



DARTBROOK MINE

ENVIRONMENTAL MANAGEMENT STRATEGY

for Dartbrook Operations Pty Ltd

6 March 2024

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1. INTRODUCTION

1.1 BACKGROUND

Dartbrook Mine is an unincorporated Joint Venture (Dartbrook Joint Venture) between Australian Pacific Coal (AQC) and Tetra Resources Pty Ltd (Tetra). Dartbrook Operations Pty Ltd will be the appointed operating management company and the Mine Operator under Section 5 of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2022 (NSW). The Dartbrook Joint Venture will acquire AQC Dartbrook Management Pty Ltd ABN 62 007 377 577 (holder of Development Consent and Environment Protection Licence) and AQC Dartbrook Pty Ltd ABN 46 000 012 813 (holder of mining and coal authorities).

Dartbrook is located approximately 10 kilometres (km) north-west of Muswellbrook and 4.5 km south-west of the Aberdeen in the Upper Hunter region (see **Figure 1**). Dartbrook operated as an underground longwall coal mine from 1993 until December 2006, when it was placed in care and maintenance by the previous owner, Anglo Coal (Dartbrook Management) Pty Ltd (ACDM). The mine was acquired by Australian Pacific Coal (AQC) (ASX-AQC) in 2016 and the mine has remained in care and maintenance.

Dartbrook Mine is authorised by Development Consent DA 231-07-2000 granted under the *Environmental Planning and Assessment Act 1979* (EP&A Act). DA 231-07-2000 was granted on 28 August 2001 and has been modified on seven occasions (as summarised in **Table 1**). DA 231-07-2000 enables mining operations to be carried out until 5 December 2027.

Table 1 Modifications to DA 231-07-2000

Modification	Approval Date	Activities
MOD 1	19 June 2002	MOD1 was an administrative modification to DA 231-07-2000 to alter the conditions regarding blasting notifications and structural inspections.
MOD 2	16 June 2003	MOD2 approved the construction and operation of an additional emergency tailings storage cell at the Coal Handling and Processing Plant (CHPP).
MOD 3	4 November 2003	<p>MOD3 proposed the following changes to the site access arrangements:</p> <ul style="list-style-type: none"> Continued use of Dartbrook Road to provide access to the West Site; and Use of local public roads by traffic associated with Dartbrook Mine. <p>Prior to construction of the Kayuga Mine Access Road, access to the West Site was via Dartbrook Road. It was envisaged that Kayuga Mine Access Road would replace Dartbrook Mine as the primary access to the West Site. However, the Kayuga Mine Access Road was being used by trucks to haul coal to the CHPP. To avoid interactions between haul trucks and private vehicles, MOD3 proposed that Dartbrook Road should continue to be used as the primary access road for mine personnel.</p> <p>MOD3 also sought approval for locally based employees to access the West Site via local roads (Kayuga Road, Dartbrook Road and Blairmore Lane). For employees residing in the surrounding areas, these local roads provide more convenient access than the Western Access Road.</p>
MOD 4	30 March 2004	DA 231-7-2000 allowed for truck haulage of coal to the CHPP over an 18-month period. Truck haulage was to be discontinued upon completion of the conveyor system for the Kayuga Seam, which would enable coal to be transferred to the CHPP via the Hunter Tunnel. MOD 4 extended the duration of truck haulage by 3 months to allow for haulage to continue until the completion of the Kayuga Seam conveyor system.
MOD 5	4 May 2005	MOD 5 facilitated changes to the rejects disposal system at Dartbrook Mine. The approved rejects disposal system involved the commissioning of a

Modification	Approval Date	Activities
		pipeline and pumping system for the transportation and disposal of reject materials. Engineering studies indicated that this method would pose significant technical risks due to the variability in relative quantities of coarse and fine rejects produced by the CHPP. MOD5 obtained approval for rejects to be transported to the Rejects Emplacement Area (REA) using trucks.
MOD 6	16 November 2005	<p>MOD 6 provided approval for the following activities:</p> <ul style="list-style-type: none"> • Establishment of four new ROM coal stockpiles and expansion of the existing emergency ROM coal stockpile at the CHPP; • Disposal of tailings within the Wynn Seam goaf; and • Operation of a Nitrogen Injection Plant to prevent the oxidation of coal.
MOD 7	11 March 2022	<p>MOD 7 was determined by the NSW Independent Planning Commission (IPCN) on 9 August 2019. The IPCN approved the alternate mining method (bord and pillar mining) but not the proposed five-year extension to the duration of mining operations. Without the extension to operate under DA 231-07-2000 for a further five years, it was impractical to recommence mining at Dartbrook. In November 2019, an appeal was lodged against the IPCN's determination in the NSW Land and Environment Court. The court proceedings were resolved on 11 March 2022, with the proposed five-year extension of mining being approved. As a result, DA 231-07-2000 currently enables mining operations to be undertaken until 5 December 2027.</p>

Dartbrook Operations is preparing to recommence mining activities in 2023, thereby transitioning Dartbrook Mine from care and maintenance back to an operational phase. All future mining, as approved under DA 231-07-2000 (as modified), will be within the approved underground mining are and designed to minimise mine subsidence.

1.2 SITE LAYOUT

The Dartbrook Mine generally consists of the following main components:

- West Site surface facilities including workshop and maintenance facilities, administration building, underground mine portals and water management infrastructure;
- East Site surface facilities including the Coal Handling and Preparation Plant (CHPP), rail loop, train loadout facility, Rejects Emplacement Area (REA) and water management infrastructure;
- Wynn Seam underground mine workings which are decommissioned and currently used for mine water storage;
- Kayuga Seam underground mine workings, which will be active mining domain upon recommencement; and
- Hunter Tunnel which connects the underground mine workings to the East Site.

Figure 2 shows the location of these features of the Dartbrook Mine.

1.3 REGULATORY REQUIREMENTS

Dartbrook Mine operates under the regulatory approvals, authorisations and licences listed in Table 2.

Table 2 Approvals, Authorisations and Licences

Description	Type of Approval	Relevant Authority
Authorisation 256	Exploration Licence	Resources Regulator
CL 386	Mining Lease	Resources Regulator
ML 1381	Mining Lease	Resources Regulator
ML 1456	Mining Lease	Resources Regulator
ML 1497	Mining Lease	Resources Regulator
EL 4574	Exploration Licence	Resources Regulator
EL 4575	Exploration Licence	Resources Regulator
EL 5525	Exploration Licence	Resources Regulator
DA 231-07-2000	Development Consent	Department of Planning, Housing and Infrastructure
Approval for an Emplacement Area (s126 approval)	Emplacement Area Approval	NSW Mineral Resources
Stage 4 Reject Emplacement Approval C95/2265 (s126 approval)	Emplacement Area Approval	NSW Mineral Resources
Approval for 14° slopes in the REA Stage 4 (s126 approval)	Emplacement Area Approval	NSW Mineral Resources
EPL 4885	Environmental Protection Licence	EPA
Radiation Licence 5061080	Radiation Licence	EPA
WAL 30213	Water Access Licence	DCCEEW-Water

This Environmental Management Strategy (EMS) has been prepared to satisfy the requirements under Schedule 2, Condition 3.2(a) of DA 231-07-2000. It acts the overarching framework for environmental management at Dartbrook Mine. **Table 3** indicates where the relevant conditions of DA 231-07-2000 have been addressed in this Strategy.

Table 3 Regulatory Requirements

Condition	Requirement	Reference
Development Consent DA 231-07-2000		
3.2(a)	<i>Environmental Management Strategies and Plans</i> Prior to the recommencement of mining operations, the Applicant must prepare an Environmental Management Strategy for the development.	This Plan
3.2 (b)	This strategy must: (i) provide the strategic framework for environmental management of the development;	Section 2
	(ii) identify the statutory approvals that apply to the development;	Table 2

Condition	Requirement	Reference
	(iii) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Section 3.2
	(iv) set out the procedures to be implemented to: <ul style="list-style-type: none"> (a) keep the local community and relevant agencies informed about the operation and environmental performance of the development; (b) receive, record, handle and respond to complaints; (c) resolve any disputes that may arise during the course of the development; (d) respond to any non-compliance and any incident; (e) respond to emergencies; and 	Section 3.7 Section 4.3 Section 4.6 Sections 4.4 & 4.5 Section 4.7
	(v) Include: <ul style="list-style-type: none"> (f) references to any strategies, plans and programs approved under the conditions of this consent; and (g) a clear plan depicting all the monitoring to be carried out under the conditions of this consent. 	Section 2.2 Appendix A

1.4 COMMITMENT

At Dartbrook Mine, we have a demonstrated leadership commitment to the environment within our mining, processing and business activities. This commitment also encompasses our social performance within our local communities through our demonstrated behaviours and the application of the Environmental Management System (EMS). In line with this commitment, Dartbrook Mine has developed a common system and processes that will deliver planned business performance.

We are committed to the continual implementation and development of a positive culture where we are responsible and accountable for our actions at all levels of our business.

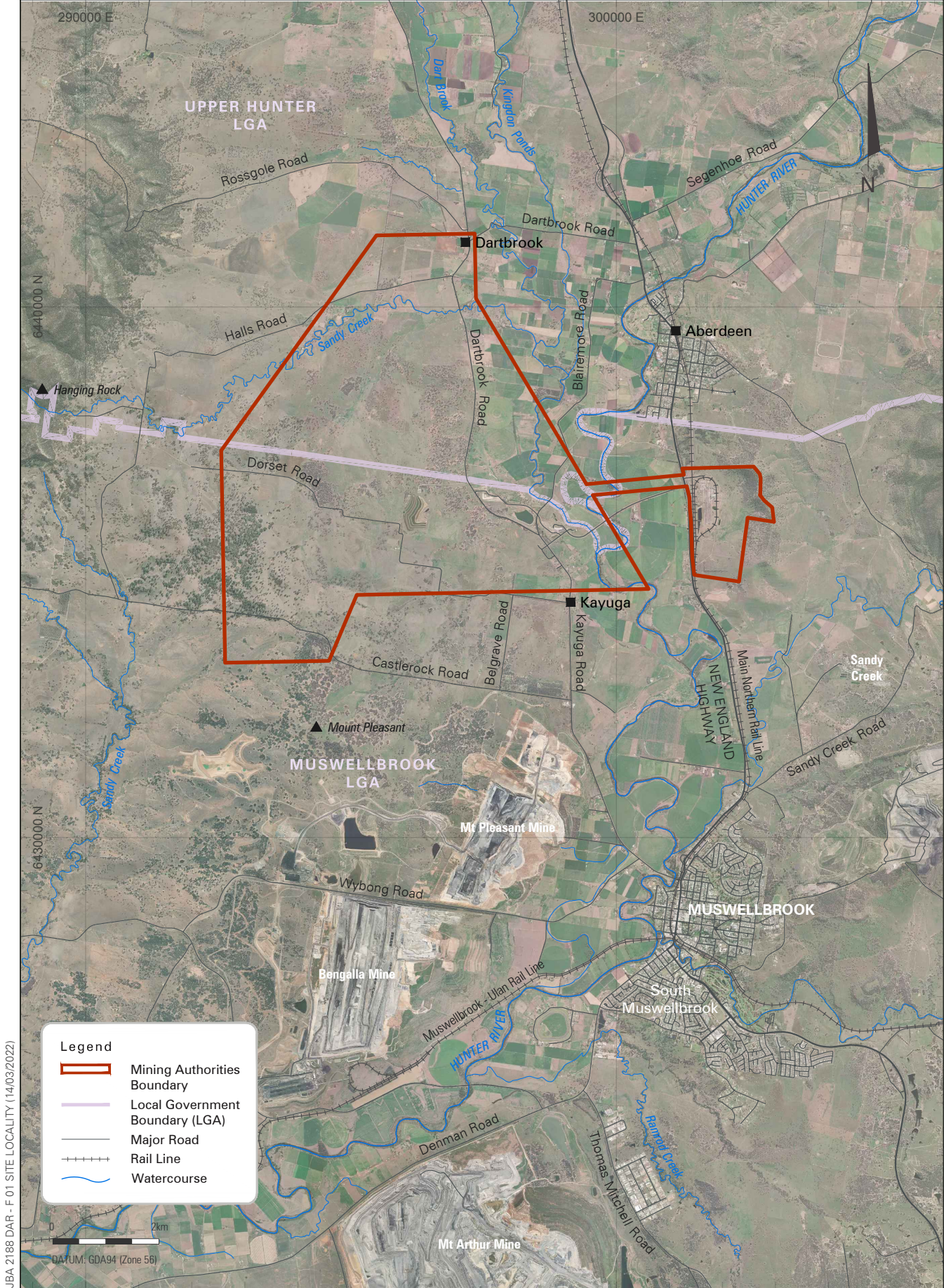
We will work actively to achieve a culture where all of our people feel like they can make a difference and want to take responsibility and ownership.

1.5 PURPOSE

Dartbrook Mine has developed an Environmental Management System based on AS/NZS ISO 14001:2004. This manual is designed to provide an overview of Dartbrook's Environmental Management System. Detailed requirements of each standard are routinely reviewed and developed to provide a simplistic and manageable process.

The environment in which we operate is paramount and is a fundamental requirement for our continued operation and growth as a coal mining and exploration company. Our success and performance will be judged by our employees, contractors, regulators, and the community and will influence our ability to further enhance and develop future resources.

Our personnel are expected to comply with the requirements of the Environmental Management System, of which the key elements are listed in this EMS. This information provides the framework to achieve our sustainable development objectives.



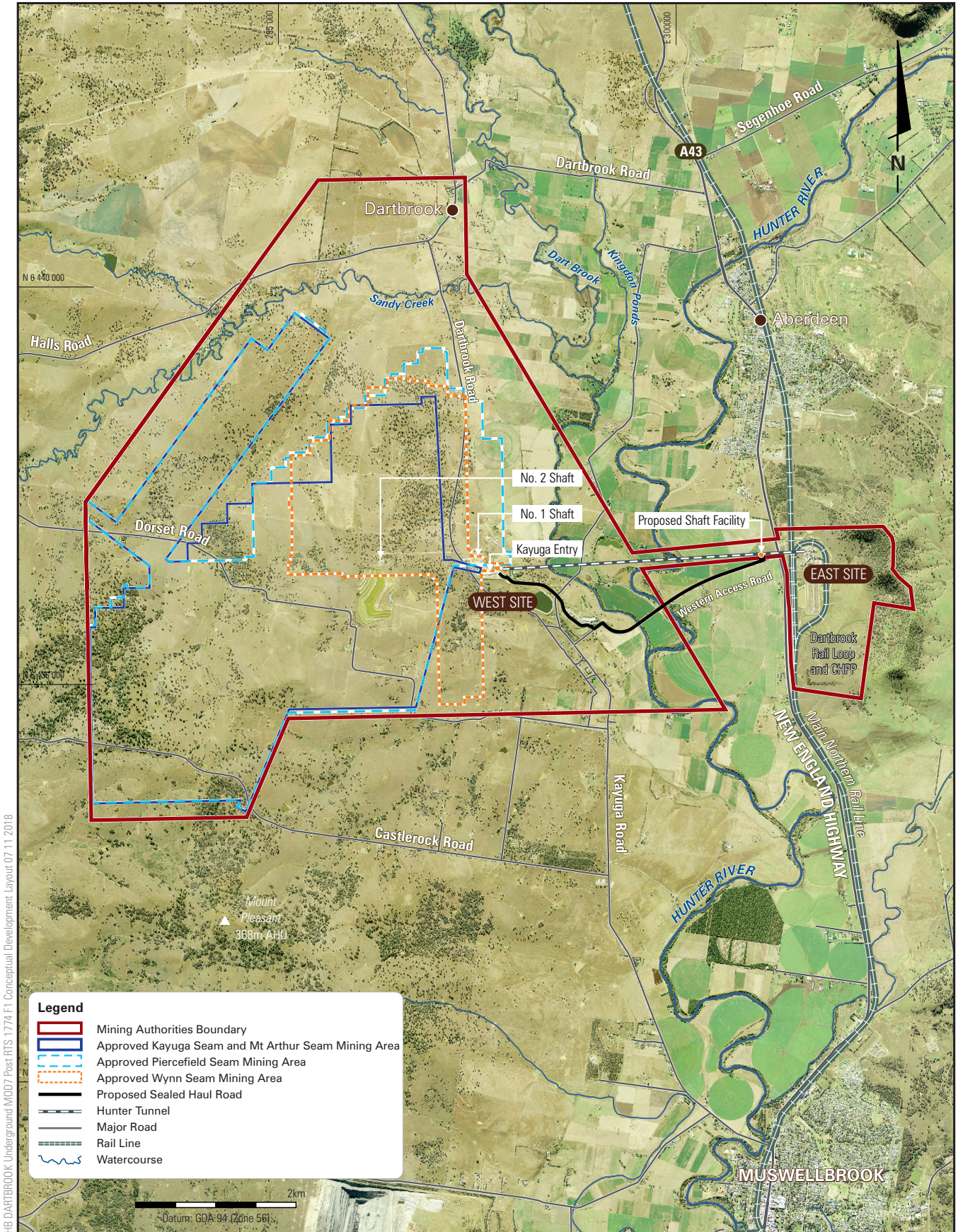
JBA 2188 DAR - F 01 SITE LOCALITY (14/03/2022)

DARTBROOK MINE



Regional Locality

FIGURE 1



HB DARTBROOK Underground MOD7 Post-RTS 1774 F1 Conceptual Development Layout 07 11 2018

DARTBROOK MINE

Conceptual Development Layout

FIGURE 2



2. ENVIRONMENTAL MANAGEMENT SYSTEM

The Dartbrook Environmental Management System is comprised of Elements and Standards, with the relationships between these illustrated in **Figure 3**.

The system model is comprised of 10 Standards (as listed in **Table 4**) with a reference to where each specific requirement is addressed in the System. These Standards are summarised in **Section 3**.

2.1 SYSTEM DOCUMENTATION

The requirement of this system is based on Dartbrook Mine’s commitment to comply with legislative and other external standards and requirements such as the following:

- AS/NZS ISO 14001:2004 Environmental Management standards.
- Dartbrook Mine’s Values and Directives.
- Relevant state and federal legislation and
- Relevant Australian Codes and Recognised Standards.

The Environmental Management System Manual sets out the expectations to be achieved and is the highest internal document generated for the management of the environment. These standards are designed to provide consistency and apply common practices.

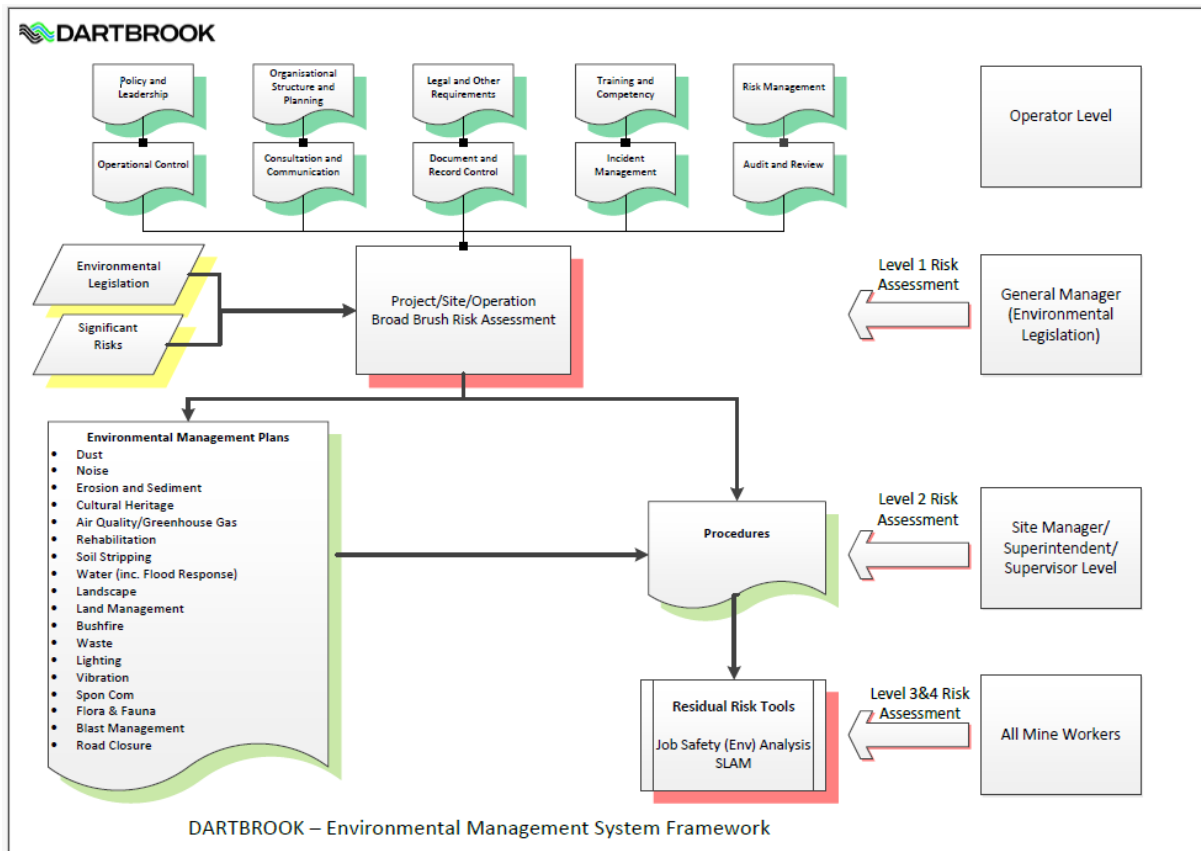
Standards are documented, maintained and implemented at the appropriate organisational level and authorised by the General Manager.

Site operational procedures are to be developed to address specific site environmental risks and hazards

Table 4 Environmental Management Standards & System

Number	HSE Standard
1	Policy & Leadership
2	Organisational Structure & Planning
3	Legal & Other Requirements
4	Training & Competency
5	Risk Management
6	Operational Control
7	Consultation & Communication
8	Document & Record Control
9	Incident Management
10	Audit & Review

Figure 3 Environmental Management System Framework



2.2 ENVIRONMENTAL MANAGEMENT PLANS

The environmental management system includes the following suite of management plans that address the environmental issues relevant to Dartbrook Mine:

- Archaeology and Cultural Management Plan;
- Blast Management Plan;
- Bushfire Management Plan;
- Air Quality and Greenhouse Gas Management Plan;
- Erosion and Sediment Control Management Plan;
- Flora and Fauna Management Plan;
- Land Management Plan;
- Landscape and Lighting Management Plan;
- Noise Management Plan;
- Pollution Incident Response Management Plan;
- Rehabilitation Management Plan;

- Site Water Management Plan;
- Soil Stripping Management Plan;
- Spontaneous Combustion Management Plan;
- Waste Management Plan; and
- Vibration Management Plan.

These management plans were prepared in accordance with conditions of DA 231-07-2000 and/or EPL 4885, and in consultation with the relevant regulatory authorities.

Each management plan typically includes the following information relevant to its subject:

- Introduction, including explanation of the aspects of the construction and operation of the project to which the plan applies;
- Management plan requirements, including a checklist of development consent conditions relevant to the plan;
- Objectives of the plan;
- Summary of predicted impacts for the particular aspect;
- Relevant performance criteria;
- Control measures;
- Monitoring program;
- Reporting;
- Response procedures; and
- Responsibilities.

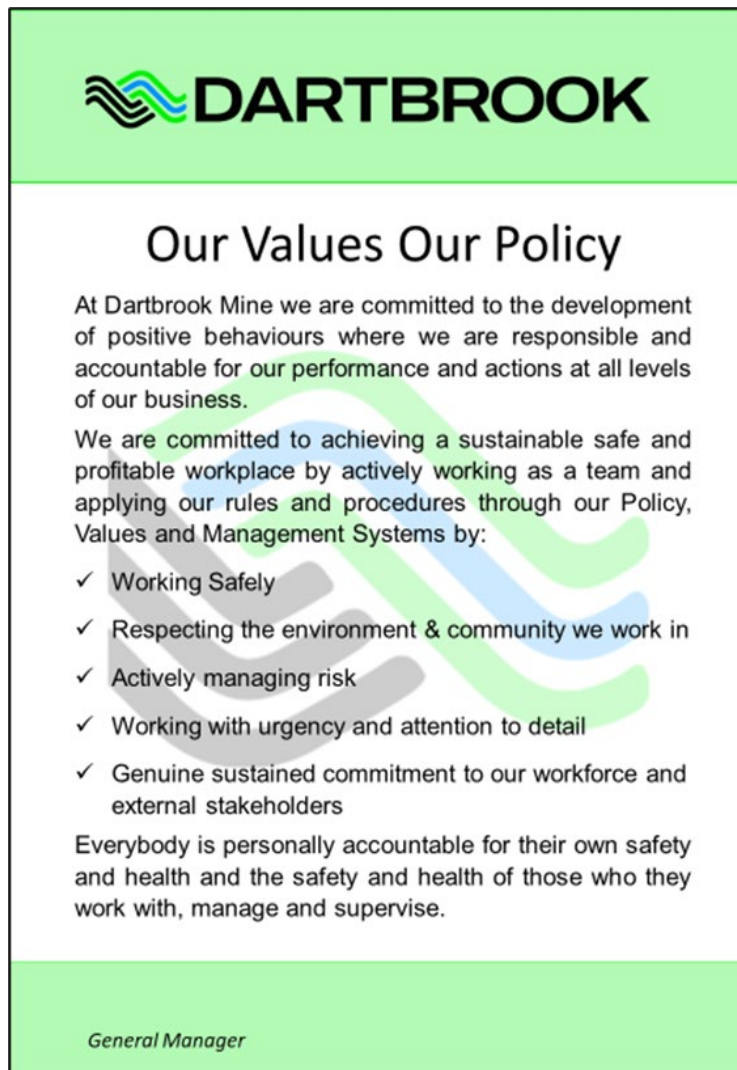
3. STANDARDS

3.1 POLICY & LEADERSHIP

The Values Statement is authorised by the General Manager and is fully endorsed, and actively supported and demonstrated by management at all levels of the business.

The Value Statement will be distributed and displayed prominently throughout the business via site and general offices and relevant documentation. Dartbrook Mine's Values and Policy Statement is reproduced in **Figure 4**.

Figure 4 Environmental Management Values and Policy Statement





DARTBROOK

Environmental Policy

At Dartbrook Operations, we are committed to the development of a positive culture where environmental management practices are applied in our everyday activities at all levels of our business.

We will act in an environmentally responsible manner and integrate environmental matters into our corporate and operational activities by:

- ✓ Complying with legislative requirements
- ✓ Communicating effectively with stakeholders
- ✓ Committing to the reduction of environmental impacts

Environmental Management is part of our DNA and is incorporated into our behaviours, management system and practices.

General Manager

3.2 ORGANISATIONAL STRUCTURE & PLANNING

All Dartbrook Mine personnel will actively demonstrate positive environmental leadership in the pursuit of achieving our objectives through the development of a culture of working safely, respecting the environment and community we work in, and by actively managing risk and working together.

All Dartbrook Mine managers and supervisors will lead by example and set the highest personal standards of environmental performance. They will promote environmental awareness amongst employees and contractors, encourage individual responsibility and accountability and continually reinforce and positively support Dartbrook Mine's Values.

Upon recommencement of operations, Dartbrook Mine will develop an organisational structure identifying key positions and skills so that environmental objectives and legislative compliance can be achieved. Management will ensure appropriate and qualified personnel are in place to achieve safe production outcomes and allocate adequate resources.

Key environmental obligations for nominated supervisory positions are specified in the environmental management plans under the EMS.

The General Manager or their designate will:

- Define responsibilities for staff and contractors that are clearly understood and regularly reviewed;

- Monitor and evaluate HSE performance of staff and contractors on a regular basis; and
- Provide adequate resources to allow Staff & contractors to achieve the objectives and targets.

Dartbrook Mine will maintain an annual business planning process identifying key business objectives and will longer range plans. The mine will develop consistent with the annual business plan, Environmental Objectives and Targets, based on specific site conditions and priorities and identified significant risks identified in the site Risk Register.

As a minimum, the Dartbrook Mine will consider:

- Environmental Objectives and Targets;
- Legal, regulatory and voluntary requirements;
- Site Environmental Risk Register;
- Outcomes of discussion with staff, contractors and stakeholders; and
- Results from monitoring or auditing activities.

3.3 LEGAL AND OTHER REQUIREMENTS

The Dartbrook Mine will have access to all relevant legal and other requirements (e.g. codes and other recognised standards) that are directly applicable to maintaining environmental compliance at each site. The mine will develop and maintain a Legal Compliance register, provide access to current versions of relevant documents that describe laws, regulations and other requirements.

This standard will be periodically reviewed and kept up to date. The review will be documented. Dartbrook Mine will comply with their legal and regulatory requirements or have specific plans in place to address deficiencies.

3.4 TRAINING AND COMPETENCY

This Standard establishes the site Training Scheme. It ensures all personnel and contractors have the necessary skills base to carry out their required activities and identifies those activities that require authorisation. It identifies the training requirements for staff and that training records are to be maintained. The system also includes the requirement for contractors and other personnel and random audits to monitor and validate compliance from internal and external trainers and training providers.

The training needs matrix will include:

- Inductions;
- Environmental Values Statement;
- Roles and responsibilities;
- Risk Management and Hazard Identification;
- Procedures, Site rules etc;
- Emergency Response; and
- Equipment operation.

A training plan is to be developed annually in line with the business plan ensuring a suitable training timetable is recorded and delivered.

3.5 RISK MANAGEMENT

The Dartbrook Mine has developed a comprehensive risk register (Broad Brush Risk Assessment) and operational risk profile.

An annual process for the development of an Environmental Risk Register will occur and be reviewed when significant operational changes take place at operations. Identification of environmental hazards are ranked in four categories: Extreme, High, Medium and Low. The Environmental Risk Register will include a summary of the relevant hazards, existing and proposed control measures, plus a cross reference to applicable legislative requirements. The risk register and profile are formally documented. The risk register forms the basis of the risk management framework.

Dartbrook Mine has developed a Risk Management Framework that comprises four distinct levels and processes, and the identification of risk management tools utilised at each level.

The framework in **Table 5** illustrates the formalised document system. The documents produced by Level 1 and 2 activities (considered “planning” activities) are placed on the document control system. Procedures and system of work documents developed from SLAM/Take 5 and Job Safety Analysis (JSA) activities (considered “doing” activities) are live documents managed by front line supervision.

Table 5 Risk Management Framework

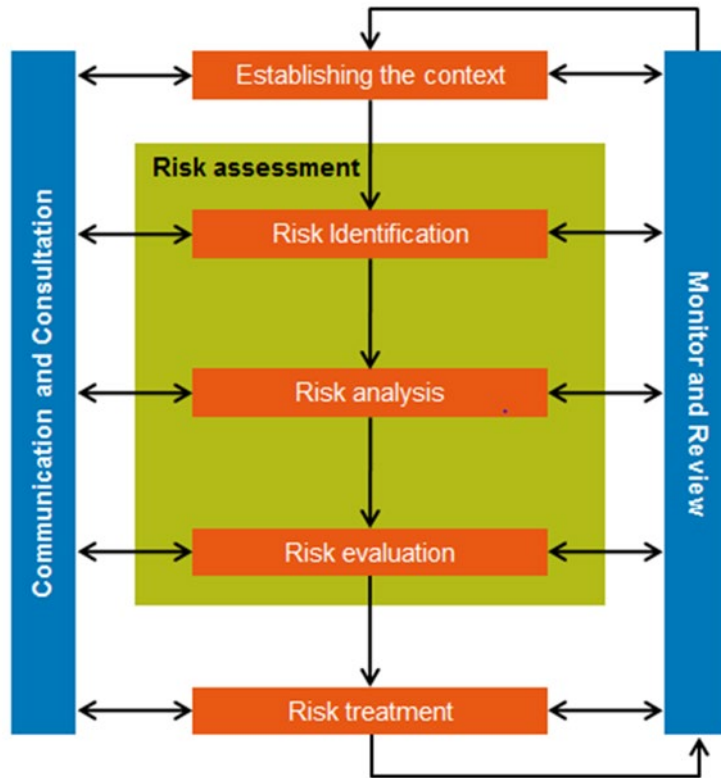
Level	Description	Risk Assessment Tools	
1	Strategic – Enterprise Risks /Major Hazard/ Full site risk assessment	<i>Fault Tree Analysis, Bow Tie, Workplace Risk and Control (WRAC) etc.</i>	PLANNING
2	Operational/Project – Specific area / major change / specific issue risk assessment	<i>WRAC, HAZOP etc.</i>	
3	Job – Routine and non-routine task planning risk assessment	<i>JSA.</i>	DOING
4	Task – Personal / continuous risk assessment	<i>SLAM / Take 5</i>	

This standard is designed to capture and adequately recognise the risks associated with changes that have potential to affect the HSE of all personnel. It defines the Trigger Action Response Plan (TARP) methodology utilised to manage and recognising change in the environment, people, equipment and process through identification of triggers to maintain a safe productive environment.

The risk management approach (see **Figure 5**) adopted by Dartbrook Operations is based on an initial assessment of level risk and the consequences of the risk to the organisation. This establishes the degree of assessment required to undertake the risk assessment.

Four distinct risk assessment levels are defined. The level of risk assessment is determined by risk criteria that apply at different organisational levels. This in turn defines the scope of the assessment, level of engagement, resources and tools needed to conduct the Health, Safety and Environment risk assessment. The 4 levels are summarised in **Table 5**.

Figure 5 Risk Management Process

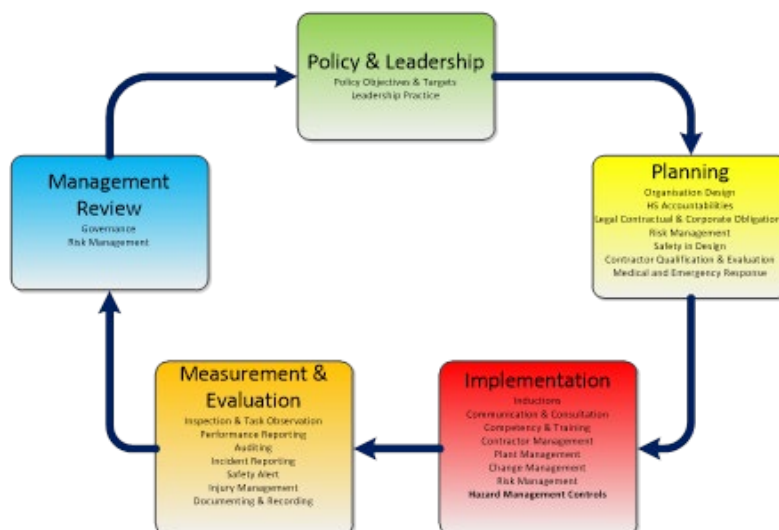


3.6 OPERATIONAL CONTROL

This standard establishes the operational management control in the development, implementation and monitoring of the required management plans, standard operating procedures and on-the-job safety (environment) analysis processes. This process is outlined in **Figure 6**.

It set the standards of the documentation, review status of procedures and ensures that the identified and statutory operational risks are documented and managed.

Figure 6 Operating Model



3.7 CONSULTATION AND COMMUNICATION

This standard is designed to ensure environmental issues and objectives are communicated to all relevant personnel and that there are mechanisms in place to identify relevant stakeholders and effective two-way communication with internal and external parties.

Information on environmental issues shall be communicated to all relevant personnel on a regular basis. The Mine will have in place a system which provides an opportunity for staff and contractors to be involved in the development of procedures and policies and to report environmental concerns or to seek information on those issues. The systems shall provide effective representation of staff and contractors in regard to the management of HSE issues. This may include committees, representatives and other mechanisms, (eg training as identified) as appropriate.

Upon commencement, processes will be established governing the communication with and, where appropriate, involvement of community stakeholders in relevant local community issues. Links with relevant governments, authorities and other organisations shall be maintained in order to monitor, contribute, and respond to likely changes in environmental legislation, standards or initiatives that may affect the mine's operations. A register for all external stakeholder communication will be maintained and reviewed.

A process for the sharing of information, both inter and intra department shall be developed, implemented and maintained.

3.8 DOCUMENT CONTROL

This standard is designed to develop an effective, simple and manageable HSE document control management system. Effective implementation of this standard is reliant on the accurate development, approval and maintenance of relevant documents and the control of the document system. The standard also considers that too many procedures and procedure not being adequately controlled will create an increase environmental risk to the business.

All environmental documents must be:

- Prepared, reviewed by authorised personnel;
- Dated and have a revision status;
- Legible and maintained in a professional manner;
- Retained for specific periods; and
- Have a document owner.

An electronic system is to be established for each operation (as required) and is to cover the following:

- Environmental Management System;
- Environmental Management Plans;
- Operating Procedures, Standard Task Instructions; and
- Registers.

Where an electronic system is not practicably accessible, hard copy libraries will be established and managed using standard document control principals. Documents will be made available to personnel whose activities are dependent upon them.

Environmental Data Management supports the continual improvement of the system. The Mine will maintain the data in an appropriate database to be able to report statistics for internal and external compliance and review, and be able to report on a weekly, monthly and annual basis on the following:

- Weather data;
- Air quality data;
- Noise and vibration data;
- Water volume and quality data;
- Waste data;
- Greenhouse gas emissions data;
- Incidents, Hazards, Near Misses;
- Incident Report sign offs;
- Outstanding actions; and
- Overdue actions.

The mine will develop a range of site specific KPIs that will enable them to achieve Environmental Targets and Objectives.

In addition, the data will be aligned to the Global Reporting Initiative (GRI) reporting protocols and reported on an annual basis. The GRI is an international independent standards organisation that helps businesses, governments and other organizations understand and communicate their impacts on issues such as GHG emissions.

The data will also be used to satisfy Australian reporting requirements such as the National Greenhouse and Energy Reporting Scheme (NGERS) and National Pollutant Inventory (NPI).

The system is regularly reviewed to ensure its continuing suitability, adequacy, and effectiveness. This standard is to ensure all necessary information is collected to facilitate formal and effective evaluation and review of the HSE management system.

Management reviews will be conducted by the General Manager or his designate and reported internally. In addition, the mine shall conduct a site Management System Assessment (MSA), which will examine the site management system including results from audits, the extent the objectives and targets are being met and the extent to which the Dartbrook Mine's system has been adopted. This MSA is a high level systems review of the Standards for continued relevance and effectiveness.

3.9 INCIDENT MANAGEMENT

This standard applies to the establishment of procedures for reporting, analysing and identifying actions to prevent reoccurrence of workplace incidents and hazards.

All incident and hazards reported will be adequately analysed and investigated by the appropriate level of management in line with the potential consequence of the incident and shall ensure essential factors and root causes are identified and corrective actions established. All incidents and hazard are recorded on a common data base and reviewed as required.

External reporting of incidents will be undertaken in accordance with the relevant conditions of DA 231-07-2000 and EPL 4885.

Dartbrook Mine will develop and implement procedures and resources to effectively respond to and manage HSE emergencies associated with their specific activity including an integrated corporate response and support.

A documented Emergency Response Plan is required to be established to manage all emergencies. The plans are communicated to all personnel and exercised at a frequency determined by risk assessment.

Emergency Response Plans are reviewed annually or after the occurrence of a significant incident or emergency.

3.10 AUDIT AND REVIEW

Auditing and reviews provide a systematic and structured approach to verifying activities are conforming to planned arrangements. Where there is non-conformance, corrective and preventative actions can be addressed and implemented. Dartbrook Mine has a three-level audit program.

1. Site, operational internal audits,
2. Group compliance audits and
3. External third-party audits.

Each level of audit program is designed to measure the effectiveness of the management system and to identify areas for improvement. The standard covers the audit scope, frequency, responsibility, requirement and reporting results. An audit program will be developed based on the significance of the activities' impact on HSE outcomes and results from previous audits.

Incidents and non-conformances once identified are reported and analysed. Corrective, Preventative Actions are taken and recorded and registered. Outstanding CPAR's are allocated an owner and monitored to ensure plans are completed.

The aim of this standard is to manage and report on actions taken and required to monitor and manage safety and health and environmental performance.

Corrective, Preventative Action Requirements can be generated from:

- Incidents;
- Audits and Management Reviews;
- Change Management System; and
- Management Plans, Compliance Meetings.

4. IMPLEMENTATION

Specific management principles for each environmental aspect are provided in the relevant management plan (see **Section 2.2**). However, the EMS framework includes the following general principles which are applicable to all environmental aspects:

- Environmental Management Responsibilities;
- Monitoring and Reporting;
- Complaints Handling Protocol; and
- Dispute Resolution Procedures.

4.1 ENVIRONMENTAL MANAGEMENT RESPONSIBILITIES

The HSEC Manager has the overall responsibility for environmental management at Dartbrook Mine. This will include responsibility for the preparation of management plans, compliance with the regulatory requirements, and management of any complaints. The Environmental Officer has the authority to take reasonable steps to avoid or minimise unintended or adverse environmental impacts and failing the effectiveness of such steps, to stop work immediately if an adverse impact on the environment is likely to occur. The HSEC Manager reports directly to the General Manager.

A small team of environmental professionals will report directly to the HSEC Manager and will have specific responsibilities for implementing and monitoring environmental controls and conditions. In addition, Construction and Production Supervisors will indirectly report to the HSEC Manager, with responsibilities for each environmental aspect which are specified in the relevant management plans.

All contractors working on the site will have relevant environmental conditions included in the conditions of their contracts to ensure that their activities are conducted in compliance with relevant requirements, and to the satisfaction of the HSEC Manager.

4.2 MONITORING AND REPORTING

The monitoring and reporting of Dartbrook's environmental performance is a key component of the environmental management system. Monitoring is currently being undertaken for air quality, surface water, groundwater and greenhouse gas emissions. Noise monitoring will resume upon recommencement of mining operations.

The monitoring sites within the Dartbrook environmental monitoring network are shown in **Appendix A**. Further details on these monitoring programs (such as frequency and parameters) are provided in the relevant environmental management plans.

Regular reporting of environmental data will be conducted to comply with the conditions of DA 231-07-2000 and EPL 4885, and to inform stakeholders of Dartbrook's environmental performance and compliance. The regular reporting of environmental performance will identify any areas of non-compliance and appropriate remedial actions.

4.2.1 Internal Reporting

The HSEC Manager will prepare monthly environmental reports which include:

- Monitoring results and assessment of compliance with relevant criteria;
- Environmental compliance issues;

- Summary of any complaints;
- Discussion of any environmental control measure performance issues; and
- Specification of any necessary amendments to operational procedures or additional environmental control measures.

These monthly reports will be reviewed by Dartbrook mine management at monthly management meetings. This process ensures that non-compliances are identified, and that appropriate remedial measures are developed and implemented.

4.2.2 Regulatory Reporting

DA 231-07-2000 requires the preparation of an Annual Review which reports on the following:

- Environmental monitoring results;
- Complaints received;
- Incidents and non-compliances;
- Water management (including a water balance);
- Monitoring of declared dams (i.e. the Staged Discharge Dam);
- Consultations with Aboriginal stakeholders (if required during that reporting period);
- Rehabilitation; and
- Management actions required by management plans.

The *Protection of the Environment Operations Act 1997* (POEO Act) requires publication of monitoring data that is required to be collected under an EPL. Dartbrook's EPL 4885 requires the monitoring of particulate matter (dust), noise, meteorology, groundwater, surface water (discharges only) and soil quality (at the effluent application area). These data will be published on the data website consistent with the monitoring frequency under EPL 4885.

4.3 COMPLAINTS

Dartbrook Mine maintains a dedicated, publicly advertised complaints hotline that operates 24 hours per day, 7 days per week.

Dartbrook Mine has a Community Complaints Protocol which outlines the procedures for dealing with complaints received from community members. All legitimate complaints will be recorded in the Complaints Register and investigated by the Environmental Officer. The following information will be recorded for each complaint:

- The date and time of the complaint;
- The method by which the complaint was made;
- Any personal details of the complainant (or if no such details were provided, a note to that effect);
- The nature of the complaint; and
- The response taken by Dartbrook in relation to the complaint; and
- If no action was taken by MGO, the reasons why no action was taken.

The Complaints Register is regularly updated on the Dartbrook website.

4.4 INCIDENTS

The definition of an 'incident' under DA 231-07-2000 is:

An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance.

Condition 9.3(a) of DA 231-07-2000 requires notification of the relevant regulators immediately upon becoming aware of an incident that has occurred. The current practice is to report incidents on the NSW Planning Portal.

EPL 4885 also requires notification of the EPA in the event of an incident. Condition R2 requires that incidents are initially reported via the EPA's environment line (131 500), followed by a written notification within 7 days.

4.5 NON-COMPLIANCES

The definition of a 'non-compliance' under DA 231-07-2000 is:

An occurrence, set of circumstances or development that is a breach of this consent.

Condition 9.3(b) of DA 231-07-2000 requires that the Department of Planning be notified of non-compliances within 7 days. The current practice is to report non-compliances on the NSW Planning Portal. If an event constitutes both an incident and non-compliance, that event only needs to be reported as an incident.

4.6 DISPUTE RESOLUTION

If there is a dispute with a landowner regarding impacts due to Dartbrook Mine (and any associated requests for mitigation or compensation), DA 231-07-2000 provides the option for either party to refer the dispute to the Planning Secretary for an independent resolution.

4.7 EMERGENCIES

Emergencies are to be managed in accordance with the Emergency Response Plan, which includes the following:

- Emergency warning systems;
- Emergency muster locations;
- Notification of emergency services; and
- Training exercises.

The Statutory Mine Manager is responsible for the implementation of emergency procedures.

Any emergencies associated with the Staged Discharge Dam are to be managed in accordance with the Dam Safety Environment Plan.

5. DEFINITIONS

Abbreviation	Meaning
EMS	Environment Management System based on AS/NZS ISO 14001:2004 Environmental Management standards
Accident / Incident	An unplanned event that causes an uncontrolled action resulting in injury or damage or has the potential to create injury or damage.
Near Miss	An incident classification, (a free lesson) An occurrence that had the potential to become a significant incident/accident.
Notifiable Incident	An Incident required to be reported to external stakeholder by the Project Manager / Senior Mining Official within a specified time. A legislative requirement.
Hazard	A source of potential energy or illness to a person, or a situation that has the potential to cause loss of life.
HIRARC	Hazard Identification, Risk Assessment, Risk Control
EMP	Environmental Management Plan
Management Plans	A Document that specifies, as applicable, the aims and objectives of an activity. It states what will be done and by whom; when, where; and how; what materials, equipment and documentation will or are to be used and how it is to be controlled.
Risk Management	The systemic application of management policies, procedures and practices to the tasks of identifying, analysing, assessing, treating and monitoring risk.
Risk Analysis	The process of determining the likelihood and consequence of Hazard, using available information.
Residual Risk	Risk that remains after controls have been put in place.
Risk Assessment	The process used to determine risk management priorities by evaluation and comparing the level of risk against predetermined standards, eg. target risk levels, or other criteria.
Formal Risk Assessment	A formal documented process used to develop SOP's, Hazard Management Plans, introducing new or modified plant & equipment.
Recognised Standard	A Recognised Standard is made by the Minister for the purpose of stating ways to achieve an acceptable level of risk to persons arising out of coal mining operations.
Standard Operating Procedure	Is a documented Procedure developed through consultation with mine workers to achieve an acceptable level of risk
Standard Work Instruction	A process that needs to be followed to obtain an end result that achieves an acceptable level or standard (eg. panel advance).
Job Safety Analysis	A process used to identify all critical tasks, through a written procedure, conducted by the supervisor and the work team doing the specific task at the task location.

Abbreviation	Meaning
Standard	An acceptable measure of performance or quality that determines the minimum criteria required to ensure a safe and healthy work environment.
WRAC	Workplace Risk Assessment & Control
Guideline	A recommended course of action designed to achieve a specific outcome.
Auditor:	A person who reviews documented activity to ensure they are being carried out.
Emergency	A situation that is developing or has developed suddenly and unexpectedly and poses a threat to life, property or the environment. It necessitates immediate and positive action to reduce impact, loss or injury.
Risk	The chance of something happening that may cause injury, illness, equipment damage or business interruption and measured in terms of consequences, likelihood and frequency of exposure.
Trigger	A condition or an event that identifies a change in the environment, people, equipment and process. It must be able to be measured or observed and on being reached, requires initiation of predetermined action responses.
Trigger Action Response Plans (TARP)	Actions to be taken in the event of an alarm or trigger level being reached to ensure that action is taken to an early stage to prevent injury or an escalation of the condition. A change management process.