

T3 | Scope for the Cudmore
Resources Reserve
Operations Plan





Report

Scope for Cudmore Resources Reserve Operations Plan

13 JUNE 2012

Prepared for
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Purpose of the Operations Plans

The Cudmore Resources Reserve is designated under the *Nature Conservation Act 1992* (NC Act) and is jointly management by the Environment Chief Executive (Department of Environment and Heritage Protection (DEHP)); and Mining Chief Executive (Department of Natural Resources and Mines (DNRM)). The overall intent of the reserve is to allow the government to manage both the economic resources located under the Reserve and the ecological and cultural values that are an extension of the values present in the adjacent Cudmore National Park.

The Cudmore Resources Reserve is located within the north-western corner of the Project area. At its closest point the national park is located approximately 114 m from the boundary of Mining Lease (ML) 70425 and is shown in Figure 1.

The purpose of the Cudmore Resources Reserve Operations Plan (Operations Plan) is to outline the proposed establishment and operation of the mine, identify potential environmental impacts to the ecological and cultural values present within the Reserve and outline the proposed mitigation and management measures currently proposed. The Operations Plan will assist the joint trustees in the drafting of a Management Plan for the Cudmore Resources Reserve as required by the provisions of the NC Act and associated Regulations.

The Operations Plan will be prepared by the Proponent and will deal specifically with those activities proposed to occur within and beneath Cudmore Resources Reserve. This plan will detail:

- The ecological and cultural values of the area of Cudmore Resources Reserve subject to ML 70425;
- The mining and associated activities which are proposed to occur within the area of Cudmore Resources Reserve subject to ML 70425;
- The likely impacts to the identified ecological and cultural values which may be caused by the proposed mining and associated activities within the area of Cudmore Resources Reserve subject to ML 70425;
- Environmental objectives and commitments for the area of Cudmore Resources Reserve subject to ML 70425; and
- Control strategies and indicators to measure and ensure environmental objectives and commitments are being achieved.

Legislative Background

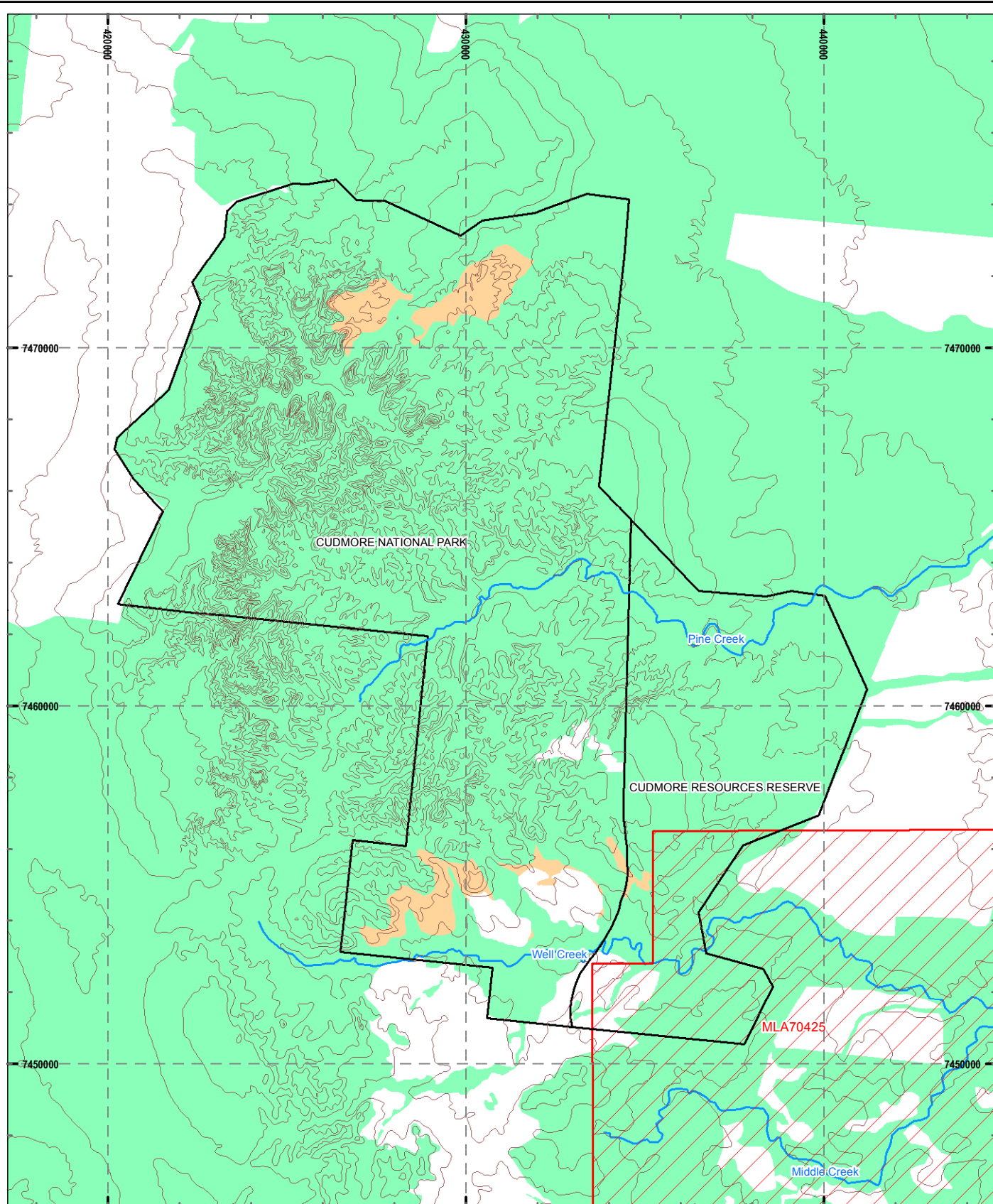
Cudmore Resources Reserve is designated under the *Nature Conservation Act 1992* as a Resources Reserve and is to be managed in accordance with Section 21 of the same Act. Section 21 of the Act states that the management principles of resources reserves are as follows:

- a) recognise and, if appropriate, protect the area's cultural and natural resources; and
- b) provide for the controlled use of the area's cultural and natural resources; and
- c) ensure that the area is maintained predominantly in its natural condition.

The Reserve was gazetted as a Resources Reserve on 23 October 1998. The Reserve does not currently have an area specific management plan.

Cudmore Resources Reserve is identified beneath Schedule 2, Part 1 of the *Nature Conservation (Protected Areas Management) Regulation 2006*, as a Resources Reserve placed under the management of joint trustees.

This drawing is subject to COPYRIGHT.



0 1 2 3 4
km

Scale: 1:150,000

Projection: GDA94, MGA Zone 55



Kevin's Corner MLA70425



Water Courses



Contours 20m

Vegetation Management Status



Endangered Sub-dominant



Endangered Dominant



Of Concern Sub-Dominant



Of Concern Dominant



Not of Concern

Source: Aerial Imagery sourced from Bing Map Aerials, Microsoft Corporation and its Data Suppliers, 2011; Cadastre sourced from DERM DCDB, 2011; Drainage sourced from Streetspro, 2011.

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Kevin's Corner Project
Supplementary Environmental Impact Statement

BIOPHYSICAL CONSTRAINTS

URS

SCOPE FOR THE CUDMORE RESOURCES RESERVE OPERATIONS PLAN

Figure: **2-1**

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A4



2 Legislative Background

Table 2-1: Mining Lease in relation to Cudmore Resource Reserve and Cudmore Park below presents the area that the mining lease occupies and the area of the Cudmore National Park. It also presents the area that the mining lease occupies within the Cudmore National Park.

Table 2-1: Mining Lease in relation to Cudmore Resource Reserve and Cudmore Park

Location	Area (ha)
Cudmore National park	20,400
Cudmore Resource Centre	6,900
Mining Lease	37,379
Mining Lease within Cudmore Park	1,673

- Environment Chief Executive (DEHP); and
- Mining Chief Executive (DNRM).

In accordance with Schedule 2 part 2 of the *Nature Conservation (Protected Areas Management) Regulation 2006*, the joint trustee is given the powers of the Chief Executive (Environment), other than the power to:

1. Charge a fee for entry to the park; or
2. Grant any of the following:
 - a) A permit to take, use, keep or interfere with cultural or natural resources;
 - b) An apiary permit;
 - c) An aboriginal tradition authority or island custom authority;
 - d) A commercial activity permit or special activity permit;
 - e) A stock grazing permit, stock mustering permit or travelling stock permit; or
3. Enter into a commercial activity agreement; or
4. Approve the use of a herbicide or pesticide.

The issue of joint trustees implies that due recognition needs to be given to both the environmental and commercial resources values of the Reserve.

Operations Plan Framework

Table 3-1 Operations Plan Framework

Section	Description	Purpose
1	Introduction	<ul style="list-style-type: none"> Provides background and overall purpose and objective of the Operations Plan.
1.1	Overview of the Project & Cudmore Resources Reserve	<ul style="list-style-type: none"> Provides a description of the Project, the geographical location and context, the Proponent and the general project rationale. Describes the Cudmore Resources Reserve and provides details of the purpose, role and relationship to the Resources Reserve Project.
1.2	Need and Purpose of the Operational Plan	<ul style="list-style-type: none"> Provides an outline as to why the Operations Plan is required. Details the need for an Operations Plan to be prepared to manage the identified Resources with the reserve. Describes the purpose of the Operational Plan and its role in managing the activities associated with the project within the Cudmore Resources Reserve.
1.3	Relationship to other Management Plans	<ul style="list-style-type: none"> Details the three management plan documents to be developed for the Project. Outlines the differing levels of applicability of the management plans to the Cudmore Resources Reserve. Describes the relationship of the Operations Plan to the other management plans. Details the entities responsible for drafting, implementation and management of the management plans.
1.4	Contents of the Operational Plan	<ul style="list-style-type: none"> Describes the outlines and content of the Operations Plan.
1.5	Approval and Review of the Operational Plan	<ul style="list-style-type: none"> Details periodic review process to be followed to update and maintain the accuracy and completeness of the Operations Plan. Outlines the entities responsible for the updating of the document and those involved in the approval of these periodic updates.
2	Overview of the Cudmore Resources Reserve	<ul style="list-style-type: none"> Describes the legislative framework of the Cudmore Resources Reserve, the linkage of the project to the Cudmore National Park and the key environmental values of the Cudmore Resources Reserve.
2.1	Legislative Framework	<ul style="list-style-type: none"> Details the gazettal, designation and management procedures of the Cudmore Resources Reserve under the <i>Nature Conservation Act 1992</i>. Describes the role, function and powers given to the Department of Environment and Heritage Protection and the Department of Natural Resources and Mines as joint trustees under the <i>Nature Conservation (Protected Areas Management) Regulation 2006</i>.
2.2	Linkage to Cudmore Resources Reserve	<ul style="list-style-type: none"> Describes the relationship between the Cudmore National Park, the Cudmore Resources Reserve and the Project, including the geographical context, land uses, tenure and associated matters.
2.3	Overview of Key Environmental Values	<ul style="list-style-type: none"> Provides a description of the key environmental values of the project area within the Cudmore Resources Reserve, including: <ul style="list-style-type: none"> Biophysical Values – including the geology, soils and

3 Operations Plan Framework

Section	Description	Purpose
		<p>topography, water and waterways and ecological values.</p> <ul style="list-style-type: none"> ○ Cultural Heritage Values – including the indigenous and non-indigenous heritage values, scenic amenity and current land uses. ○ Resources Values – including the geology and geomorphology, location and extent of coal reserve, construction phase activities and mine operation.
3	Project Description/Mining Operations	<ul style="list-style-type: none"> • Describes the mining activities, including the construction phase activities, Surface and subsurface operations and associated infrastructure and the decommissioning and rehabilitation activities.
3.1	General Description	<ul style="list-style-type: none"> • Outlines the mining activities to be undertaken as part of the Project, including: <ul style="list-style-type: none"> ○ ML and coal seam – description of the ML and coal seam within the Cudmore Resources Reserve. ○ Mining operations and sequencing – details the mining operations, components and activities to be undertaken, including the construction phase, staging of mining operations and decommissioning and rehabilitation. ○ Mine disturbance area – outlines the area of disturbance resulting from the mining operations within the Cudmore Resources Reserve. ○ Mine infrastructure and access – describes the infrastructure associated with the Project. ○
3.2	Sub-surface Activities	<ul style="list-style-type: none"> • Details the sub-surface activities associated with the Project within the Cudmore Resources Reserve, including: <ul style="list-style-type: none"> ○ Construction phase activities – including site preparation, access, initial temporary infrastructure and civil works; ○ Project operations – including details of the run of mine, mine sequencing and mine life, mining methods, mining equipment and coal handling and production. ○ Associated infrastructure – including water and power supply, raw and fire water storage and ventilation shafts; and ○ Decommissioning and rehabilitation. ○ Mapping of the ecological values of the Reserve area will be used to minimise the impacts of sub-surface infrastructure and activities on areas of high habitat value as far as practicable.
3.3	Surface Activities	<ul style="list-style-type: none"> • Details the surface activities associated with the Project within the Cudmore Resources Reserve, including: <ul style="list-style-type: none"> ○ Construction phase activities – including site preparation, access, initial temporary infrastructure and civil works; ○ Project operations – including details of any surface mining activities such as fire break management, stockpiling and maintenance activities. ○ Associated infrastructure – including roads and access trails, any surface water and power supply

3 Operations Plan Framework

Section	Description	Purpose
		<p>and raw and fire water storage, surface water management infrastructure and ventilation shafts; and</p> <ul style="list-style-type: none"> Decommissioning and rehabilitation activities – including surface water management and revegetation. Mapping of the ecological values of the Reserve area will be used to identify appropriate locations for surface infrastructure to be placed in areas of low habitat value as far as practicable.
4	Potential Impacts and Proposed Mitigation and Management Measures	<ul style="list-style-type: none"> Describes the environmental values likely to be affected. Outlines potential adverse impacts on the environmental values, including the influences of subsidence on topography, fauna and flora, groundwater, watercourses and drainage features, erosion, existing infrastructure and linkages to Cudmore National Park. Details environmental protection objectives and performance criteria. Identifies control strategies adopted to achieve the environmental protection objectives.
4.1	Biophysical	<ul style="list-style-type: none"> Details the potential impacts of the Project on the identified biophysical environment of both the Cudmore Resources Reserve and Cudmore National Park. Outlines the proposed mitigation and management measures to be implemented.
4.2	Cultural Heritage	<ul style="list-style-type: none"> Details the potential impacts of the Project on the identified cultural heritage environment of both the Cudmore Resources Reserve and Cudmore National Park. Outlines the proposed mitigation and management measures to be implemented.
4.3	Resource Impacts	<ul style="list-style-type: none"> Details the potential impacts of the identified biophysical and cultural heritage values of both the Cudmore Resources Reserve and Cudmore National Park on the ability for the Project to extract the coal resource. Outlines the proposed mitigation and management measures to be implemented.
5	Implementation	<ul style="list-style-type: none"> Describes details of the Project's systems for monitoring, reporting, research, training and auditing.
5.1	Roles and Responsibilities	<ul style="list-style-type: none"> Details of implementation responsibilities for the Operations Plan.
5.2	Training	<ul style="list-style-type: none"> Outlines the training requirements for persons outlined within the roles and responsibilities section.
5.3	Auditing	<ul style="list-style-type: none"> Details the auditing requirements to demonstrate implementation of agreed mitigation and management measures.
5.4	Complaints, Non Conformance and Corrective Actions	<ul style="list-style-type: none"> Outlines the requirements for addressing any complaints and/or non-conformance and corrective actions (as options) to rectify any deviation from performance standards.
5.5	Operations Plan Review	<ul style="list-style-type: none"> Details the requirements and process for the periodic review of the Operations Plan to reflect knowledge gained during the course of operations and to reflect new knowledge and/or changed requirements/standards.
5.6	Record Keeping and Reporting	<ul style="list-style-type: none"> Outlines the format, timing and responsibility for reporting and auditing of monitoring results.

3 Operations Plan Framework

A draft Table of Contents for the Operations Plan following the aforementioned structure is provided in Appendix A.

The Proponent is supportive of the Environmental Authority being conditioned to require the Operations Plan to be implemented prior to mining activities commencing within the Cudmore Resources Reserve. The following condition is proposed:

Prior to commencement of mining or associated activities within the Cudmore Resources Reserve, the proponent must develop an Operations Plan for that area detailing the mitigation and management measures to be implemented to manage the impacts as a result of the mining activities. The Operations Plan will need to be subject to a periodic review to allow consideration of all relevant environmental, economic resource and operational considerations with potential to impact on the values of Cudmore Resources Reserve.

Potential access to Cudmore Resources Reserve may be required for survey of the mine lease, photographs and ground truthing. This may be undertaken under the existing exploration Environmental Authority which covers an area of the Cudmore Resource Reserve.

Limitations

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Any estimates of potential costs which have been provided are presented as estimates only as at the date of the Report. Any cost estimates that have been provided may therefore vary from actual costs at the time of expenditure.

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 - 1.3. Relationship to other Management Plans
 - 1.4. Contents of the Operational Plan
 - 1.5. Approval and Review of the Operational Plan
2. Overview of the Cudmore Resources Reserve
 - 2.1. Legislative Framework
 - 2.2. Linkage to Cudmore National Park
 - 2.3. Overview of Key Environmental Values
 - 2.3.1. Biophysical Values
 - 2.3.2. Cultural Heritage Values
 - 2.3.3. Resource Values
3. Project Description/Mining Operations
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 - 3.1.2. Mining Operations and Sequencing
 - 3.1.3. Mine Disturbance Area
 - 3.1.4. Mine Infrastructure & Access
 - 3.2. Sub-surface Activities
 - 3.2.1. Construction
 - 3.2.2. Project Operations
 - 3.2.3. Associated Infrastructure
 - 3.2.4. Decommissioning and Rehabilitation
 - 3.3. Surface Activities
 - 3.3.1. Construction
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Appendix A - Table of Contents – Cudmore Resources Reserve Operations Plan

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