



Rehabilitation and Closure

Earth Systems has specialised expertise and over 20 years' experience in developing cost-effective leading-practice closure and rehabilitation strategies for mines, landfills, waste treatment facilities and other contaminated sites. We lead the industry in identifying closure potential risks and opportunities at any stage in the project lifecycle to minimise rehabilitation and closure costs and long-term environmental risks.

The rehabilitation and closure of major projects such as mining operations and waste landfills is an important and integral part of the project lifecycle and a critical project cost. Strategic closure planning at the project design phase can identify potential risks and liabilities early in the project lifecycle and provide opportunities for significant reductions in closure costs.

Whatever the stage of project development, Earth Systems has the expertise to develop customised, cost-effective rehabilitation and closure strategies with a view to lowering environmental risk and streamlining the transition to closure.

OUR SERVICES

- Identifying rehabilitation issues, options and constraints through targeted studies, such as revegetation trials, stakeholder consultations, and assessment of issues relating to land capability, groundwater, surface water, biodiversity, culture, archaeology and heritage.
- Evaluating closure options using multi-criteria decision analysis.
- Developing integrated rehabilitation and closure strategies that allow life-of-project closure planning that is responsive to project planning decisions, changing regulatory frameworks, and evolving corporate and stakeholder expectations.
- Designing and managing targeted research programs to define closure issues and refine closure options.
- Assessing risks and liabilities associated with rehabilitation and closure.
- Preparing rehabilitation, conceptual closure, interim closure and final closure plans to meet site, corporate, government, community or financier requirements.
- Designing and/or conducting closure and post-closure monitoring programs.

TROUBLE SHOOTING

Earth Systems has specialist expertise and technical capabilities to provide solutions for both typical and unique closure problems.



Some of the commonly encountered closure problems include:

- The decommissioning of sites containing acid-generating waste materials.
- The decommissioning of turbid, acidic or contaminated water bodies.
- The management of post-closure water quality issues.

EXPERIENCE

- Preparation of a Strategic Framework for Rehabilitation and Closure Planning, including multi-criteria decision analysis of closure options, for a large coal mine in Australia;
- Preparation of a Rehabilitation and Mine Closure Plan for the gold and copper mine in Lao PDR;
- Preparation of a Conceptual Closure Plan for a gold mine in Australia, covering both active and historic mining areas.
- Design of a rehabilitation and closure strategy for a base metal mine in southeastern Australia;
- Presented at Australian Centre for Mining Environmental Research (ACMER) closure workshops.



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