

McPhillamys Gold Project

#18 Rehabilitating the site after mining

Rehabilitation funding guaranteed

Modern mining has a high standard for rehabilitation of mining areas and Regis adopts a best practice approach to ensuring those standards are met.

Rehabilitation Plans must be developed and agreed to by the regulators before mining operations can even begin.

At McPhillamys, rehabilitation will be continuous throughout the life of the project.

The contouring and replanting of amenity bunds (large banks of soil and rock which provide a noise and visual screen from the mine) will commence in the first few years of the mine life.

Below:

Before and after images at McPhillamys.

The top photo shows the McPhillamys site during drilling in 2013. The bottom photo shows the same view after rehabilitation work on the site.



After 11 years of mining operations there will be another three years of work to rehabilitate the site. That rehabilitation work will include:

- removal of buildings, concrete foundations, equipment and other infrastructure
- remediation of any contaminated areas
- recontouring of landforms to form stable gradients—and replacement of topsoil to enable replanting of trees and other vegetation.

The final void (the open pit area) will be bunded and fenced off to prevent access.

Rehabilitation methods

The aim of the project's rehabilitation strategy is to return disturbed land to a condition that is stable, nonpolluting, and suitable for agricultural land use.

Before mining starts, the topsoil will be stripped, stockpiled and managed so that it can be used to re-establish an appropriate soil profile after mining.

Protecting against erosion

Bush rock and tree debris will be retained (where possible) from land clearing and stripping activities for placement on the waste rock emplacement.

This provides erosion protection and habitat enhancement for small animals.

Once the topsoil is restored grass and trees will be planted so the site can be returned to land suitable for agricultural and environmental uses.

Progress on rehabilitation will be monitored annually and the results will be reported within the annual review.

Closure planning

Final rehabilitation and closure requirements will be developed as part of a detailed closure plan. This will be developed well before mining operations finish on the site.

The closure plan will also involve extensive consultation with government agencies, Council, neighbours and other stakeholders.

Progressive rehabilitation

The pit amenity bund and southern amenity bund will be constructed as quickly as possible and will be progressively planted with new vegetation.

The aim is to provide a noise and visual amenity barrier for the residents of Kings Plains, to the south

of the project area, and for traffic travelling along the Mid Western Highway.

Progressive rehabilitation of the waste rock emplacement will continue from south to north over the mine life. This will progressively improve views of the emplacement as well as helping to protect against erosion.



Above: Looking east towards the McPhillamys western boundary. This is the **current view** from Guyong Road.



Above: Looking east towards the McPhillamys western boundary. This artist impression shows what the **final landform** will look like after the mine has closed and rehabilitation is completed.

Waste rock emplacement design

The final form of the waste rock emplacement was designed to blend in as much as possible with the surrounding landforms.

It includes micro-relief and topographical features on the top of the emplacement.

The design also incorporates ridge lines and minor drainage lines to minimise flow concentration and erosion by runoff.

Bore monitoring will take place downstream of the waste rock emplacement area to ensure groundwater quality is maintained.



Above: Looking east towards McPhillamys, from the Mid Western Highway. This is the **current view**.



Above: Looking east towards McPhillamys, from the Mid Western Highway. This artist impression shows what the **final landform** will look like after the mine has closed and rehabilitation is completed.

The tailings storage facility

Once mining operations are finished, the tailings storage facility will be capped and rehabilitated.

The final landform will grade gently towards a clean water diversion.

The diversion captures clean water, diverts it around the site and places it back into the Belubula River.

Minor reshaping works may be required and where necessary, the installation of shallow grass-lined drains to facilitate free draining on the landform to the permanent clean water diversion.

During the final decommissioning and rehabilitation phase, the tailings will be capped by a layer of suitable rock and soil.

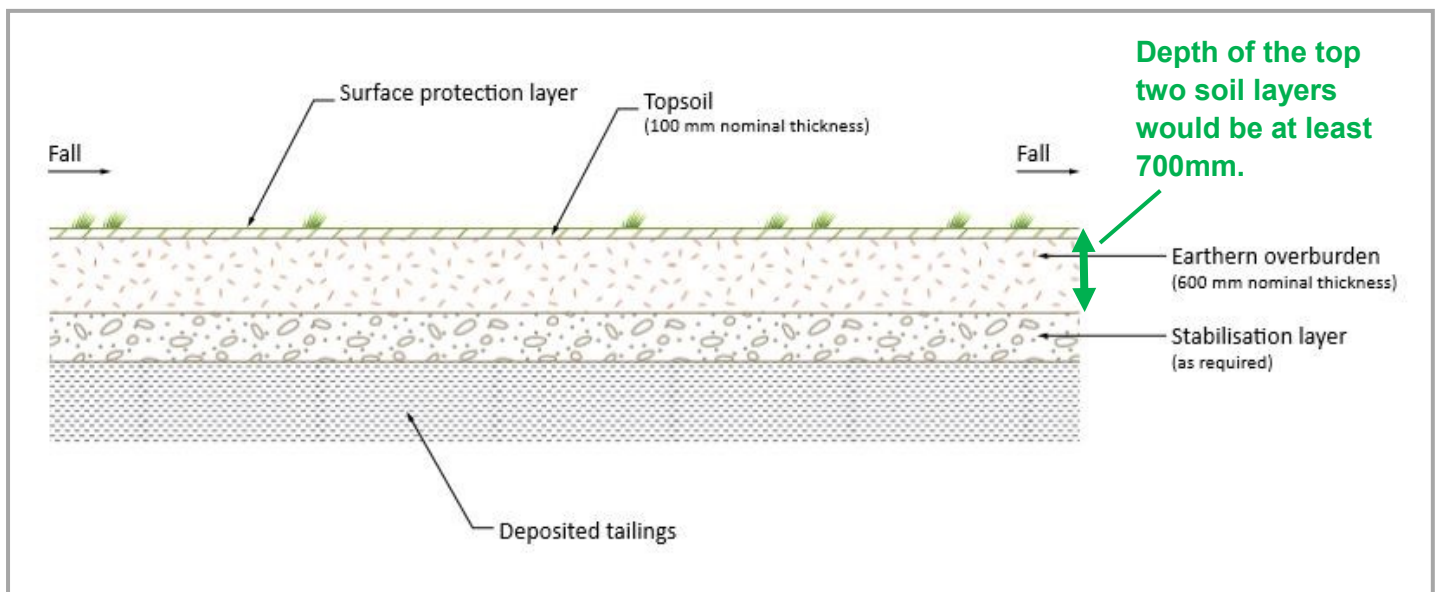
Prior to placing the topsoil, the cap will be allowed to settle and if necessary, additional soil will be placed to achieve the final landform.

The last step is placement of the topsoil and revegetation with pasture species by either drill or broadcast seeding.

Once pastures are established the area will be suitable for grazing.

Below:

Rehabilitation of the tailings storage facility involves capping with a number of layers of rock, subsoils and soils before final revegetation and seeding.



Future of the mine pit

At the completion of ore extraction, the open cut void (of the mine pit) will be a cone shaped hole, approximately 1,050 m across at its widest point, and 450 m deep.

The void is anticipated to be a sink, which means that groundwater will accumulate in the void over time until an equilibrium water level is reached.

It is expected that this equilibrium level will be reached very slowly over a long period of time.

Under predicted long-term, steady state conditions, the pit lake will remain predominantly a sink.

When the mine is closed, access to the pit will be closed off. This could be done with a safety bund or fencing. If a bund is used it would be covered with topsoil and seeded with cover crops and open woodland species.

A fence will be constructed in front of the bund to prevent access.