



DIVISION OF RESOURCES & ENERGY

Rehabilitation Regulatory Reform Project – Mine Rehab Conference 2017

30 March 2017

Outline

- What is rehabilitation for resource (mining) projects?
- Overview of current Rehabilitation Regulatory Framework
 - Security Bonds
 - Performance requirements
 - Rehabilitation Management Plans
 - Regulatory Agencies
 - Compliance Monitoring
 - Enforcement powers
- Case Studies
- Rehabilitation Reform Program
 - Principles of DRE Rehabilitation Reform Program
 - Key aspects of DRE Rehabilitation Reform Program

What is rehabilitation for resource projects?

The treatment or management of disturbed land or water for the purpose of establishing a safe and stable environment.



Images: New Wallsend Colliery, Newcastle NSW

2003

2004

2005

2011

Rehabilitation Principles

- Rehabilitation = areas disturbed by exploration, mining or gas activities are returned to a condition that is safe, stable and in line with consent approvals
- The focus of rehabilitation will be to support a specified post-mining land use(s)
- This may include the re-establishment of native ecosystems, agricultural land uses (grazing or cropping), industrial and recreational uses



NSW – Rehabilitation Security Obligations

- A security bond must be provided, **up front** before any disturbance occurs.
- A security bond is either submitted as cash or in the form of a bank guarantee with a financial institution – strict standards applied (e.g. APRA oversight).
- Bonds must be **maintained throughout** exploration and production activities and are continually adjusted to reflect the actual rehabilitation liability.
- Bonds **remain with the NSW Government** at all times, even if the company owning the title goes into liquidation.
- Before a title is transferred, new title holder must have bond in place for full liability.
- Bonds are only released when rehabilitation requirements have been met. *This is true even if the title is cancelled.*
- NSW has extensive compliance and enforcement powers for contraventions of rehabilitation obligations

DRE currently holds approximately \$2.2 Billion in security deposits (March 2017)

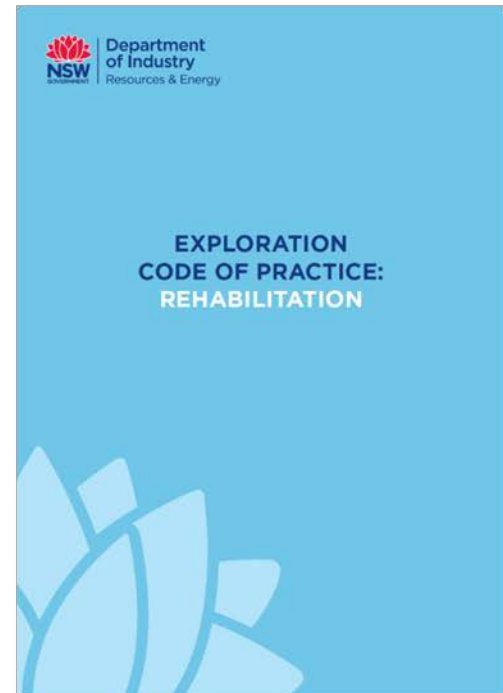


Rehabilitation Performance Obligations

Exploration

The NSW Rehabilitation Code - Exploration

- Sets the mandatory requirements for compliance
- Enables title holders to adopt a risk-based approach
- Includes guidance material on best practice rehabilitation



Rehabilitation Performance Obligations

Production

Production & Closure

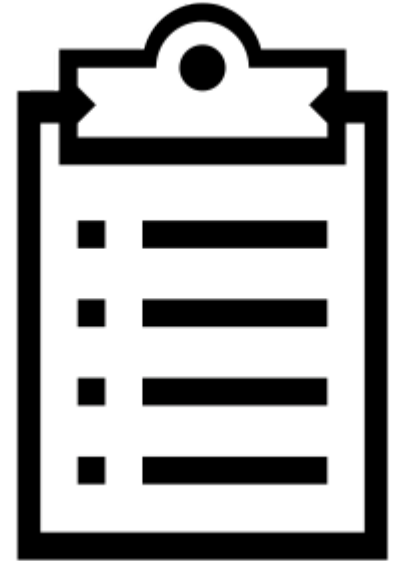
- ✓ Environmental Impact Statement – Rehabilitation Principals
- ✓ Development Consent - Final Land Use Requirements
- ✓ Mining & Petroleum Title/Authorisation: Rehabilitation Conditions
- ✓ **Rehabilitation Management Plan Guidelines (nee Mining or Petroleum Operations Plans – MOPs & POPs)**
- ✓ Active rehabilitation as mining proceeds
- ✓ Annual Rehabilitation Reporting Guidelines

Rehabilitation - Lead Regulatory Agencies

	Exploration & Assessment	Production	Care & Maintenance	Closure
Standard Setting	DRE	Planning & DRE	Planning & DRE	Planning & DRE
Monitoring	DRE	DRE	DRE	DRE
Enforcement (non-petroleum)	DRE	Planning & DRE	Planning & DRE	Planning & DRE
Enforcement - Petroleum	EPA	EPA	EPA	EPA

Rehabilitation - Compliance Monitoring

- Resource operations are risk-ranked to ensure inspectorate resources are deployed more frequently to operations with higher potential risks
- Planned audit and inspection programs are conducted to monitor both rehabilitation progress and quality
- Auditors, Inspectors and Investigators from across Government monitor and enforce compliance with rehabilitation requirements
- Annual reporting is required by titleholders on rehabilitation progress



Enforcement Powers

Authorised Inspectors may :

- enter land, inspect, copy and seize items
- require persons to produce documents and answer questions
- issue statutory notices and directions
- temporarily stop site operations
- issue penalty notices
- institute prosecution action

In addition, DRE may suspend or cancel titles or activity approvals

Ulan Coal Mine – 30 year old rehabilitation



Ulan Coal Mine – <5 year old rehabilitation



Ulan Coal Mine – <5 year old rehabilitation



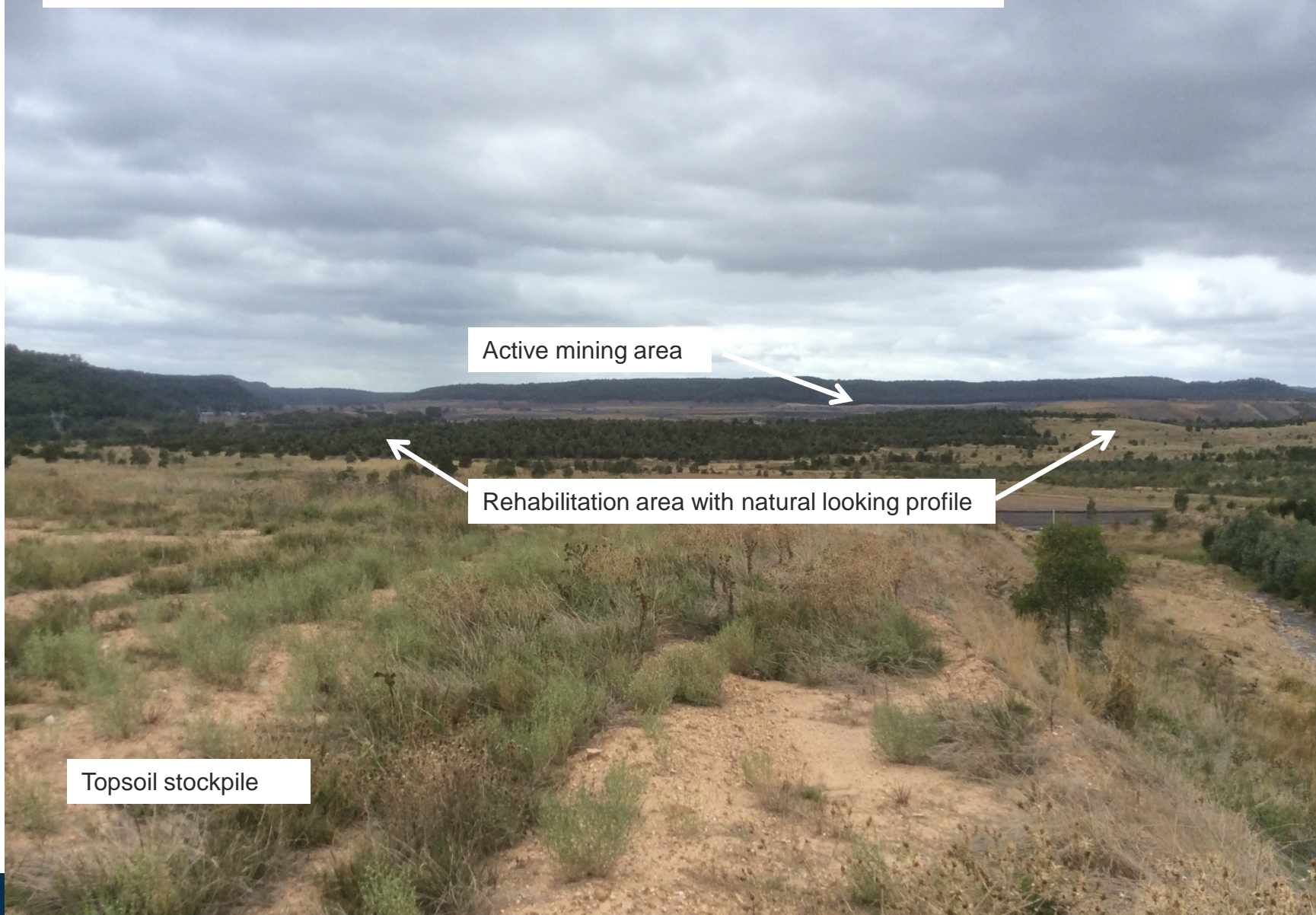
Wilpinjong Coal Mine – Overview of rehabilitation areas approx. 5 years old



Active access track

Rehabilitation area

Wilpinjong Coal Mine – Overview of rehabilitation areas



Wilpinjong Coal Mine – Overview of rehabilitation areas



Rehabilitation Reform Program

What is the problem we are trying to solve?

- Ensure progressive rehabilitation occurs
- Ensure sustainable rehabilitation outcomes are achieved
- Community trust in regards to government's regulatory processes
- Industry's social licence to operate

What are the general policy principles we want to follow?

- Integration of closure and rehabilitation planning into design
- Outcomes focused and risk-based regulation
- Appropriate allocation of government resources to activities that represent greatest risk to regulatory outcomes
- Fostering industry innovation to achieve best practice rehabilitation

Key Aspects of Rehabilitation Reform Program

Reform Aspect	Purpose & Scope
Review of Mining Lease Conditions	<ul style="list-style-type: none">• Prove more specificity in regards to rehabilitation outcomes to be achieved – consistent with development consent• Streamline conditions to improve enforceability and reduce regulatory overlap• Risk based approach proportionate to the scale, risk and nature of mining
Rehabilitation Guidelines	<ul style="list-style-type: none">• Guidance notes to assist industry with achieving compliance• Guidance on preparation of Annual Rehabilitation Report & Program, Rehabilitation Management Plan, Objectives and Completion Criteria, Risk Assessments• Foster industry to adopt innovative solutions and best practice to meet rehab requirements

Key Aspects of Rehabilitation Reform Program cont.

Reform Aspect	Purpose & Scope
Annual Rehabilitation Report & Program	<ul style="list-style-type: none">• Submit plans / data to demonstrate previous 12 months rehabilitation progress as well as forward three yearly progressive rehabilitation forecast – DRE to approve and determine compliance• Report on rehab stats and performance indicators• Report on rehabilitation performance against objectives and completion criteria as well as outcomes of research and monitoring programs
Rehabilitation Management Plan	<ul style="list-style-type: none">• For high risk activities, RMP outlines the framework for how rehabilitation will be implemented• Approval not required, instead DRE resources shifted to regulating on-the-ground performance• DRE may use powers to require a title holder to address potential deficiencies if required• RMP to be included on a company's website• Trigger points for ongoing review

Key Aspects of Rehabilitation Reform Program cont.

Reform Aspect	Purpose & Scope
GIS Rehabilitation Spatial Data	<ul style="list-style-type: none">• Guideline to be developed to assist industry prepare and submit geospatial rehabilitation data• Web-based portal to be developed for data submission and for public viewing of progressive rehabilitation and final landform outcomes
DRE Site Rehabilitation Assessment Protocol	<ul style="list-style-type: none">• Provide consistency across DRE in regards to assessment of rehabilitation performance.• Specifically, progressive rehabilitation and whether risks are being satisfactorily managed
DRE Rehabilitation Performance Dashboard	<ul style="list-style-type: none">• Identifies areas of best practices and opportunities for improvement• Provides basis for ongoing review of governments rehabilitation assessment program to focus regulatory efforts on poor performance

Rehabilitation GIS Data Portal

- Access to spatial data is becoming a key tool for DRE to undertake regulatory functions
- Rehabilitation data currently collected by the Department is not readily collated to a format that can show progressive rehabilitation
- The proposed GIS portal will not only allow industry to import rehab data to the Department's geodatabase (GIS101), but allows map viewing and calculation of summary statistical rehabilitation data
- Summary statistical reports showing sequence of disturbance and rehabilitation filters per mine (or group of mines – i.e. Hunter Region) and time period
- Map viewing functions within the portal – allowing interrogation of data