

FACT SHEET

Exploration and mining rehabilitation

March 2016

The NSW Government has strict conditions that ensure exploration and mining affected land is left in a safe and stable condition and that local communities are not unduly affected. Post-mining rehabilitation can take many forms such as the removal of infrastructure, securing of mine entrances and shafts, remediation of contaminated land, landscaping and revegetation.

What is rehabilitation?

The NSW Government encourages the safe and sustainable development of the state's natural resources and imposes strict conditions on authority holders (mostly exploration and mining companies) to ensure the environment and people of NSW are not unduly affected as a result of their actions. Rehabilitation of impacted land is essential and therefore an integral consideration throughout the entire exploration and mining cycle.

The *Mining Act 1992* defines rehabilitation as 'the treatment or management of disturbed water or land for the purpose of establishing a safe and stable environment'.

During exploration, the Department of Industry, Skills and Regional Development - Division of Resources and Energy ensures, through its approval and compliance processes, that rehabilitation activities return disturbed land to a condition that is safe and stable. The final condition should be as good or better than it was before exploration activities, or that it allows the proposed final land use(s) (developed in consultation with landholders) to be sustained.

Rehabilitation commitments post-mining are established as part of the development approval issued under the *Environment Planning and Assessment Act 1979* (EP&A Act) and associated conditions of title issued under the *Mining Act 1992*.

The focus is generally towards supporting future land uses. Post-mining land use(s) are approved by a consent authority such as the Minister for Planning and Environment, the Planning Assessment Commission or a local council.

Post-mining rehabilitation can take many forms such as the removal of infrastructure, securing of mine entrances and shafts, remediation of contaminated land, landscaping and revegetation works.

Key points

- Rehabilitation is the treatment or management of disturbed water or land for the purpose of establishing a safe and sustainable environment
- All exploration and mining approvals contain conditions regarding rehabilitation
- Authority holders lodge security bonds with the NSW Government to cover the full cost of rehabilitation. The total bond held across the state as at February 2016 is \$2 billion
- Historic mining issues are dealt with under the NSW Government's Derelict mines program
- Rehabilitation obligations transfer to the new owner if a mine is sold or ownership transferred.

Remediation plans are negotiated with landholders and the community to ensure the final landform and post-exploration or mining land use is safe and usable for future generations.

Conditions and controls

All exploration and mining approvals contain specific conditions regarding rehabilitation. Authority holders are required to:

- comply with all requirements under relevant legislation
- comply with the *Exploration code of practice: Rehabilitation*, which have been granted, issued, renewed or transferred after 1 July 2015 (prospecting titles only)
- develop rehabilitation and completion criteria in consultation with relevant landholders
- lodge a security bond that covers the full cost of rehabilitation in the event the authority holder becomes insolvent. The total bond held by the government is in the region of \$2 billion
- develop a mining operations plan (MOP, also known as a Rehabilitation Management Plan, or

RMP) that outlines and commits to rehabilitation activities

- regularly report on the performance of rehabilitation activities against the MOP and any other rehabilitation commitments
- permit access by government compliance officers to inspect rehabilitation efforts
- fulfil all rehabilitation obligations and take on security bonds if mine ownership is transferred from one operator to another.

Best practice regulation

Under the *Mining Act 1992*, the department regulates rehabilitation conditions of mining and mining-related activities. The department seeks to ensure that land disturbed by mining operations is returned to a condition capable of supporting the nominated post-mining land use(s).

The department's approach to rehabilitation regulation is outcome focussed. Authority holders are required to identify the impacts of their activities as well as the ways in which rehabilitation will address these. All rehabilitation commitments become part of the titleholder's condition of title, to which they are legally held accountable.

As a condition of title, a titleholder is required to submit and comply with a MOP. A MOP outlines the rehabilitation objectives and completion criteria of the proposed post-mining land use(s). A MOP also describes how rehabilitation activities will be implemented to ensure these outcomes are achieved.

The department regulates rehabilitation throughout the entire life of a project by assessing whether a title holder is meeting the commitments in the MOP, and whether rehabilitation is on course to meet final land use criteria (post-mining). As part of this process, title holders are required to undertake progressive rehabilitation once project stages are complete.

Progressive rehabilitation is supported by the partial release of the security deposit if successful rehabilitation is demonstrated. If the rehabilitation obligations have not been met to the satisfaction of the Minister, then part or all of the security deposit will be retained until obligations are met.

Rehabilitation obligations, including the security debt, transfer to the new owner in the event a mine is sold or ownership transferred.

Final voids

To address the issue of final voids, mining title applicants are required to present final landform options in their Environmental Impact Assessments. Applicants need to justify that the proposed design is safe, feasible and environmentally stable.

Options for backfilling, partial backfilling, reshaping and void configuration (shape) are included. The main aim here is to minimise potential sterilisation of post-

mining land. This information is used by consent authorities as part of a triple bottom line assessment, when determining mine applications.

Mining operators often develop innovative solutions to rehabilitate final voids, and ex-mines have been adapted for tourism, agricultural and ecological uses.

The security bond is set to cover these actions and commitments rather than refill a void.

Derelict mines program

Unfortunately, mine rehabilitation was not always a consideration during historic mining operations. In 1974, the NSW Government established the Derelict mines program to address legacy mine issues.

\$3.3 million was allocated to the Derelict mines program in the 2015-16 financial year, for the purpose of remediating derelict mine sites.

Derelict mines are former mine sites requiring remediation where no individual or company can be held responsible for its management or remediation. Generally speaking, the responsibility for derelict mines lies with the landowner although support is provided through the Derelict mines program.

Modern regulation, including the requirement to lodge a security bond, means that mining operators are responsible for their own rehabilitation works.

The primary aims of the Derelict mines program are to:

- reduce or eliminate risks to public health, safety and the environment
- stabilise and prevent further degradation of derelict mine sites
- remove or contain contamination or sources of nuisance at their source and prevent them from spreading.

The secondary aims are to:

- optimise beneficial reuse of derelict mine sites
- encourage native plant and animal life
- conserve items of significant heritage value
- improve visual amenity.

More information

Environment Planning & Assessment Act 1979
Exploration Code of Practice: Rehabilitation
Mining Act 1992

www.resourcesandenergy.nsw.gov.au/miners-and-explorers/codes-and-guidelines/codes-of-practice/rehabilitation
www.resourcesandenergy.nsw.gov.au/miners-and-explorers/programs-and-initiatives/derelict
www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf

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