



Workshop 2 output

The breadth and scale of closure planning – what does a closure planner need to know?

Author: Peter Elliott (on behalf of the CPPA)

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The breadth and scale of closure planning – what does a closure planner need to know?

1. Introduction

This document presents notes that were made at a meeting of the Closure Planning Practitioners Association workshop held at Jacobs offices, 236 Adelaide Terrace, Perth on 21 March 2018. This was the second session held by the interim Closure Planning Practitioners Association committee to understand the areas of focus that the association should concentrate its efforts on. The session was facilitated by Peter Elliott. This interactive workshop asked a series of questions (Appendix 1) exploring the scope of closure planning and the role of a closure planner including but not limited to:

- The planning process;
- The knowledge base that is required including technical disciplines involved;
- The process of closure cost estimation;
- Risk management and;
- Stakeholder engagement.

After discussion of the scope attendees were asked to work in small groups to explore the role of a closure planner and capture their findings under the following six themes.

1. Closure cost estimation
2. Defining the knowledge base that is required
3. Defining closure risks
4. Identifying and engaging with stakeholders
5. Planning for closure
6. Managing closure executions

The breadth and scale of closure planning – what does a closure planner need to know?

2. Closure cost estimation

Closure planner (CP) must have sound knowledge of closure cost estimation but is not required to be an expert.

As closure planning is a broad field few people can do it all. CP should be an overview role with reliance on relevant topic experts.

Lead internal reaction following major changes such as increase in costs

Facilitate the determination of future land use in early mine life

Recommend if closure expertise to be kept in house or not?

Manage the process of closure cost estimation including:

- Scope of Work
- Risk management
- Elements and accuracy of cost determination
- Intent, what's in and what's out
- Level of uncertainty

CP needs to understand:

- where there might be unknown costs such as contaminated sites
- whether consideration has been made of moving goalposts and accounting for changes
- the accuracy of cost estimates are a key part of economic models in mine projects
- what is OPEX or CAPEX and how costs are used internally and externally

CP need to be involved:

- in mine project analysis and financial modelling
- from early project definition through Definite Feasibility

CP needs to be able to

- Justify closure cost numbers and identify competing priorities that may be driving costs up and down
- Determine the next land use
- Think outside the square
- Engage all stakeholders early – know who their audience is
- Ensure there are funds for perpetuity

3. Defining the knowledge base that is required

This process needs to be risk based. It may be driven by the need to generate a financial provision as a starting point.

The role of the closure planner is to

- Be aware of standards, requirements of the corporation, government and others within the jurisdiction, commitments and expectations raised with stakeholders that have been made.
- Understand there will be legal obligations, construction obligations, financial obligations that will need to be applied and their relative importance in the closure process
- Facilitate research and development and project design including the compilation of baseline studies and information that is available.
- Address gaps in knowledge
- Understand planning horizons and how the mine and closure plans are integrated
- Apply critical thinking
- Understand limitation of data, confidence in data and ability for repeatability
- Be aware of the current mine plan and its implication for mine closure and any changes to this plan when they occur
- Explicit understand the next land use, closure objectives and criteria
- Engage with and assign responsibility for all relevant obligations
- Manage knowledge and changes in regulatory requirements. Recognising that this is a dynamic process
- Achieve increased confidence in managing closure risks
- Re-define the knowledge base as required

4. Defining closure risks

This process involves

1. Scope risks and opportunities to be considered.
Establishing the scope
 - Geographical
 - Operational risk
 - Commercial
 - Execution
 - Identification of disparities

The role of the closure planner is to

Facilitate /chair - ensure all the right people are involved and getting them in the room

2. Closure option definition and screening
 - Financial – organisational view – each team has own agenda
 - Geological and financial strategies

The role of the closure planner is to

Interview – encourage the asking of the right questions
Commercial strategist and lead engagement with adjacent tenement holders

3. Risk and opportunity assessment
 - Inherent and residual risk
 - 1yr, 3yr, 5yr impact assessments
 - Diversity is required

The role of the closure planner is to

Engage risk specialist/s as required

4. Short, Medium- and Long-term impacts
 - Operational, company owners, regulators

The role of the closure planner is to

Coordination of stakeholders

5. Acceptance of residual risk
 - Competing impacts and risks

The role of the closure planner is to

- Communicate

5. Identifying and engaging with stakeholders

Closure planners involved with the following process

1. Planning to engage
 - Establishment of engagement register
 - Due diligence, obligations
 - Identification of relevant stakeholders
 - Development of engagement plan/strategy through the life of asset, planning to implementation to post closure and relinquishment
2. Who's involved
 - a. Landowner/managers
 - b. Regulator
 - c. Community/NGO's/Regional population
 - d. Internal – corporate, operations, mine planning, HSEC
 - e. Entrepreneurs – business diversification
3. Types of involvement
 - a. Negotiation
 - b. Influencing
 - c. Informing
 - d. Involving
 - e. Upskilling/knowledge of stakeholders
 - f. Identifying knowledge gaps and synergies
4. Engagement tools
 - a. Closure plans/maps
 - b. Community forums, meetings
 - c. Social media
 - d. Correspondence, agreements

Closure planners need the following

- Good communication skills
- EQ
- Technical knowledge
- Project management and organisational skills
- Conflict resolution ability

6. Planning for closure

There is no defined role of a closure planner

What is a closure planner? Depends on the context – no such thing, should be a closure practitioner

Practitioners primary role at the closure planning stage is

- Communication, coordination and leadership
- Gaining buy-in from all stakeholders (internal and external)
- Defines the next steps
- Supports financial provisioning
- Liaises with mine planning and operation

7. Managing closure executions

Role of closure practitioner(s) in execution is

- QA/QC
- Stakeholder communication
- Auditor
- Managing change – contingency, identifying opportunities

Closure practitioner needs a holistic understanding of the plan to ensure it is implemented and communicated

8. Appendix 1

The information outlined below was given to the attendees as a prompt for discussion.

CPPA – Session 2

The breadth and scale of closure planning – what does a closure planner need to know?

The role of a closure planner in for example:

1. Planning for closure

Developing a mine closure strategy, closure options and objectives

Planning for future land use

Defining the needs and content of the closure plan

Integration in life of mine planning and regular review

Setting acceptable design criteria and planning horizons

Setting financial requirements

Identifying socio-economic considerations

2. Identifying and engaging with Stakeholders

Who needs to be involved?

Stakeholder involvement in decision making

3. Defining closure risks

Scope of risks to be considered

Closure option definition and screening

Risk and opportunity assessment

Short, medium and long-term impacts

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Acceptance of residual risk

4. Defining the knowledge base that is required

Identifying the closure disciplines required

Science, engineering and social dimensions

Addressing legal and regulatory requirements and commitments made to stakeholders

Research and development

5. The process of closure cost estimation

Decommissioning

Landform design

Provisioning

Defining reasonable assumptions

Assignment of indirect costs

Allowances for failure

Contingency allowances

In perpetuity management/contingent liabilities

Repurposing – transition to beneficial land use

Valuing assets/asset sale

6. Managing Closure

Progressive rehabilitation

Decommissioning

Defining relinquishment pathways

Design for temporary or sudden closure

Abandoned sites

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Designing post closure monitoring programmes

Managing expectations

Administration of documentation

9. Disclaimer

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- Reflect the views of the author or CPPA.
- The views of all of the workshop participants. Views of individuals were captured, and there was no attempt to reach a consensus on these items.

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