



Regional
NSW

Mineral prospecting minimum standards

For work programs and technical and financial capability

December 2020



Contents

- Introduction 1**
- Scope and application 3**
- Minimum standards 4**
 - Mandatory requirements 5
 - Detailed information about the mandatory requirements 7
 - Work programs 7
 - Technical and financial capability 10
- Glossary 12**
- Appendix 1 16**

Introduction

Background and purpose

Holding an authority to explore for minerals in NSW comes with certain rights and responsibilities. The Department of Regional NSW Mining, Exploration and Geoscience (MEG) expects explorers in NSW to demonstrate a genuine commitment to the sustainable discovery and development of the state's mineral resources.

Clause 4 of Schedule 1B of the *Mining Act 1992* (Mining Act) allows the decision-maker to take into account minimum standards (the Standards) when assessing an application for the grant, renewal or transfer of an authority. This document details the mandatory criteria required to be satisfied to meet the Standards for prospecting authorities and how MEG will apply them. The Standards apply to applications for the grant, renewal or transfer of exploration licences and assessment leases under the Mining Act. The decision-maker may consider the Standards when assessing an applicant or transferee's proposed work program, and when considering their technical and financial capability to carry out the work program. The Standards set out the criteria applicants must meet to demonstrate their commitment to effective and sustainable exploration.

These criteria:

- benchmark applicant credentials, experience and financial capability to explore in NSW
- require applicants or transferees to submit geoscientifically and technically appropriate work programs that clearly describe the objectives, rationale and intended outcome of the exploration activities proposed over the term of the authority, including environmental management and community consultation.
- in the case of renewal applications, require authority holders to demonstrate over the preceding term of the authority either of the following:
 - authentic and tangible progress in advancing the geoscientific knowledge of the resource potential of the authority or project area
 - reasonable progress in advancing a project towards mining status.

The Standards support and enable informed, consistent and transparent decision-making on applications for the grant, renewal or transfer of exploration licences and assessment leases. They will also provide greater clarity and certainty to applicants and the community on how MEG assesses applications for these authorities.

Interpretation

Generally, terms used in this document have the same meaning as defined in the Mining Act. However, given its scope, this document uses a narrower interpretation of some terms than the specific Mining Act definitions. Any reference to an 'application' in this document means an application for the grant, renewal or transfer of an exploration licence or an assessment lease. The glossary in this document clarifies the meaning of all applicable terms used throughout this document.

Any reference this document makes to any other document refers to the most recent version of that document at the time a respective exploration licence or assessment lease application is lodged (including as amended or replaced from time to time).

This document refers to a range of other relevant documents. Exploration licence or assessment lease applicants must refer to the most recent published version of a relevant document when lodging an application.

Regulatory context

Section 129A of the Mining Act requires all applications for authorities in NSW be accompanied by a work program detailing proposed activities under the authority. Applications for the renewal or transfer of an authority must also be accompanied by a work program which meets the requirements of section 129A set out in clauses 18 (1) (f) and 33 (1) (g) of the Mining Regulation 2016 (Mining Regulation).

A work program must:

- indicate the nature and extent of operations to be carried out
- set out commitments relating to the conduct of those operations (including when they will occur)
- provide for related activities such as community consultation and environmental management and rehabilitation.

In accordance with clause 35 of the *Mining Regulation 2016* (Mining Regulation), a work program must also include details of the estimated expenditure for carrying out the proposed operations and related activities.

Further information on how to satisfy the legislative and regulatory requirements with respect to work programs is contained in MEG's [Exploration Guideline: Work programs for prospecting titles](#).

Clause 4 of Schedule 1B of the Mining Act allows the decision-maker to take into account the following factors when considering an application for an authority:

- whether the proposed work program meets the standards with respect to work programs
- whether the applicant meets the standards with respect to the technical and financial capability to carry out the proposed work program
- if the application relates to a transfer, whether the transferee meets the standards with respect to the technical and financial capability to carry out the proposed work program.

Schedule 1B also sets out other relevant considerations the decision-maker may take into account when determining an application, such as an applicant's compliance history.

The provisions in Schedule 1B inform the decision-maker's overall assessment of the merits of an exploration licence or assessment lease application and any conditions applied to the authority.

Under clause 6(b) of Schedule 1B, the decision-maker may refuse an application for an authority if the proposed work program and/or the applicant's technical and financial capabilities do not meet the Standards.

Scope and application

When the Standards apply

The decision-maker will take the Standards into account when assessing the merits of applications and applicants, including transferees.

Types of authorities

The Standards apply to applications for all **exploration licences** (EL) and **assessment leases** (AL) under the Mining Act, including for coal authorities. They do not apply to applications for mining leases or small-scale titles (opal prospecting licences and mineral claims).

Decisions on authorities

The Standards apply to:

- the **grant** of an authority
- the **renewal** of an authority
- the **transfer** of an authority.

Given the grant, renewal or transfer of an authority requires applicants to submit a work program, the minimum standards in this document apply to requests to amend a work program submitted as part of the original application. The *Work Program Minimum Standards* section of this document explains this further.

The standards in this document do not apply to the following decisions:

- the variation of conditions on an authority
- the suspension of an authority
- the cancellation of an authority.

Minimum standards

This section sets out:

- the standards applicants and transferees must meet with respect to their proposed work programs and the technical and financial capability required to carry them out
- the evidence applicants and transferees are required to provide to demonstrate they have met these standards.

Any person who knowingly or recklessly provides false or misleading information concerning any requirement under the Mining Act may be guilty of an offence under section 378C of the Mining Act.

Under clause 5(1) of Schedule 1B of the Mining Act, a decision-maker may require applicants to provide further information in connection with the application, including information demonstrating compliance with any aspect of the minimum standards. The decision-maker may refuse an application if such information is not provided in the timeframe specified by the decision-maker.

The full suite of mandatory requirements to meet work programs and technical and financial capability minimum standards are set out below.

Mandatory requirements

Work programs

A proposed work program supporting an application for the **grant** or **transfer** of an authority **must**:

- a. satisfy the requirements of Section 129A of the Mining Act and clause 35 of the Mining Regulation.
- b. be prepared and submitted in the appropriate manner and form in accordance with MEG's Work Program Guideline.
- c. nominate the exploration stage/s to be worked through over the term of the authority.
- d. describe exploration objectives, rationale and intended outcomes of proposed activities that are geoscientifically appropriate to the targeted commodity or commodities, exploration rationale and nominated exploration stage/s.
- e. if applicable, clearly identify any other authorities (including Mining Leases) operating in conjunction with the authority as part of a 'project', including:
 - i. the geoscientific, spatial and proprietary justification for the project grouping; and
 - ii. how the proposed work for the subject authority relates to the schedule of work across the broader project area.

A proposed work program supporting an application for the **renewal** of an authority **must**:

- a. satisfy all of the above requirements.
- b. in satisfying criteria c) and d), demonstrate that the applicant made tangible and authentic progress during the preceding term of the authority in either:
 - o advancing the geoscientific knowledge of the resource potential of the authority or project area, in accordance with the stated objectives of the work program/s; OR
 - o reasonably progressing or advancing a project toward mining.

Technical capability

An applicant's or transferee's nominated technical manager **must have either**:

- a. membership with a recognised relevant professional organisation (e.g. AusIMM or Australian Institute of Geologists) at the minimum level of *Member*, and a tertiary degree related to the geosciences; OR
- b. five or more years' exploration experience in the mineral group(s), commodity/s or deposit setting nominated in the proposed work program.

An applicant's or transferee's nominated technical manager must have not, at any time, had their membership with a recognised professional organisation refused, revoked or suspended by the organisation for conduct-related reasons.

An applicant or transferee can demonstrate they meet these criteria by:

- a. including the nominated technical manager's professional membership number and listing their relevant tertiary qualification in the relevant application form (e.g. EL1); OR
- b. submitting with their application a copy of the nominated technical manager's curriculum vitae, outlining the person's relevant exploration experience.

In addition to satisfying one of the above criteria, an applicant's or transferee's nominated technical manager **must not** have been convicted in the last 10 years of a serious offence under the Mining Act, the *Protection of the Environment Operations Act 1997* or other relevant legislation or equivalent legislation in other jurisdictions. Other relevant legislation is defined in the glossary.

Financial capability

Applicants or transferees **must**:

- a. not be bankrupt or a body corporate that is subject to a scheme of arrangement, receivership, winding up or other external administration.
- b. have at least one applicant with either:
 - i. the capital to meet the forecast expenditure and committed objectives for the entire proposed work program; OR
 - ii. the ability to raise sufficient future capital to meet the forecast expenditure and the committed objectives for the entire proposed work program.

Applicants or transferees can demonstrate they meet these criteria by confirming in the relevant application form that:

- a. they are not bankrupt or a body corporate that is subject to a scheme of arrangement, receivership, winding up or other external administration; AND
- b. that at least one applicant:
 - i. has sufficient capital available over the term of the authority to meet the forecast expenditure and committed objectives of the entire work program; OR
 - ii. is subject to an agreement with a third party for the provision of finance to meet the forecast expenditure and committed objectives of the entire proposed work program (e.g. a deed); OR
 - iii. has Board Members or Corporate Officers that have successfully raised capital in the past for similar exploration programs in NSW or other jurisdictions.

Note: despite mandatory criterion (a) above, the decision-maker may exercise his or her discretion to grant the renewal of an authority where it can be shown that renewal is required to wind up a company that has entered administration. The decision-maker will determine whether renewal in such circumstances would best serve the objects of the Mining Act.

Detailed information about the mandatory requirements

This section provides detailed information about the mandatory requirements in this document as well as further guidance for authority holders on how they may achieve compliance with the mandatory requirements.

Work programs

The work program is the key indicator of an applicant's or transferee's commitment to the sustainable discovery and development of the state's mineral resources. MEG has published a separate Work Program Guideline to assist applicants and transferees in preparing a work program in accordance with relevant legislative and regulatory requirements. This is available on the [MEG website](#).

In accordance with the work program component of the Standards, MEG will assess whether a proposed work program is prepared consistent with the Work Program Guideline and meets all relevant legislative and regulatory requirements. Section 129A of the Mining Act and clause 35 of the Mining Regulation set out the legal and regulatory requirements for a work program. In addition to describing exploration activities and objectives, Section 129A mandates that a work program describes environmental management and community consultation activities to be carried out in connection with geoscientific and technical activities. The Work Program Guideline provides further detail on describing such activities.

From a geoscientific perspective, MEG will then assess the proposed work program in accordance with the Standards. This assessment considers:

- the suitability of the proposed activities to meet the proposed exploration objectives
- the appropriateness of the proposed activities and exploration objective with respect to the term of the proposed work program and the mineral group under the authority
- the geoscientific and technical appropriateness of the targeted commodities and exploration rationale, with relevance to the area sought and the level of pre-existing geoscientific data and knowledge.

The geoscientific aspects of the work program must be expressed using the five stages of exploration, detailed in **Appendix 1** of this document. The stages are also summarised below and defined in the glossary of this document. The stages assist applicants and MEG in categorising, organising and evaluating proposed activities, objectives and outcomes. The stages also clarify MEG's expectations around ongoing progress on exploration authorities. The decision-maker will assess the geoscientific appropriateness of the nominated exploration stage/s, proposed activities and exploration objectives in the applicant's proposed work program.

In summary, an applicant will meet the work program component of the Standards and the legislative and regulatory requirements described above by:

- nominating the exploration stage/s that will be worked through across the term of the authority and the geoscientific justification for doing so
- proposing exploration activities likely to occur across the term of the authority, in accordance with the nominated exploration stage/s
- proposing appropriate community consultation and environmental management activities to be undertaken over the term of the authority
- providing an estimate of expenditure likely to occur over the term of the authority in undertaking the proposed activities

-
- stating and defining the exploration objectives and proposed outcomes to be achieved over the term of the authority, within the context of the nominated exploration stage/s.

Further detail and guidance on how the above criteria can be met is in MEG's [Work programs for prospecting titles](#) guideline.

In the event an authority holder needs to make significant changes to the rationale or objectives of a work program, they will be required to amend their work program. Applications to amend a work program will also be subject to the work program component of the Standards.

The five stages of exploration

Below is a summary of the five stages of exploration, which forms the basis for categorising, organising and evaluating proposed exploration activities, objectives and outcomes:

1. **Reconnaissance** - an authority holder works to identify broad geological, geochemical or geophysical anomalies, historic or conceptual targets, and/or unvalidated targets.
2. **Target Definition** - an authority holder works to confirm the mineral potential of identified anomalies and targets, and prioritises targets warranting prospect scale detailed assessment.
3. **Prospect Testing** - an authority holder undertakes detailed assessment of prospects to determine if the mineral deposit(s) have significant potential, warranting more intensive assessment of the prospect's potential as a Joint Ore Reserve Committee (JORC) Mineral Resource
4. **Advanced Prospect Testing** - an authority holder undertakes intensive assessment of a mineral deposit to determine if there is potential to identify a JORC Mineral Resource, producing at minimum a global resource estimate.
5. **Resource Definition** - an authority holder undertakes an intensive Mineral Resource definition program including consideration of factors impacting the economic viability to mine the mineral deposit, to produce a JORC or JORC equivalent estimate of categorised Mineral Resources and / or Ore Reserves.

Timeframes for working within an exploration stage

MEG recognises the complexities in prescribing specific timeframes for an authority holder to be working within a given exploration stage. However, as a general rule, a geoscientific and technically appropriate work program for an initial term of an authority will propose to complete Stages 1 and 2 over a six-year term. If exploration is successful, the authority holder would then be expected as a minimum to propose work in Stage 3 in their renewal application (if sought). This is consistent with the objective of the minimum standards in requiring applicants at renewal to demonstrate authentic and tangible exploration progress over the preceding term of the authority or relinquish tenure that has not demonstrated potential for further progression.

Flexibility for explorers testing prospects

MEG regards Stage 3 as a critical point in the exploration process. Stage 3 involves detailed assessment of a prospect/s identified during Stages 1 and 2. The information obtained during this assessment will determine the likelihood of a project advancing to Stages 4 and 5. Drilling usually begins on an authority during Stage 3 and so the intensity of activity and capital expenditure increases. As mineral exploration is an iterative and results-based process, MEG acknowledges that an authority holder may spend longer assessing a prospect/s in Stage 3 than conducting other activities in the other stages. MEG also acknowledges that an authority holder may periodically revert an exploration program to a lower stage in response to exploration results obtained in Stage 3 and other external circumstances. The decision-maker will consider these factors when assessing whether a proposed work program supporting a renewal application supports the notion of tangible and authentic exploration progress.

Project-based work program administration

Applicants may elect to nominate the tenure being sought to be grouped with other authorities as a broader 'project' for the purposes of justifying variance in exploration objectives and rates of progression on related authorities. They can do so by completing the relevant section of MEG's work program submission form. The glossary of this document includes a working definition of a 'project', including the geoscientific, proprietary and spatial parameters for nominating respective applications and authorities. Further information on obtaining project status is included in the summary of mandatory requirements earlier in this document and in MEG's Work Program Guidelines.

Activities on some authorities within a project may progress at different rates. For example, a significant discovery may be made on one authority in the project, justifying reallocation of budget, focus and resources from other authorities for a period of time. While MEG expects that some level of work is undertaken on all authorities within a project, in some instances, exploration work on an authority may not progress at the expected rate. When assessing a renewal application against the Standards, the decision-maker will consider 'project status' and whether the objects of the Mining Act are best served by renewing the authority despite delays in progress on that authority.

Technical and financial capability

Applicants can demonstrate they meet the technical and financial capability component of the Standards by confirming the relevant requirements in their application form (including information from the technical manager themselves). Nominated technical managers relying on field experience must include a copy of their curriculum vitae, outlining his or her field experience.

Technical managers

MEG's EL and AL application forms require applicants or transferees to nominate a supervising technical manager responsible for carrying out the proposed work program over the term of the authority.

MEG acknowledges that authorities are granted to applicants seeking the right to explore for a variety of mineral groups¹, some of which may not necessarily be explored for by industry professionals. The minimum standards allow for flexibility in such situations by allowing technical managers to have a minimum five years' field experience in lieu of membership with a professional member organisation.

Nominated technical managers relying on their professional membership to meet the Standards must hold a minimum membership level of 'Member' with a recognised professional member organisation such as the Australia Institute of Mining and Metallurgy (AusIMM) or the Australian Institute of Geoscientists (AiG). In addition, given the broad eligibility criteria for professional membership (e.g. lawyers, accountants, geologists), the nominated technical manager's professional membership must be held in their capacity as a geoscience professional. That is, they hold a tertiary qualification in geology or similar.

Nominated technical managers that do not hold a professional membership must demonstrate their technical capability by having at least five years' relevant exploration experience working in the respective mineral group/s, commodity or deposit setting stated in the application. The minimum field experience requirement for professional membership is usually five years. Therefore, nominated technical managers that do not hold a professional membership are required to have a level of field experience that would otherwise meet the experience requirements for professional membership.

Applicants must also provide details in the relevant application form of the nominated technical managers criminal and compliance history. This includes under the Mining Act, the *Protection of the Environment Operations Act 1997* and relevant work health and safety and environmental legislation. Relevant legislation is in this document's glossary, and further detail is included in the mandatory criteria summarised earlier.

Financial capability

Given the highly speculative, iterative and results-based nature of mineral exploration, various factors can directly influence an authority holder's finances. These include drilling results, commodity prices and obtaining an authority in the first instance. MEG acknowledges that explorers can be individuals or companies of various size, scale and targeted commodities. The Standards are sufficiently flexible to accommodate the broad range of explorers. They also ensure decision-maker confidence in an applicant's ability to meet forecast expenditure in a proposed work program, based on their specific circumstances. When assessing an application, a decision-maker will consider the applicant's immediate ability to meet the forecast expenditure of the

¹ Schedule 2 of the Mining Regulation 2016 lists the groups of minerals for which authorities may be granted, along with the specific minerals within each group.

proposed work program and/or their ability to raise future finance to meet these forecast objectives. The decision-maker may also have regard to:

- the relevant work program and proposed operations;
- the obligations under the relevant authority; AND
- current assets and liabilities.

Applicants must have regard to these matters when completing their application form.

Glossary

Term	Definition
Advanced prospect testing	The confirmation of an informal resource or possibly an initial JORC Inferred Resource (see glossary definition), usually via means such as systematic targeted (RC or diamond) drilling.
Applicant/s	A person or company that has applied for the grant or renewal of an exploration licence or assessment lease.
Application	An application for the grant, renewal or transfer of an exploration licence or assessment lease.
Assessment lease	An assessment lease has the same meaning as in the <i>Mining Act 1992</i> . An assessment lease allows a company to retain mineral rights in which a significant mineral deposit has been identified, without being obligated to conduct further exploration activity.
Authority	An exploration licence or assessment lease granted under sections 22 and 41 of the <i>Mining Act 1992</i> or in some instances, under the <i>Mining Act 1973</i> .
Deposit	An aggregate of a mineral in an unusually high concentration.
Drilling	The perforation of the earth's surface crust by mechanical means, whether the hole caused by the perforation is vertical, inclined or horizontal, and includes all operations within the hole for activities ancillary to drilling.
Exploration	Exploration has the same meaning as in the <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i> . Exploration includes the taking of samples, and the assessment of deposits of minerals.
Exploration Licence	An exploration licence has the same meaning as in the <i>Mining Act 1992</i> . It allows the authority holder to explore an area for mineral deposits.
Exploration Results	As defined in the JORC Code, Exploration Results include data and information generated by mineral exploration programmes that might be of use to investors, but which do not form part of a declaration of a Mineral Resource or Ore Reserve (see glossary definitions).
Exploration Target	As defined in the JORC Code an Exploration Target is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade (or quality) relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource (see glossary definition).

Term	Definition
Feasibility study	<p>The term includes both ‘pre-feasibility’ and ‘feasibility’ studies, as defined in the JORC Code:</p> <p><i>Pre-feasibility study:</i> a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method is established, and an effective method of mineral processing is determined.</p> <p><i>Feasibility study:</i> a comprehensive technical and economic study of the selected development option for a mineral project.</p>
Global resource	<p>An Exploration Target based on Exploration Results. A Global resource is an estimate of the total contained metal content of a mineral deposit expressed as a range of tonnes and grade. There has either been insufficient exploration to estimate a Mineral Resource, or there are factors that may impact the viability of mining which have not been considered. A global resource estimate is NOT a JORC categorised Mineral Resource estimate.</p>
Indicated Resource	<p>As defined in the JORC Code, the part of a Mineral Resource (see glossary definition) for which the quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. An Indicated Resource has a higher level of confidence than an Inferred Resource.</p>
Inferred Resource	<p>As defined in the JORC Code, the part of a Mineral Resource (see glossary definition) for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological grade (or quality) continuity.</p>
JORC	<p>The Joint Ore Reserves Committee. JORC is responsible for the development and ongoing update of the JORC Code. JORC comprises representatives of each of the three parent bodies: The Minerals Council of Australia (MCA), The Australasian Institute of Mining and Metallurgy (AusIMM), and the Australian Institute of Geoscientists (AiG) as well as representatives from the Australian Securities Exchange (ASX), the Financial Services Institute of Australasia (FinSIA). The committee also comprises a representative from the accounting profession and an observer from the Association of Mining and Exploration Companies (AMEC).</p>
JORC (Code)	<p>The JORC Australasian Code for Public Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code provides a mandatory system for the classification of minerals Exploration Results, Mineral Resources and Ore Reserves (see glossary definitions according to the levels of confidence in geological knowledge and economic considerations in reports prepared for the purpose of informing investors or potential investors and their advisors. For example, annual and quarterly company reports, press releases, technical papers.</p>
Proposed work program	<p>The work program submitted with an application for grant, renewal or transfer of an authority that describes the nature, extent and estimated expenditure of the exploration and associated activities proposed to be carried out during the proposed term of the authority.</p>

Term	Definition
Measured Resource	As defined in the JORC Code, the part of a Mineral Resource (see glossary definition) for which quantity, grade (or quality), densities, and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. A Measured Resource has a higher level of confidence than either an Indicated or Inferred Resource.
MEG	The Mining, Exploration and Geoscience group, which sits in the Department of Regional NSW.
Mineral deposit	See deposit.
Mineral Resource	<p>Consistent with the definition in the JORC Code, a Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction.</p> <p>All minerals listed in Schedule 2 of the Mining Regulation 2016 are considered 'minerals' for the purpose of a Mineral Resource.</p>
Ore Reserve	As defined in the JORC Code, the economically mineable part of a Measured and/or Indicated Mineral Resource (see above).
Other relevant legislation	<p>For the purposes of the technical capability Standards, means:</p> <ul style="list-style-type: none"> • other relevant legislation as specified in Schedule 5 of the Mining Regulation 2016 • environment protection legislation as defined in the Dictionary to the <i>Mining Act 1992</i> • work health and safety legislation as defined in the Dictionary to the <i>Mining Act 1992</i> • any equivalent legislation outside New South Wales governing exploration and mining, environmental protection or work health and safety not already specified in Schedule 5 of the Mining Regulation 2016.
Project / Project status	<p>A group of mineral or coal authorities (including mining leases):</p> <ol style="list-style-type: none"> a. granted for the same group of minerals b. located in the same geological province c. targeting the same mineralisation style d. operated by a common entity or joint venture partners e. located partially or wholly within a maximum radius of 50 km of one another.
Prospect testing	The identification of significant mineral potential within identified exploration targets (see glossary definition), usually via methods such as RC (percussion) drilling, with a view to establishing a JORC Mineral Resource (see glossary definition).
Reconnaissance	The identification of broad geochemical or geophysical anomalies, historic or conceptual and/or unvalidated exploration targets, usually via low impact means (e.g. literature reviews, data analysis).

Term	Definition
Resource definition	The characterisation of an informal global resource into a JORC or JORC equivalent Inferred, Indicated and/or Measured Resource or Ore Reserve (as defined in this glossary), usually via means such as feasibility studies, environmental impact assessments, market studies and/or mine planning studies.
Serious offence	For the purposes of the technical capability standards, a serious offence may comprise: <ul style="list-style-type: none"> • any offence under the <i>Mining Act 1992</i> or the <i>Work Health and Safety (Mines and Petroleum Sites) Act 2013</i> warranting a major investigation by the NSW Resources Regulator • any offence under NSW or equivalent legislation attracting a penalty of five or more years' imprisonment.
Specified activities	Specified activities comprise detailed information about the type and amount of exploration activities that the applicant or authority holder specifically plans to carry out, including the exploration stage the applicant or authority holder plans to be at as a result of those specified activities.
Target	An area of interest for exploration with known or perceived potential to identify mineralisation which may be associated with a mineral deposit. A target in this context may include an <i>Exploration Target</i> (as defined in the JORC Code) which is conceptually based on early Exploration Results (as defined in the JORC Code).
Target definition	The prioritisation of exploration targets (see glossary definition) for more intensive assessment, usually via low to medium impact means (e.g. semi-targeted broad empirical geophysical or geochemical surveying, localised geological mapping).
Transferee	A person or company in which an authority is being transferred to.

© State of New South Wales through Regional NSW 2020. The information contained in this publication is based on knowledge and understanding at the time of writing (December 2020). However, because of advances in knowledge, users are reminded of the need to ensure that the information upon which they rely is up to date and to check the currency of the information with the appropriate officer of the Regional NSW or the user's independent adviser.

Appendix 1 – The five stages of exploration

Stage	1. Reconnaissance	2. Target Definition	3. Prospect Testing	4. Advanced Prospect Testing	5. Resource Definition
Initial status:	Authority holder identifies a target commodity and establishes the exploration rationale.	Authority holder has identified broad geochemical or geophysical anomalies, historic or conceptual targets and/or unvalidated targets identified.	Authority holder has confirmed the mineral potential, warranting prospect scale assessment.	Authority holder has identified a significant mineral deposit, warranting more intensive assessment of its potential as a Mineral Resource.	Authority holder has confirmed the Mineral Resource as an informal global resource or possibly an initial Inferred JORC Resource.
Objective:	<ul style="list-style-type: none"> Available data prepared and collated Exploration targets identified. 	<ul style="list-style-type: none"> Validate the presence of mineral potential and refine targets. Prioritise targets. 	<ul style="list-style-type: none"> Test prospects to identify presence of significant quantum and tenor of mineral potential. Prioritise prospects for assessment. 	<ul style="list-style-type: none"> Assess the quantum, tenor and continuity of mineral potential. Characterise the mineral potential. 	<ul style="list-style-type: none"> Define Resource or Reserve Increase Resource or Reserve confidence Characterise ore Assess feasibility Mine planning
Typical activities:	<ul style="list-style-type: none"> Project generation Tectonic assessment Literature review Data compilation & validation Remote sensing data acquisition Land access negotiation Regional scale non-targeted empirical geophysical or geochemical surveying Low impact reconnaissance or regional geological mapping Regional mineral vectoring studies. 	<ul style="list-style-type: none"> Land access negotiation Data/geophysics reprocessing Target validation Semi-targeted broad empirical geophysical or geochemical surveying Localised geological mapping Local scale mineral vectoring studies Empirical drill testing Review exploration priorities. 	<ul style="list-style-type: none"> Land access negotiation Detailed targeted geological mapping Reprocessing prospect scale geophysics Targeted geophysical or geochemical surveying Geochemical sampling or trenching Initial sporadic targeted drill testing Downhole geophysics Early characterisation studies. 	<ul style="list-style-type: none"> Community consultation and land access negotiation Extensive geochemical sampling or trenching Systematic targeted drilling (RC or diamond) Systematic characterisation studies Developing geological or mineral potential models Possible bulk sampling. 	<ul style="list-style-type: none"> Community consultation Intensive systematic drill testing Developing or revising resource estimations or geological models Metallurgical and geotechnical testing Ore characterisation Bulk sampling Validating models Feasibility studies EIS studies Environmental monitoring Marketing studies Mine planning studies.
Outcome / criteria for progression:	Authority holder has identified broad geochemical or geophysical anomalies, historic or conceptual targets and/or unvalidated targets	Authority holder has confirmed the mineral potential, warranting prospect scale assessment	Authority holder has identified a significant mineral deposit warranting more intensive assessment of Mineral Resource potential	Authority holder has confirmed resource potential as an informal global resource or possibly an initial Inferred JORC Resource	Titleholder has categorised the informal global resource into a JORC or JORC equivalent Inferred, Indicated and/or Measured Resource or Ore Reserve.