



Government of **Western Australia**
Department of **Mines and Petroleum**

Abandoned Mines Policy

DRAFT FOR CONSULTATION

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Foreword

Since 2010, the Department of Mines and Petroleum (DMP) has been implementing significant reforms to the regulator and policy frameworks relating to mine closure in Western Australia.

These reforms have three main areas:

1. Improving the planning arrangements for mine closure (all mine sites under the Mining Act 1978 (the 'Mining Act') now require a mine closure plan)
2. Establishing adequate financial assurance for when mine sites are abandoned through the introduction of the Mining Rehabilitation Fund Act 2012 (the 'MRF Act')
3. Developing appropriate policy and information material for managing and rehabilitating mine sites once they are abandoned (this draft policy)

These reforms have been substantially implemented, with this draft policy being one of the final milestones in the overall framework.

The reality is that it is neither practical nor desirable to rehabilitate all abandoned mine sites in Western Australia. Therefore a policy is required to establish the principles that should be used in making decisions about the management and/or rehabilitation of these sites.

Management decisions regarding abandoned mine sites need to balance risk, costs and benefits to both the environment and the Western Australian community, and also recognise the varying values of abandoned mines. Every site will need to be considered individually, with management and/or rehabilitation undertaken in a landscape context.

This draft policy, which is a whole of government statement regarding abandoned mines, will be underpinned by a suite of products that DMP will be developing or updating over the next 12 months to provide the framework for the identification and rehabilitation of abandoned mine sites.

I encourage you to read this draft policy and submit any comments you have to DMP.

Dr Phil Gorey
Executive Director
Environment

Introduction

Mining has occurred in Western Australia for more than 150 years, resulting in many thousands of workings that were abandoned after exploration or mining. Few of these site workings and their associated features have been recorded, with the majority remaining undocumented. As a result, the health, safety or environmental risks and potential historical, cultural, social, environmental, educational or economic value of these sites are unknown.

During the early 1980s, the effects of mining on the environment became a key consideration in assessing and approving mineral exploration and mining activities. Unconditional Performance Bonds (UPBs) were introduced and imposed on exploration and mining companies to ensure mine sites would be appropriately rehabilitated prior to closure.

In 1997, the then Department of Minerals and Energy commenced a programme to capture, from a safety perspective, baseline data relating to historical mining-related features. While not a complete record of the abandoned sites in the state, the database currently contains over 190,000 abandoned mine site features.

The *Mining Rehabilitation Fund Act 2012* (the 'MRF Act') was passed by the Western Australian parliament, with the Mining Rehabilitation Fund (MRF) became operational in 2013. The MRF requires all Mining Act tenement holders to annually report on areas of disturbance on their tenements and, providing they meet a minimum threshold, pay a levy based on the disturbance area.

MRF funds will be used to rehabilitate future abandoned mine sites, when all other avenues to ensure rehabilitation have been exhausted. Interest generated from the MRF shall be used to rehabilitate legacy abandoned mine sites (sites located on tenements that have not had an MRF reporting obligation).

The data captured during the inventory of abandoned mines programme and the creation of an ongoing source of funding provides the foundation for further development of the inventory, site prioritisation and rehabilitation or management of known abandoned mine sites.

In addition, land managers may have obligations relating to the management of abandoned mine sites. This policy, and supporting material, will assist them in that decision making.

It is important that a robust policy and project framework is in place to support decisions regarding the prioritisation, management and/or rehabilitation of these sites.

Purpose

The purpose of this policy is to provide a framework that guides decision making by the Western Australian Government relating to the prioritisation, management and/or rehabilitation of abandoned mine sites.

The policy ensures decision making is undertaken in a strategic manner that minimises environmental and community safety risks and leads towards the realisation of potential value within each site through efficient, sustainable and innovative solutions.

Scope of policy

The policy will apply to all identified abandoned mine sites and associated site features in Western Australia.

Abandoned mine sites, for the purpose of this policy, are areas of land impacted by former mining activities for which no individual, company or organisation can be held responsible for rehabilitation.

An abandoned mine site may comprise of multiple areas of land or site features (e.g. mine shafts, waste dumps, abandoned equipment) that may or may not be adjacent to each other.

Policy objectives

The objectives of this policy are to ensure:

1. abandoned mine sites are prioritised in a consistent manner based on agreed criteria;
2. significant risks to the community and the environment are identified and contribute towards the overall priority of the mine site;
3. potential value within an abandoned mine site is identified and protected;
4. tools are in place to support the ongoing capture, analysis and management and/or rehabilitation tracking of mine site features throughout the state;
5. an efficient, repeatable methodology is used to rehabilitate or manage abandoned mine sites.

Policy principles

The following principles will provide the foundation for management and/or rehabilitation activity:

Risk assessment

1. A risk-based approach focussed on community safety and environmental impact should be taken to prioritise sites for active management and/or rehabilitation
2. Risks associated with site opportunities should be identified and analysed to inform the management and/or rehabilitation solution decision

Valuing abandoned mine sites

3. The potential historical, cultural, social, environmental, educational or economic value of an abandoned mine site should be considered when developing a management and/or rehabilitation plan
4. There should be clear community benefit with any management and/or rehabilitation work that receives funding from government or industry schemes such as the MRF
5. Where management and/or rehabilitation will result in private benefit, a cost sharing arrangement between interested parties should be pursued

Data collection and management

6. Data collection should include multiple aspects of an abandoned mine site
7. Data management should allow comparative analysis and reporting of information

Resourcing and partnership opportunities

8. Resources should be focussed on addressing priority risk sites
9. Management and/or rehabilitation partnerships with interested other government bodies, community groups and businesses should be encouraged
10. Definition of management and/or rehabilitation goals for a given site should be a joint effort involving all stakeholders
11. If a community could reasonably have an interest in an abandoned mine site, stakeholder engagement should commence during the

initial stage of site investigation and assessment and continue through to post project handover

Information sharing and 'leading best practice'

12. Site management and rehabilitation learnings and outcomes should be reviewed regularly in order to establish a continuous improvement approach which drives improved industry best practices for mine site planning, operations, closure and compliance monitoring
13. Information regarding the identification, prioritisation management and/or rehabilitation of abandoned mine sites throughout the state should be publically accessible

Governance

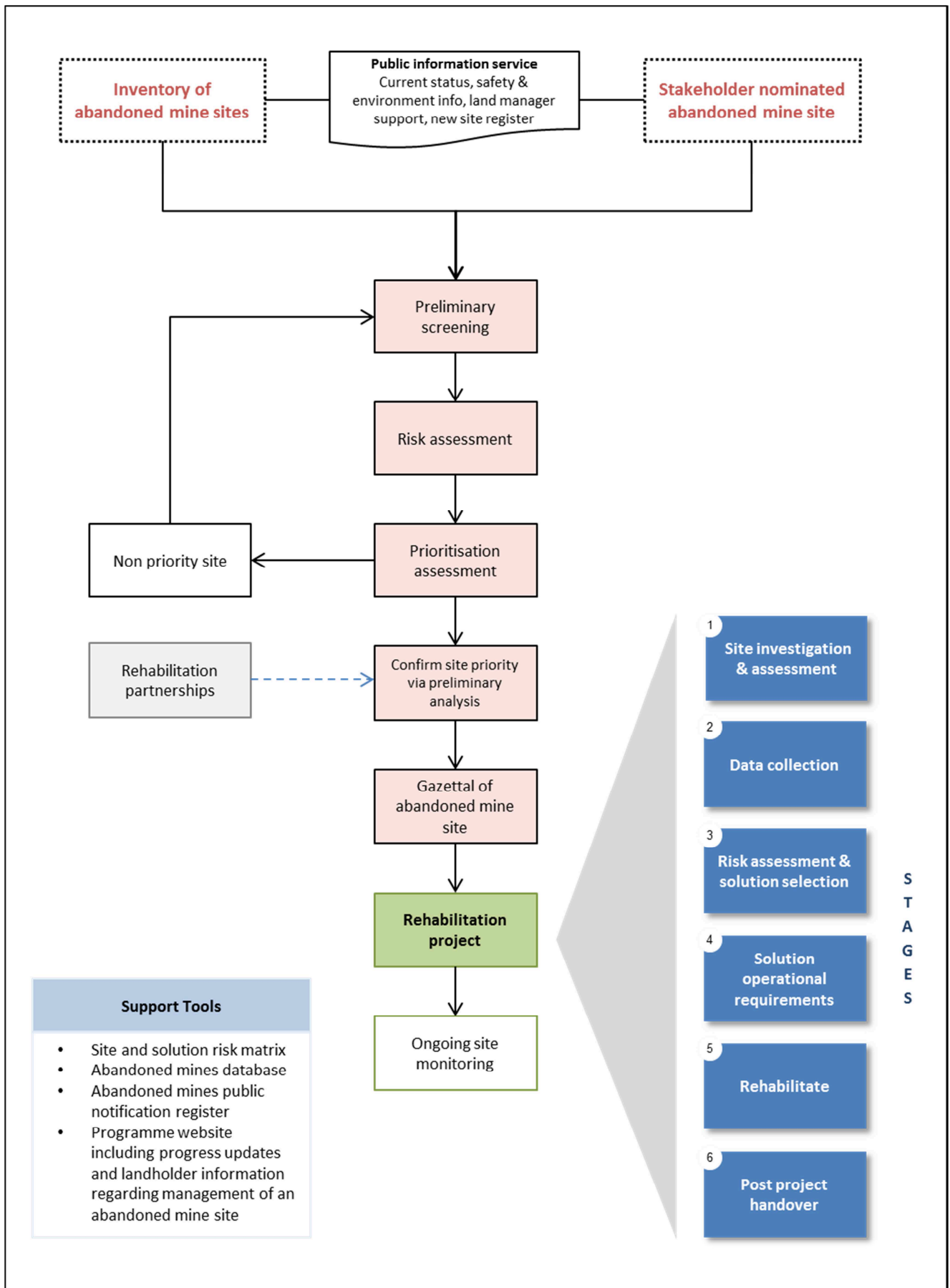
14. A formal, transparent governance structure should exist to support management and/or rehabilitation funding decisions, track spending and clearly define responsibilities
15. Management and/or rehabilitation of abandoned mine sites should be cost-effective
16. Other government agencies responsible for implementing legislation and land management applicable to a given abandoned mine site will be regarded as key stakeholders

Policy measures

The following diagram outlines the activities that will be undertaken in the implementation of this policy.

It is anticipated that industry rehabilitation standards will continue to improve through development of a continuous improvement culture and ongoing commitment to transparency and stakeholder engagement.

Diagram 1: Abandoned mines policy measures



Policy measure descriptions

Inventory of abandoned mine sites and stakeholder nominated abandoned mine sites

A database currently available via the Mines and Mineral Deposits system (MINEDEX) contains information on a number of abandoned mine site features in Western Australia. Data captured includes type, size, location and status. The database will continue to mature as further information is reported from a range of sources and verified.

A public register will be developed to enable the community to nominate additional abandoned mine site features.

Over time this will provide a comprehensive data set of abandoned mine site features across Western Australia which will be publically accessible.

Public information service

A centralised information service will be available to the public via the DMP website containing support tools such as the ability to register abandoned mine site features, current status of an abandoned mine site or feature, safety and environmental information and provide support to land managers who have abandoned mine site features on their land.

Preliminary screening

A desktop assessment of all recorded sites to identify sites and features which pose potentially significant environmental and safety risks.

Risk assessment

Sites within the abandoned mines database will be assessed against the WA government safety and environmental risk matrix (currently in development).

Prioritisation assessment

Risk assessment outcomes will be combined with a range of other considerations such as likelihood of success, beneficial land use, cost effectiveness and potential for long term industry benefit to determine an overall site priority.

Non-priority site management

Sites identified as low priority will remain in the abandoned mines database for future consideration.

Confirm site priority via preliminary analysis

A comprehensive site summary paper including history, risks, opportunities, cost indicators, site limitations, potential stakeholders and partnership opportunities will be developed that informs the final decision to proceed to gazettal.

Rehabilitation partnerships

Industry, other government bodies, research organisations and community groups who are best positioned to contribute and benefit from a successful rehabilitation outcome will have the opportunity to partner with the department.

Gazettal of abandoned mine site

Land identified within the project boundary will be formally gazetted, allowing funds from the MRF to be allocated for rehabilitation activities within the boundary.

Rehabilitation project

An efficient, repeatable project methodology including implementation plan, budget, clearly defined processes and stage boundaries will guide and support all projects. The approach will be independently audited periodically to identify continuous improvement opportunities contributing to industry best practice.

The agreed rehabilitation solution will be determined based on the site's unique characteristics and detailed stakeholder consultation. Key goals will include ensuring sites are safe, stable, non-polluting, non-contaminating and able to support self-sustaining land use. Activities requiring external contracts will adhere to state government tender policy and procedures.

Post project handover to end land users will indicate completion of the project.

Ongoing site monitoring

Sites will be monitored as required following management and/or rehabilitation efforts to ensure long term benefits continue to be realised.

Policy review

This policy will be reviewed every five years by DMP, in consultation with the Mining Rehabilitation Advisory Panel, industry and the community.

Policy development process

The Department of Mines and Petroleum (DMP) invites submissions on this draft abandoned mines policy via the online feedback form at www.dmp.wa.gov.au/19344 .

All submissions will be made publicly available on the DMP website at www.dmp.wa.gov.au. DMP will also publish a consolidated response to those submissions received.

Points to keep in mind:

- Clearly state your point of view and articulate the part/s of the policy you are commenting on;
- If referencing other material, please indicate the source of your information; and
- Suggest alternative options or direction where appropriate.

Submissions must be received by Friday 11 September 2015.

If you have any queries about the draft policy, please send an email to the Abandoned Mines project team via abandonedmines@dmp.wa.gov.au or contact one of the following DMP officers:

- Ms Sarah Bellamy, Manager Environmental Reform on (08) 9222 3604
- Mr Glen Stewart, Abandoned Mines Project Manager on (08) 9222 3704