

Department of **Environment and Resource Management**
Conserving and managing Queensland's environment and natural resources

Mining Rehabilitation/Financial Assurance Compliance Program

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Summary

- 4 year program, 2008-2012
- I am project manager. Key regional and central DERM mining personnel act as steering committee
- Project divided into phases. Phase I (→ Aug 2009) is essentially a scoping phase
- This presentation will give an overview of the progress of Phase I and the implications for future financial assurance (FA) regulation

Background

- Mining is an important industry in Queensland
- Mining operations pose an environmental risk
- Operational risk is managed through licence conditions. 'Failure to rehabilitate' risk is managed by financial assurance.

- Financial assurance is a cash or bank guarantee held by the government to cover the costs of site rehabilitation in the event of a company not meeting its environmental obligations

FA in Queensland

- Approximately \$1.75B in FA is held for Queensland mining operations
- FA is:
 - calculated and proposed by the operator
 - assessed by DERM (ex EPA)
 - collected and administered by DEEDI (ex DME)
- Queensland differs from other states in that it allows an FA discount of up to 75% depending on environmental performance and management systems
- Anecdotal evidence to suggest questionable accuracy of FA at some operations

Principal Objectives (2008-12)

- **Primary:** To assess the accuracy of Plans of Operations in terms of financial assurance and progressive rehabilitation
- **Underlying:** To address the gap between total financial assurance held by the state and the total cost of rehabilitating disturbed land.
- This can be achieved by:
 - Encouraging progressive rehabilitation, or
 - Increasing Financial Assurance held

Progressive Rehabilitation

- In 2006 the mining industry successfully lobbied to have the concept of progressive rehabilitation included in legislation
- Progressive rehabilitation is where the rehabilitation acceptance criteria for a section/domain of a minesite (eg. waste rock dump, tailings dam) are met in full
- Companies can achieve a partial reduction of their FA by having areas of their mine certified as rehabilitated
- No applications received to date

Current FA calculation

- EPA Guideline 17 includes a basic FA 'calculator' based on a domain approach.
 - Domains are not pre-defined
 - Unit fees are not set
 - Flexible approach (area cost or project cost)
 - All costs should be "derived from third party contractor quotes"
- Differs from a more formal approach in other states

Current FA assessment

- The flexible approach to FA calculation complicates a consistent approach to assessment
- Assessing officers rely on local knowledge and comparisons with similar operations
- Obtaining third party quotes is not always realistic

Project Aims - Phase I

For a small selection of different mines:

- Assess the accuracy of Plans of Operations
- Assess the accuracy of FA calculations
- Determine the adequacy of the Guideline 17 FA 'Calculator'
- Assess rehabilitation progress where appropriate
- Identify gaps in DERM expertise
- Understand impediments to progressive rehabilitation lodgement

Project Progress

3 mines assessed with one more scheduled:

- Diversity of operations - Metaliferous, coal, sand, hard rock
- Diversity of location - North, central, south-east, west
- Diversity of scale - FA ranges from \$100K to \$120M

Assessment approach

- Approach involves:
 - Assess PoO and FA calculation.
 - Assess supporting documents (eg. Final Land Use Plan, Rehabilitation Plan, Erosion and Sediment Plan, etc).
 - Assess monitoring programs. Are they sufficiently robust to allow an assessor to sign off on rehabilitation?
 - Site visit.

Initial Findings

- Accuracy of FA calculations is variable
- Significant room for improvement in quality of information in PoOs:
 - usually lack sufficient detail in both process description and FA calculation
 - supporting documents often much better quality (also often externally prepared)
 - supporting documents often conflict with FA calculation in PoO
 - environmental monitoring programs often lack robustness
- Site visits essential

Likely recommendations from Phase I

Regionally:

- Roll out FA assessment procedure and toolkit developed during Phase I
- Encourage better understanding by minesite personnel of importance of environmental monitoring and its bearing on deciding rehabilitation success (and therefore FA refunds)
- Encourage industry to test the progressive rehabilitation waters (and help us all understand residual risk)

Likely recommendations from Phase I

Centrally:

- Evaluate the currency of FA information held by DEEDI
- Improve the link between DEEDI and DERM in terms of FA assessment, submission and review
- Explore alternatives to current FA 'calculator', including possibility of national calculator

Concluding remarks

- DERM is taking a partnership approach with industry
- DERM understands impact of current economic climate on mining industry
- Risk to environment and State also increases during tough economic times
- Honesty is best policy

Questions?