



Mineral Exploration and You

Minerals in NSW are owned by the Crown and are excluded from property deeds. The NSW Government encourages mineral explorers to find and develop mineral resources, which deliver significant economic benefits to regional areas and the state.

Exploration is governed by strict conditions to minimise impacts. Explorers must reach a land access agreement with the landholder before exploring on their land. Exploration does not guarantee that mining will ever occur in a given area.

What is exploration?

Exploration is the process of searching for deposits of minerals in the ground. The information gathered during exploration is used to assess the size and quality of a mineral deposit and to determine if it can be economically recovered.

What is an exploration licence?

All exploration and mining activity in NSW must be conducted under an authority from NSW Trade & Investment – Division of Resources and Energy, the NSW State Government department responsible for mineral resources.

Exploration licences allow licence holders to explore for minerals on limited areas of land. Exploration licences are typically granted and renewed for periods of between two and five years. An exploration licence can cover up to hundreds of square kilometres.

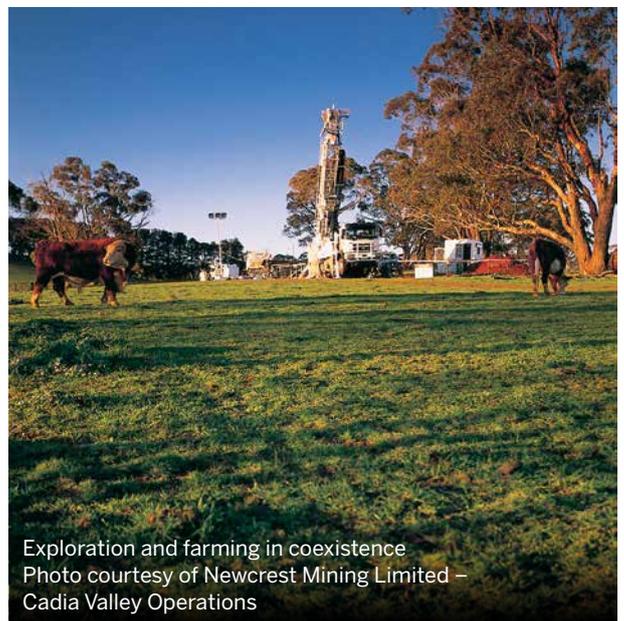
An exploration licence contains detailed conditions to protect the environment. A substantial security deposit must also be lodged by the explorer with the NSW Government to ensure explorers satisfy licence requirements and complete rehabilitation of areas disturbed during exploration.

Before an exploration licence is granted, the applicant must advertise their application in *The Land* and in a newspaper with circulation covering the biggest population base for the area where the licence application has been lodged.

Can an exploration licence holder undertake mining?

Exploration licences do not permit mining, nor do they guarantee that a mining lease will be granted. Exploration does not always lead to mining. Exploration licences simply allow the licence holder to explore for minerals. Economically recoverable mineral resources are not always discovered, which means that mining may not be viable at that time.

If there is the potential for a mine to be developed, any mine proposal must undergo a rigorous assessment under the Environmental Planning and Assessment Act 1979. This assessment involves a series of stages that normally take several years. Each proposal must be considered on its merits and there is no guarantee that approval will be granted.



Exploration and farming in coexistence
Photo courtesy of Newcrest Mining Limited –
Cadia Valley Operations



What does exploration involve?

Exploration is initially conducted over wide areas and becomes more focused and intense where potential mineral resources are identified.

Exploration can involve a range of techniques and is generally carried out in stages. This can include:

- **Reconnaissance:** This initial work usually involves a visit by a geologist to look at rock outcrops and to map the geology. It may involve vehicle access to a property, taking and recording measurements and walking across the area. It may also involve gathering small samples from rock outcrops, soils or streams for chemical analysis. Reconnaissance exploration can also include airborne surveys involving low flying helicopters or light aircraft fitted with instruments flying in a grid pattern.
- **Follow-up Investigations:** The reconnaissance stage may identify areas requiring further investigation. This could involve surveying the area, taking additional small soil or rock samples for analysis, geophysics surveys using electronic instruments and more detailed airborne surveys. Generally these techniques have low impact and only involve small areas of ground disturbance.
- **Detailed Investigations:** If an area of a potential mineral resource is discovered, the next stage of exploration would usually involve drilling. Drilling is expensive, so the number of holes drilled to test an area of interest is kept to a minimum. Explorers normally use truck-mounted drill rigs. This stage may also involve digging trenches or test pits to take a bulk sample. However, bulk sampling is not a regular occurrence and is generally only required as part of feasibility investigations for a mining proposal.

What happens if an explorer wants to access my land?

Exploration licence holders must reach a land access agreement with the landholder before exploring on their land. Landholders may not veto exploration, but access arrangements must be negotiated and in place before exploration may commence. The negotiations regarding access arrangements are part of the important consultative process undertaken by the explorer. Legal advice may be sought to assist in the negotiation process and an arbitration process is available if agreement cannot be reached.

The access agreement details the conditions on which an explorer will access the land and any compensation payable. All access arrangements should be based on the understanding that explorers are 'guests' on private land and an appreciation by landholders of the needs and rights of mineral explorers.

Courtesy, respect and honesty help to build effective working relationships between explorers and landholders.

To assist landholders and explorers negotiate a land access agreement, the template Land Access Arrangement for Mineral Exploration has been published by the Government. The template was originally published with the concurrence of the NSW Minerals Council and NSW Farmers and followed extensive negotiation. The template, and the accompanying guide Land Access Arrangement Information for Mineral Exploration, are written in plain English and outline practical conditions, with options, to allow the agreement to reflect the individual needs of the landholder and explorer. These documents may be downloaded at www.resources.nsw.gov.au/landholder-information.

How will my land be protected from the impacts of exploration?

There are a number of legal requirements in the *Mining Act 1992* and in exploration licence conditions to minimise the impacts of exploration on the environment and the land. Exploration activities which have the potential to significantly impact the surface require additional environmental assessment through a Review of Environmental Factors and Agricultural Impact Statement.



Explorers are required to rehabilitate any land that is affected by exploration. The NSW Government holds a substantial security deposit to ensure that the explorer complies with all conditions, including rehabilitation.

The access agreement between the landholder and explorer also contains provisions covering duration of entry, exploration methods, precautions to minimise the risk of disease or weed introduction and compensation for damage.

What can I be compensated for?

Landholders are entitled to compensation for 'compensable loss' as defined in the Mining Act 1992. This compensation is payable for loss caused by damage during exploration activities or for deprivation of the use of the land.

Compensable loss should always be negotiated between the explorer and landholder using 'just and fair' principles. The compensable loss is dependent on, amongst other things, the value of the land, improvement of the land, time of land deprivation and the area of land disturbed.

What are your rights and responsibilities as a landholder?

Landholders do have a number of important rights and responsibilities in the exploration process including:

- Negotiate an agreement for access before exploration commences.
- Advise the exploration licence holder of a change in land ownership or management.
- Work with the explorers and liaise with fairness and in good faith.

What are the rights and responsibilities of an explorer?

Explorers also have a number of important rights and responsibilities in the exploration process including:

- Undertake the exploration detailed in their exploration licence.
- Ensure an access agreement is negotiated with the landholder before exploration can commence.
- Advise the landholder of changes to the management or proposed activity in the exploration program.
- Minimise damage to the landholder's property and promptly rehabilitate the land after exploration.
- Respect landholders and liaise with them with fairness and in good faith.

Further Information

NSW Trade & Investment – Division of Resources and Energy www.resources.nsw.gov.au

NSW Minerals Council 'Mineral Exploration Handbook' www.nswmining.com.au/menu/media/publications

NSW Minerals Council Fact Sheets on mineral exploration methods and guideline on the template *Land Access Arrangement for Mineral Exploration* www.nswmining.com.au/menu/media/fact-sheets

Our thanks to Newcrest Mining Limited – Cadia Valley Operations for contributing the photo for this fact sheet.

Disclaimer: This fact sheet is intended to provide general information only. It does not intend to be comprehensive or to provide specific legal advice. Given the changing nature of legislation, regulations, program rules and guidelines, there is a potential for inherent inaccuracies and potential omissions in information contained in this fact sheet. All information in this case study is provided 'as is' with no guarantee of completeness or accuracy and without warranty of any kind, express or implied. In no event will New South Wales Minerals Council Limited, any related members, consultants or employees thereof be liable to anyone for any decision made or action taken in reliance on the information in this paper or for any consequential damages.