

## UPPER HUNTER MINING DIALOGUE



## Rebuilding the Land

Rehabilitation is rebuilding or regenerating mined land to a safe and stable landform.

As open cut mines progress, rock and dirt is dug out to allow the coal found in seams underneath to be extracted and processed. The rock and dirt is stockpiled close to the mine and is called overburden.

As the mine follows the coal seams the mine actually physically moves, leaving a pit behind it. Typically, the overburden is then transported back to progressively fill in the now mined-out portion of the site as the mine moves into new areas. Often a void will be left when mining is finished. A void is an open area, typically a pit, that remains open after rehabilitation of a mine is complete.

There are a number of reasons why voids may remain as part of the final landform including insufficient material to fill the remaining pit and access to further resources in future that might otherwise be uneconomic to recover.

Rehabilitation can take a variety of forms – for example the land can be returned to bushland or be developed as grazing land to provide an agricultural industry after mining has finished.

Once placed in the pit, the overburden is generally covered with fertile topsoil and grasses and trees are planted to suit the Development Consent's agreed final land form and use.

Rehabilitation generally occurs progressively; that is rehabilitation is done as the mine disturbs The Upper Hunter Mining Dialogue is participating in research projects which explore the potential beneficial uses of final voids.

While every void has unique characteristics, international examples of post-mining uses of voids include:

- Agriculture
- Aquaculture
- Entertainment facilities
- Forestry
- Horticulture
- Housing
- Industrial use

- Power generation
- Tourism and recreation
- Waste management
- Water supply and irrigation
- Wildlife habitat

new areas and replaces the newly disturbed land with freshly rehabilitated land.

Techniques vary from site to site depending on individual site's requirements and operations, but often the rehabilitation program can occur within metres of the active mining operation.

No matter what techniques are used, if quality rehabilitation is undertaken the community can receive benefits from employment, new business ventures and the potential provision and use of new assets and landscapes when mining has finished.