled under the Commonwealth *Aboriginal Land Rights (Northern Territory) Act 1976* (ALRA). The Land Council responsible for Groote Eylandt is the Anindilyakwa Land Council (ALC).

1.4 THE PROPONENT

The project proponent is GEMCO which has two shareholders, South32 Pty Ltd (60%) and Anglo Operations (Australia) Pty Ltd (40%).

BHP Billiton Manganese Australia Pty Ltd was previously a shareholder in GEMCO, however its interest is now represented by South32. South32 is an independent global metals and mining company that was formed in May 2015 following BHP Billiton Plc's demerger. The company is listed on the Australian, Johannesburg and London Stock Exchanges, and is headquartered in Perth. South32 is globally diverse, with interests in five countries, including Australia and South Africa. South32 has extensive high-quality assets in aluminium, coal, nickel, silver and manganese. Its assets include the existing manganese mine on Groote Eylandt, which accounts for more than 15% of the world's high grade manganese ore production, with approximately 70% of its production exported to global markets.

Anglo Operations (Australia) Pty Ltd is a wholly owned subsidiary of Anglo American Plc, a UK-based mining group that is listed on the London Stock Exchange. Anglo American Plc is one of the world's largest mining companies and has a diverse portfolio of interests in coal, iron ore, manganese, base metals, precious metals, and minerals.

Key contact details for the proponent are provided in Table 1-1.

Table 1-1 Proponent Contact Details

Contact	Scott Coleman	Mike Chapman
Company	South32 Pty Ltd	South32 Pty Ltd
Title	Manager Environment Improvement	Project (Study) Manager Eastern Leases
Address	108 St Georges Terrace, Perth WA 6000	GEMCO, Rowell Highway, Alyangula NT 0885
Phone	+61 438 712 189	+61 7 3237 6574
Email	scott.coleman@south32.net	mike.chapman@south32.net

1.5 PROJECT NEED AND OBJECTIVES

1.5.1 Project Need

There are substantial undeveloped manganese resources within the project site. The project is proposed in order to efficiently extract these resources in a safe and sustainable manner. Manganese ore from the project is proposed to be blended with manganese ore from the existing mine. The development of the project will allow the existing mine to continue supplying a product that is based on a specific quality and grade to market. Manganese is used for strengthening steel as well as in the manufacture of products such as batteries and toothpaste.

Based on current mine planning, the project will extend the life of the existing mine by four years. The existing mine has been operating for more than 50 years and is an integral part of the economy of Groote Eylandt. The existing mine provides significant socio-economic benefits to the local community, as well as the regional economy of the NT.

Development of the project will allow for the continuation of socio-economic benefits, including:

- Continued provision of 835 direct jobs to the local community, including Traditional Owners, during the operations phase;
- Royalties for distribution to the ALC and Traditional Owner groups;

- Royalties, government taxes and business opportunities which significantly contribute to both the local economy and the regional economy of the NT;
- Education, training and apprenticeship opportunities for local residents, including Traditional Owners;
- Provision of social infrastructure and services, specifically health services, to the communities on Groote Eylandt;
- Procurement opportunities for businesses on Groote Eylandt and, in particular, Indigenous enterprises; and
- Coordination of community events by GEMCO.

1.5.2 Project Objectives

The key objectives of the project are to:

- Develop new mining areas to supplement the manganese ore mined at the existing mine;
- Develop the project in an environmentally responsible manner, by incorporating environmental considerations into the design and operation of the mine and its eventual closure;
- Maximise the utilisation of the manganese resources and provide a reliable high quality supply of manganese ore to the export and Australian domestic market; and
- Maximise the socio-economic benefits of the project for the local region and the NT.

1.6 STATUS OF REGULATORY APPROVALS

1.6.1 Northern Territory Approval Process

The project is subject to an environmental assessment process in accordance with the NT *Environmental Assessment Act* (EA Act). The NT Environment Protection Authority (NT EPA) determined on 19 June 2014 that an EIS was required for the project. The Terms of Reference (TOR) for the EIS were published by the NT EPA on 22 September 2014. The EIS has been prepared to address the TOR.

The EIS process supports an application for Authorisation under the *Mining Management Act*. The project cannot proceed until the EIS process has been completed, and Authorisation under the *Mining Management Act* has been granted.

1.6.2 EPBC Act Approval Process

The project was declared a controlled action under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 23 June 2014. The controlling provisions are potential impacts on listed threatened species and communities and listed migratory species. The EIS prepared under the EA Act (i.e. this EIS) has been accredited to support the EPBC Act approval.

The majority of information relevant to an assessment under the EPBC Act is provided in sections related to terrestrial and aquatic ecology. Relevant sections include:

- *Terrestrial Ecology Report* (Appendix C), summarised in Section 7 – Terrestrial Ecology;
- *Aquatic Ecology Report* (Appendix D), summarised in Section 8 – Aquatic Biology; and
- *Biodiversity Offsets Strategy* (Appendix E).

These reports and sections describe potential impacts on relevant Matters of National Environmental Significance (MNES). They also describe the way in which survey guidelines, recovery plans and conservation advice prescribed under the EPBC Act were considered in the assessment of potential impacts.

A number of other sections of the EIS contain background information relevant to the assessment of impacts on MNES. These include:

- Section 2 – Regulatory Framework, which describes the EPBC Act including the assessment and approval process for the project;
- Section 3 – Project Description, which includes a section specifically addressing project alternatives in relation to MNES;
- Section 6 – Mine Rehabilitation and Closure; and
- Section 19 – Environmental Management Plan.

1.7 EIS DOCUMENT

1.7.1 Purpose of EIS Document

The purpose of the EIS document is to:

- Provide decision-makers, stakeholders and the public with information on the project;
- Discuss the need for, and alternatives to, the project;
- Describe and assess potentially adverse and beneficial environmental, social and economic impacts of the project; and
- Provide management, monitoring and control measures to be implemented in order to mitigate any significant adverse impacts of the project.

1.7.2 EIS Preparation

This EIS has been prepared to address the following:

- The TOR for the EIS prepared by the NT EPA. A table indicating the section of the EIS addressing each term is provided in Section 24 – Guide to the Terms of Reference. A copy of the TOR can be obtained from the NT EPA's webpage (www.ntepa.nt.gov.au).
- Issues raised by government and community stakeholders. The stakeholder consultation program undertaken for the project is discussed in Section 5 – Consultation.
- The risks identified in the risk assessment that was undertaken for the project (Section 4 – Environmental Risk Assessment).

In accordance with the requirements of the TOR for the EIS, a risk-based approach was used to scope the studies in the EIS. A scoping assessment was undertaken using environmental information sourced from the existing mine, as well as other available information from the project site, to identify the environmental characteristics and sensitivity of the project site. The scoping assessment also considered the nature of the project and experience with managing environmental impacts at the existing mine.

The results of this assessment were used to inform the scoping of specialist studies for the EIS. For environmental areas with potentially significant impacts, more detailed assessments such as field surveys or modelling were undertaken to ensure all significant environmental impacts were assessed in detail. For example, detailed specialist studies including extensive fieldwork programs have been undertaken for ecology, soils, groundwater, surface water, air quality, noise and archaeology, given the sensitive environmental setting associated with these aspects. The nature of the project and its location meant that some environmental aspects, particularly traffic and visual amenity, could be assessed using a higher level, qualitative assessment. The scoping assessment is provided in Attachment 1-1.

A detailed assessment of the project's environmental and social risks was also undertaken and is included in Section 4 – Environmental Risk Assessment.

1.7.3 EIS Structure

The structure of the EIS is outlined below. The EIS document consists of a main volume (Volume 1), and four volumes of appendices (Volumes 2 – 5). The main volume addresses all areas of the environmental impact assessment and summarises the detailed specialist technical reports. Volumes 2 – 5 provide the full specialist technical reports.

Executive Summary

The Executive Summary is available as a standalone document, which includes a CD insert containing the full EIS document including appendices.

Volume 1 – Main Report

Section 1 – Introduction	Section 13 – Noise and Vibration
Section 2 – Regulatory Framework	Section 14 – Visual Amenity
Section 3 – Project Description	Section 15 – Socio-economics
Section 4 – Environmental Risk Assessment	Section 16 – Archaeology
Section 5 – Consultation	Section 17 – Non-mining Waste
Section 6 – Mine Rehabilitation and Closure	Section 18 – Health and Safety
Section 7 – Terrestrial Ecology	Section 19 – Environmental Management Plan
Section 8 – Aquatic Ecology	Section 20 – References
Section 9 – Groundwater	Section 21 – Glossary
Section 10 – Surface Water	Section 22 – Abbreviations
Section 11 – Climate	Section 23 – EIS Study Team
Section 12 – Air Quality	Section 24 – Guide to the Terms of Reference

Volume 2 – Appendices A-B

Appendix A – Geochemistry Report
Appendix B – Soils Report

Volume 4 – Appendices F-H

Appendix F – Groundwater Report
Appendix G – Surface Water Drainage Report
Appendix H – Baseline Surface Water Monitoring Report

Volume 3 – Appendices C-E

Appendix C – Terrestrial Ecology Report
Appendix D – Aquatic Ecology Report
Appendix E – Biodiversity Offsets Strategy

Volume 5 – Appendices I-L

Appendix I – Air Quality Report
Appendix J – Noise and Vibration Report
Appendix K – Socio-economics Report
Appendix L – Archaeology Report

1.7.4 How to Read the EIS

If a reader is interested in all aspects of the project, then it is suggested that the entire EIS document is reviewed.

However, if a reader is only interested in specific issues, the best approach would be to gain an understanding of the project by reading the project description in Section 3 – Project Description. This section describes the proposed mining operations including site and surrounds, mining method and mine infrastructure.

The reader could then refer to the Table of Contents in order to identify sections of interest. For more detailed technical assessments, refer to the technical reports in Volumes 2 to 5.

For example, if a reader is interested in air quality impacts, the following course of reading could be adopted:

- First, obtain an understanding of the project by reading Section 3 – Project Description.
- Second, refer to the Table of Contents and note the location of the air quality section which is located in Section 12 – Air Quality.
- Finally, refer to the *Air Quality Report* (Appendix I) in Volume 5 for detailed technical information on air quality impacts.

1.7.5 How to Make a Submission on the EIS

Section 2 – Regulatory Framework describes the key steps in the EIS process. As described in that section, government agencies and the public are invited to make submissions to the NT EPA during the EIS public exhibition period. EIS submissions must be made in writing and sent to the NT EPA within the public exhibition period, as advertised in the public notice about the draft EIS.

The NT EPA will provide copies of the submissions to the proponent and the proponent will be required to provide the NT EPA with a response to submissions. The NT EPA will take the submissions and the response to submissions into account when assessing the project. Additional detail on the EIS process is described in Section 2 – Regulatory Framework.

1.8 ACKNOWLEDGEMENTS

The Anindilyakwa People are the Traditional Owners of Groote Eylandt. The authors of this EIS, and the proponent, gratefully acknowledge the assistance that the ALC and the Traditional Owners provided in relation to the EIS. This included providing access to the project site for the purpose of undertaking field surveys, participation in specialist field surveys, and involvement in the stakeholder consultation program which has helped define the mine plan.

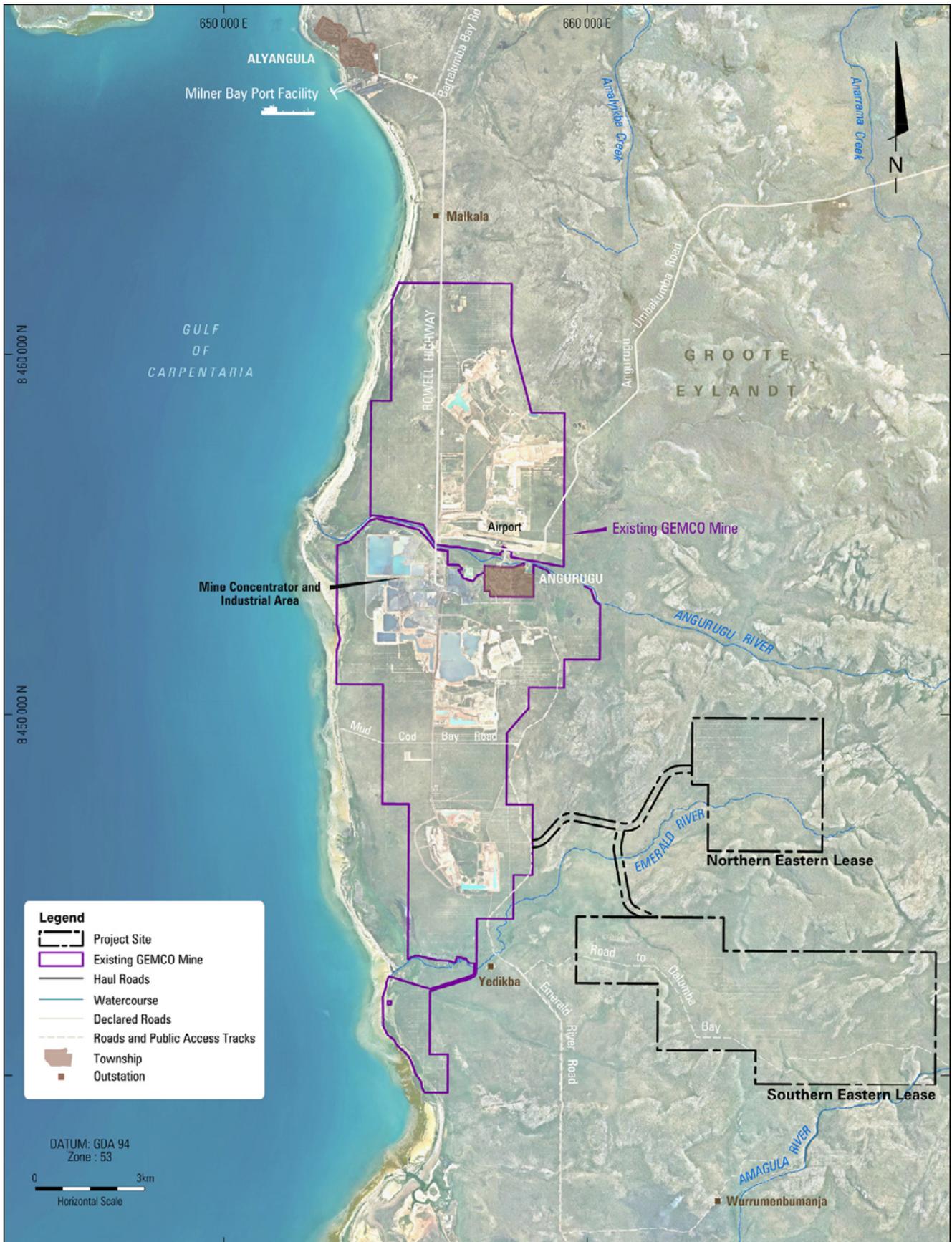
FIGURES



EASTERN LEASES PROJECT

Location Plan

FIGURE 1-1



EASTERN LEASES PROJECT

Local Setting

FIGURE 1-2

ATTACHMENTS

1-1 Environmental Scoping Assessment

ENVIRONMENTAL ISSUE	POTENTIAL IMPACTS	SCOPE OF ENVIRONMENTAL ASSESSMENT	EIS SECTION REFERENCE
Terrestrial Ecology	<p>The project is located within a sensitive ecological setting. The vegetation on the project site has not been subject to clearing, and previous field surveys have indicated the presence of a number of threatened fauna species. The project involves open cut mining, with associated vegetation clearing. It could therefore give rise to a range of potential impacts on flora and fauna.</p>	<p>A specialist terrestrial ecology assessment was required, given the sensitive project setting. The technical study included:</p> <ul style="list-style-type: none"> ■ Undertaking multi-season terrestrial ecology field surveys, including targeted searches for threatened species; ■ Preparing maps of vegetation communities within the project site, and maps of habitat types within the project site and Groote Eylandt; ■ Surveying rehabilitation at the existing mine in order to further understand the extent to which rehabilitated areas are able to provide habitat for fauna species; ■ Assessing the project's potential impacts due to clearing of vegetation, as well as indirect impacts such as dust, light, noise and changes in groundwater levels; and ■ Identifying impact mitigation measures. 	<ul style="list-style-type: none"> ■ Section 7 – Terrestrial Ecology ■ <i>Terrestrial Ecology Report</i> (Appendix C) ■ <i>Biodiversity Offsets Strategy</i> (Appendix E)

ENVIRONMENTAL ISSUE	POTENTIAL IMPACTS	SCOPE OF ENVIRONMENTAL ASSESSMENT	EIS SECTION REFERENCE
<p>Aquatic Ecology</p>	<p>The Emerald and Amagula Rivers and a number of their tributaries traverse the project site. The watercourses on the project site are considered to be in pristine condition. The project involves ground disturbance and therefore has the potential to give rise to impacts on watercourses, including impacts on water quality and surface water flows, with associated impacts on aquatic ecology.</p>	<p>A specialist aquatic ecology assessment was required, given the sensitive project setting. The technical study included:</p> <ul style="list-style-type: none"> ■ Undertaking multi-season aquatic ecology field surveys, including establishing multiple aquatic survey sites in the watercourses that traverse the project site; ■ Assessing potential impacts on aquatic ecology, including loss of aquatic habitat, erosion and sedimentation, and impacts associated with the construction of culverts within watercourses; and ■ Identifying impact mitigation measures, and providing an explanation of the project design features that limit impacts on aquatic ecology. 	<ul style="list-style-type: none"> ■ Section 8 – Aquatic Ecology ■ <i>Aquatic Ecology Report</i> (Appendix D)
<p>Groundwater</p>	<p>There are a number of aquifers within the project site, including a shallow laterite aquifer, and deeper aquifer associated with the Cretaceous sandstone. Given the presence of shallow groundwater, some vegetation communities in the project site may make use of groundwater, and watercourses may receive groundwater inflows. The project involves open cut mining which has the potential to affect groundwater levels, which may consequently impact vegetation and surface water flows.</p>	<p>A specialist groundwater assessment was required, given the presence of a shallow aquifer. The technical study included:</p> <ul style="list-style-type: none"> ■ Establishing groundwater monitoring bores and production bores within the project site; ■ Continuous logging of water levels and monthly monitoring of groundwater quality in order to obtain an understanding of the groundwater baseline; ■ 3D numerical groundwater modelling in order to understand the scale and extent of mining impacts on groundwater levels; and ■ Identifying impact mitigation measures. 	<ul style="list-style-type: none"> ■ Section 9 – Groundwater ■ <i>Groundwater Report</i> (Appendix F)

ENVIRONMENTAL ISSUE	POTENTIAL IMPACTS	SCOPE OF ENVIRONMENTAL ASSESSMENT	EIS SECTION REFERENCE
Surface Water	The project site is in the catchment of the Angurugu, Emerald and Amagula Rivers and a number of watercourses traverse the project site. The ground disturbance associated with open cut mining operations has the potential to directly disturb watercourses, impact catchment yield, surface water flows and water quality.	<p>A detailed assessment of potential impacts on surface water was required, given the sensitive project setting, and potential for impacts on surface water resources. The assessment included:</p> <ul style="list-style-type: none"> ■ Undertaking a field survey to characterise stream geomorphology and the condition of the watercourses; ■ Hydrologic and hydraulic modelling in order to identify suitable buffers around watercourses; ■ Monthly sampling of water quality within watercourses in order to characterise the baseline surface water quality in the project site; ■ Water balance modelling to size the project's water storages (dams) in order to minimise the potential for release of mine affected water; ■ Using data from the above studies to assess potential impacts on surface water, including changes to flow and quality; and ■ Identifying impact mitigation measures, including project design elements that reduce the potential for impacts on surface water resources. 	<ul style="list-style-type: none"> ■ Section 10 – Surface Water ■ <i>Surface Water Drainage Report</i> (Appendix G) ■ <i>Baseline Surface Water Monitoring Report</i> (Appendix H)

ENVIRONMENTAL ISSUE	POTENTIAL IMPACTS	SCOPE OF ENVIRONMENTAL ASSESSMENT	EIS SECTION REFERENCE
Air Quality	Although the project is in an area with a low population density, there are a few isolated residences and a popular recreation area within 5 km of the project site. The project involves open cut mining, which includes substantial earthmoving activities. It will consequently give rise to dust emissions, with the potential to impact local air quality.	<p>A specialist air quality technical study was conducted to address potential project impacts. The technical study involved:</p> <ul style="list-style-type: none"> ■ Confirming the location and nature of sensitive receptors; ■ Reviewing available background air quality monitoring data and meteorological data; ■ Emission dispersion modelling for the project, including modelling of three representative project years determined to be worst case years for air quality impacts at the sensitive receptors; ■ Determining the predicted dust levels at sensitive receptors; ■ Identifying impact mitigation measures; and ■ Determining predicted greenhouse gas emissions and detailing the measures to limit emissions, as far as possible. 	<ul style="list-style-type: none"> ■ Section 12 – Air Quality ■ <i>Air Quality Report</i> (Appendix I)

ENVIRONMENTAL ISSUE	POTENTIAL IMPACTS	SCOPE OF ENVIRONMENTAL ASSESSMENT	EIS SECTION REFERENCE
Noise and Vibration	<p>Although the project is in an area with a low population density, there are a few isolated residences and a popular recreation area within 5 km of the project site. Equipment such as dozers and trucks operating in the project site will give rise to noise emissions, potentially impacting sensitive receptors. The project will also involve blasting. The overpressure and ground vibration from blasting has the potential to impact sensitive receptors and sensitive features on the project site (i.e. rock shelters containing archaeological sites).</p>	<p>A specialist noise and vibration technical study was conducted to address potential project impacts. The technical study involved:</p> <ul style="list-style-type: none"> ■ Confirming sensitive receptors; ■ Undertaking noise monitoring, and short-term attended noise surveys, in order to characterise background noise levels; ■ Noise modelling for the project, including modelling of three representative project years determined to be worst case years for noise impacts at the sensitive receptors; ■ Determining the predicted noise levels at sensitive receptors; ■ Predicting overpressure and ground vibration levels from blasting at sensitive receptors; ■ Detailing a process that will be adopted to limit potential impacts from blasting on rock shelters; and ■ Identifying other impact mitigation measures. 	<ul style="list-style-type: none"> ■ Section 13 – Noise and Vibration ■ <i>Noise and Vibration Report</i> (Appendix J)
Visual Amenity	<p>Intervening topography and vegetation will effectively screen views of the project from sensitive receptors. The potential for the project to impact visual amenity is consequently very limited.</p>	<p>A desktop visual impact assessment was considered appropriate, given the low potential for impacts. This included preparing lines of sight to confirm that the project will not be visible from sensitive receptors.</p>	Section 14 – Visual Amenity

ENVIRONMENTAL ISSUE	POTENTIAL IMPACTS	SCOPE OF ENVIRONMENTAL ASSESSMENT	EIS SECTION REFERENCE
Socio-economics	<p>The social setting for the project is sensitive because the majority of residents of Groote Eylandt belong to a traditional Aboriginal culture which is highly sensitive to any changes to the physical and social environment. The project has the potential to give rise to both impacts (e.g. changing land use within the project site) and benefits (continuation of existing socio-economic benefits).</p>	<p>A specialist socio-economic impact assessment was conducted to gain an understanding of the social setting, evaluate the economic benefits and assess the project's potential impacts and benefits. The technical study included:</p> <ul style="list-style-type: none"> ■ Undertaking interviews and a desktop assessment to guide the planning of a stakeholder consultation program; ■ Obtaining the ALC's endorsement of the consultation approach with Traditional Owners, prior to undertaking consultation; ■ Consulting with members of all major communities on Groote Eylandt, including Aboriginal and non-Indigenous stakeholders; ■ Obtaining an understanding of the social and cultural values of the Traditional Owners, including values relating to the natural environment; ■ Describing the baseline social environment, including demography, economics and infrastructure; ■ Assessing potential impacts of the project, and describing potential benefits; and ■ Identifying measures to mitigate impacts and enhance benefits. 	<ul style="list-style-type: none"> ■ Section 15 – Socio-economics ■ <i>Socio-economics Report</i> (Appendix K)

ENVIRONMENTAL ISSUE	POTENTIAL IMPACTS	SCOPE OF ENVIRONMENTAL ASSESSMENT	EIS SECTION REFERENCE
Archaeology	<p>There is a long history of settlement on Grootte Eylandt, and there are significant archaeological sites elsewhere on the island. However, the archaeology within the project site was poorly understood, due to a lack of detailed archaeological studies undertaken within the project site. The project involves open cut mining with associated ground disturbance activities. The project therefore has the potential to impact any archaeological sites that may be present.</p>	<p>A specialist archaeological study was conducted to address potential project impacts. The technical study included:</p> <ul style="list-style-type: none"> ■ Reviewing available desktop and baseline information in order to design an archaeological survey plan; ■ Obtaining the ALC's endorsement of the survey plan prior to undertaking the field survey; ■ Undertaking an archaeological field survey of the project site. The survey was undertaken by archaeologists and Traditional Owners who could speak on behalf of country; ■ Recording and describing archaeological sites, and assessing their level of significance; ■ Assessing potential impacts of the project on archaeological sites, including impacts due to clearing, dust and blasting; and ■ Identifying impact mitigation measures. 	<ul style="list-style-type: none"> ■ Section 16 – Archaeology ■ <i>Archaeology Report</i> (Appendix L)

ENVIRONMENTAL ISSUE	POTENTIAL IMPACTS	SCOPE OF ENVIRONMENTAL ASSESSMENT	EIS SECTION REFERENCE
Sacred Sites	<p>Sacred sites are places in the landscape that have a special significance under Aboriginal tradition. They are often features in the landscape such as rivers, trees or rocky outcrops. Groote Eylandt has a long history of Aboriginal settlement and the proponent understands from consultation with the ALC that there are sacred sites (under the <i>Northern Territory Aboriginal Sacred Sites Act 1989</i>) on the project site. The ALC is currently undertaking a sacred site assessment of the project site in order to clarify the status of sacred sites.</p>	<p>The ALC is undertaking a sacred sites assessment, in consultation with the proponent. It is understood that this process will culminate in an Authority Certificate being obtained under the <i>Northern Territory Aboriginal Sacred Sites Act 1989</i>. The ALC's sacred sites assessment, and the process for obtaining the Authority Certificate, is being undertaken in a separate process to the EIS process. The Mining Agreement between the proponent and the ALC (which represents the Traditional Owners of Groote Eylandt) will address the management of sacred sites. The process for developing a Mining Agreement under the <i>Commonwealth Aboriginal Land Rights Act (Northern Territory) Act 1976</i> (ALRA) is discussed in Section 2 – Regulatory Framework. Mining cannot commence until a Mining Agreement is in place.</p>	<p>This issue is being addressed in a separate process, running in parallel to the EIS process.</p>
Non-mining Waste	<p>The project is a continuation of the existing operations and very limited additional non-mining waste will be generated on the project site. All non-mining waste will be managed in accordance with existing procedures. The project will not increase the existing mine's annual rate of production of non-mining waste. There is consequently very limited potential for the project to give rise to impacts associated with the management of non-mining waste.</p>	<p>A limited desktop assessment was considered appropriate, in accordance with the low risk of impacts related to the management of non-mining waste. It included a description of the existing waste management system and facilities, and a description of the waste streams that will be generated by the project.</p>	<p>Section 17 – Non-mining Waste</p>

ENVIRONMENTAL ISSUE	POTENTIAL IMPACTS	SCOPE OF ENVIRONMENTAL ASSESSMENT	EIS SECTION REFERENCE
Traffic	<p>The project will not generate any additional traffic movements during its operations phase, and will generate only very limited traffic during its construction phases. Further, there are very few roads on Groote Eylandt and none that are heavily trafficked. The proponent owns and maintains all the roads that provide access to the project site. The project therefore has a very limited potential to give rise to traffic related impacts, such as impacts on road pavement, levels of service or serviceability of intersections.</p>	<p>A limited desktop assessment was considered appropriate, in accordance with the low risk of traffic related impacts. It included a description of road networks and a qualitative description of project related traffic movements.</p>	<p>Section 3 – Project Description</p>