



Regional
NSW

EXPLORATION GUIDELINE

Work programs for prospecting titles

Mining Act 1992

December 2020



Published by Department of Regional NSW

www.resourcesandgeoscience.nsw.gov.au/miners-and-explorers/applications-and-approvals/mineral-exploration-minimum-standards

Title: Work programs for prospecting titles

Mining Act 1992

First published: July 2015

Department reference number: DOC20/1034770

Document control

Amendment schedule		
Date	Version #	Amendment
July 2015	1.0	First published
1 March 2016	2.0	Updated references to new legislation
25 July 2019	3.0	Updated legislative references and contact details
16 December 2020	4.0	Updated to reflect the requirements of the <i>Mineral prospecting minimum standards: for work programs and technical and financial capability</i> and various other updates to provide additional guidance

Contact details

Mining, Exploration and Geoscience
516 High Street, Maitland NSW 2320
PO Box 344, Hunter Region Mail Centre NSW 2310
Phone: (02) 4063 6600
Email: resource.operations@planning.nsw.gov.au

© State of New South Wales through Department of Regional NSW 2020. You may copy, distribute, display, download and otherwise freely deal with this publication for any purpose, provided that you attribute the Department of Regional NSW as the owner. However, you must obtain permission if you wish to charge others for access to the publication (other than at cost); include the publication in advertising or a product for sale; modify the publication; or republish the publication on a website. You may freely link to the publication on a departmental website.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (December 2020) and may not be accurate, current or complete. The State of New South Wales (including the Department of Regional NSW), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own inquiries and rely on their own advice when making decisions related to material contained in this publication.

Contents

Part A: Introduction	1
Executive summary	1
Background and purpose	1
What activities should be in a work program?	1
Project-related work programs	2
Legislative obligations	2
When this guideline applies	3
Part B: When and how to submit a work program	4
Part C: How to complete a work program	5
Stages of exploration.....	5
Proposed expenditure for the term of the authority	6
Exploration rationale.....	6
Exploration objectives	6
Proposed exploration activities for the term of the authority	7
Diagram of proposed exploration activities for the term of the authority	7
Proposed environmental management and rehabilitation activities for the term of the authority ..	7
Proposed community consultation activities for the term of the authority	8
Project-related work programs (if applicable).....	9
Project map (if applicable).....	11
Part D: When and how a work program is assessed	12
Assessment of proposed environmental management, rehabilitation and community consultation activities.....	12
Assessment of proposed exploration activities	12
Assessment of work program performance and exploration progress (for renewal applications)	13
Part E: Amendments to approved work programs	16
Glossary	18

Contacts

Purpose	Branch/Unit	Contact details
Submission of work programs	Resource Operations Mining Exploration and Geoscience (MEG)	Phone: (02) 4063 6600 Email: resource.operations@planning.nsw.gov.au
Content and assessment of work programs	Mining and Exploration Assessment Geological Survey of NSW Mining Exploration and Geoscience (MEG)	Phone: (02) 40 6425 Email: mining.explorationassessment@geoscience.nsw.gov.au

Part A: Introduction

Executive summary

A work program is a description of the proposed activities to be completed over the term of an exploration licence or assessment lease (prospecting authorities), including the proposed estimated expenditure for those activities. Work programs have three activity components; exploration, environmental management and rehabilitation, and community consultation. The exploration activities are the primary component of a work program with environmental management and rehabilitation, and community consultation activities being secondary, but closely related, components.

A work program should seek to:

- improve the knowledge of mineral resources in NSW through the:
 - generation of new exploration targets,
 - assessment of new or existing targets, and/or
 - assessment of prospects.
- progress towards resource definition and development planning for new mining projects or the expansion of existing mines
- promote best practice exploration science to allow adaptive and innovative exploration, and/or
- support the dynamic needs of mining operations where appropriate.

Explorers seeking the grant or renewal of prospecting authorities must prepare and submit a proposed work program in accordance with this guideline. Mining, Exploration and Geoscience (MEG) within the Department of Regional NSW, will assess proposed work programs to determine if it meets this guideline and the [Mineral prospecting minimum standards: for work programs and technical and financial capability](#) (the Standards). MEG is responsible for receiving, assessing and approving work programs, and assessing work program performance.

Background and purpose

Prospecting authorities granted under the [Mining Act 1992](#) (Mining Act) enable explorers to undertake exploration in order to gather information and build knowledge about mineral resources and the potential for their extraction.

MEG regulates authorisations for prospecting and mining operations including the assessment of applications for the grant, renewal and transfer of authorisations. Part of that regulation is an assessment of whether applicants have the financial and technical capability to undertake effective and competent exploration and that the proposed work program meets [the Standards](#).

Work programs, in conjunction with [the Standards](#), ensure that authority holders carry out effective and competent exploration during the term of the authority and achieve the objectives of the Mining Act. Work programs set out the minimum benchmark of activities against which exploration progress is measured at the end of a term of a prospecting authority.

What activities should be in a work program?

A work program describes the exploration objectives, rationale and intended outcomes of proposed exploration activities that are geoscientifically and technically appropriate to the targeted commodity or commodities, exploration rationale and nominated exploration stage/s. Part C of this

guideline provides more information about how to complete a work program and the activities within it.

Exploration activities within a work program should include the acquisition of data (where appropriate) to increase the geoscientific knowledge of the mineral resource potential of the authority area, with the ultimate aim of discovery, definition and development of resources in an environmentally sustainable manner and with appropriate community consultation. The exploration activities should be appropriate to the level of pre-existing geological knowledge and previous exploration of the area. As a general rule, where there is advanced geological knowledge within the authority, then an advanced level of exploration activity is expected to be proposed within a work program.

The environmental management and rehabilitation activities within a work program should appropriately reflect the exploration activities to ensure environmental impacts are managed and mitigated and rehabilitation is completed effectively.

The community consultation activities within a work program should ensure the engagement in adequate, inclusive and appropriate community consultation in planning and conducting exploration.

When the NSW Government invites new prospecting authorities via a competitive process, that process may require applicants to submit detailed proposed work programs, in a specified form, which set out the activities for each year of the term of an authority.

Project-related work programs

It may be appropriate to conduct exploration on a project basis, due to the nature of exploration. To cater for this, applicants and authority holders may request that geographically and geologically related authorities that are a part of a broader exploration project or mining operation, be accepted as a project in relation to the work program. Where 'project status' is accepted, the work program will be assessed with considering of the broader exploration objectives of the project and the authorities within the project. Project status is explained further in Part D of this guideline.

Legislative obligations

Section 129A of the Mining Act requires all applications for authorities in NSW to be accompanied by a work program detailing the proposed activities under the authority.

Clause 4(g) of Schedule 1B of the Mining Act allows the decision-maker to take into account whether the proposed work program meets [the Standards](#). Further, under clause 6(b) of Schedule 1B of the Mining Act, the decision-maker may refuse an application for an authority if the proposed work program does not meet [the Standards](#).

It is a condition of all prospecting authorities that the authority holder complies with the approved work program. Annual activity reports are required to be submitted for all prospecting authorities that detail the activities carried out during each year of the term, demonstrating compliance with the approved work program. Compliance with the approved work program and exploration progress during the current and previous terms will be considered when assessing applications to renew prospecting authorities. Where the authority holder does not evidence valid extenuating factors for not meeting the approved work program over the term of an authority, this may be referred to the NSW Resources Regulator for further investigation. The NSW Resources Regulator is responsible for compliance and enforcement activities in relation to the Mining Act.

Approved work programs are not an approval to undertake the activities nominated in them. Depending on the activity proposed, other relevant permits, approvals and/or notifications may be

required, such as, [land access arrangements](#), [community consultation](#) and [environmental assessment](#).

When this guideline applies

This guideline applies to work programs submitted with applications for the grant, renewal and transfer of prospecting authorities on and after 1 January 2021.

Note: Annual resubmission of the work program as part of annual activity reports is no longer required from 1 January 2021, regardless of when the application was lodged as per **Table 1**.

Transitional arrangements

Table 1 Transitional arrangements for work programs based on when applications are lodged.

<p>Applications for the grant, renewal and transfer of prospecting authorities <u>lodged and determined on or before 31 December 2020</u> i.e. work program is in the previous work program form</p>	<p>Applications for the grant, renewal and transfer of prospecting authorities <u>lodged but not determined on or before 31 December 2020</u> i.e. work program is in the previous work program form</p>	<p>Applications for the grant, renewal and transfer of prospecting authorities <u>lodged on or after 1 January 2021</u> i.e. work program is in the new work program form and subject to the Standards</p>
<ul style="list-style-type: none"> • These applications are <u>not</u> subject to the Standards. • The approved work program (in the previous work program form) remains in place until the end of the current term (expiry date). • If an amendment is required, it must be submitted in the existing approved work program form (relevant year resubmission section). These amendments are <u>not</u> subject to the Standards. • Applicants and title holders may opt into the new work program form by: <ol style="list-style-type: none"> i. notifying MEG, and ii. submitting a work program form. <p>The Standards do <u>not</u> apply where applicants and title holders opt in.</p> 	<ul style="list-style-type: none"> • These applications are <u>not</u> subject to the Standards. • Proposed work programs were submitted in the previous work program form. • If approved, the approved work program (in the previous work program form) will remain in place until the end of the current term (expiry date). • If an amendment is required, it must be submitted in the existing approved work program form (relevant year resubmission section). These amendments are <u>not</u> subject to the Standards. • Applicants and title holders may opt into to the new work program form by: <ol style="list-style-type: none"> i. notifying MEG, and ii. submitting a work program form. <p>The Standards do <u>not</u> apply where applicants and title holders opt in.</p> 	<ul style="list-style-type: none"> • These applications are subject to the Standards. • Proposed work programs (including amendments) must be submitted: <ol style="list-style-type: none"> i. that comply with this guideline and the Standards ii. using the work program form.

Part B: When and how to submit a work program

A proposed work program for a prospecting authority must be prepared in accordance with this guideline and using the form [Prospecting authority work program \(Mining Act 1992\)](#) (work program form).

A proposed work program must be submitted at the following times:

- With any application for the grant, renewal or transfer of a prospecting authority (or mining leases if applicable)
- With any application to amend an approved work program (refer to **Table 2** for time frames for amendment applications).

Information about how (including the file naming convention) and where to submit a work program is provided in the [work program form](#).

Applications to amend an approved work program should be lodged (as required) in accordance with the time frames set out in **Table 2**. The time frames for submission vary depending on the term of the authority. Amendments cannot be sought if any authority term is one year.

Table 2 Time frames for amendment applications.

Authority term	Amendment applications lodged by
1 year	Amendments are not required
2 years	Any time before year 2 of the term starts (by the end of year 1)
3 years	Any time before year 3 of the term starts (by the end of year 2)
4 years	Any time before year 4 of the term starts (by the end of year 3)
5 years	Any time before year 5 of the term starts (by the end of year 4)
6 years	Any time before year 5 of the term starts (by the end of year 4)

Part C: How to complete a work program

To assist in completing a work program in addition to the guidance below, examples are provided on MEG's website at www.resourcesandgeoscience.nsw.gov.au/miners-and-explorers/applications-and-approvals/mineral-exploration-minimum-standards.

Stages of exploration

A proposed work program must include the indicated exploration stage/s which the exploration activities are categorised. The stages of exploration and description are provided in **Table 3**.

The Standards provide detail about the stages of exploration including definitions of each stage and the five-stage model. The five-stage model provides guidance on the initial status of exploration, objective of the proposed exploration activities, typical exploration activities that may be carried out in each stage, the outcome of exploration activities and criteria for progression (relevant at renewal).

Multiple exploration stages may be indicated over the term of an authority. This may be dependent on the existing geological knowledge and/or data available for particular areas, the resource identification of targets and/or resource potential of an area. This may also result in exploration on different parts of an authority progressing at different paces.

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 to propose work in Stage 3 in their renewal application (if sought). This is consistent with the objective of the Standards in requiring applicants at renewal to demonstrate authentic and tangible exploration progress over the preceding term of the authority.

Progression through each exploration stage can have differing timeframes dependent on specific exploration needs of the target/resource and the amount of work required in each stage. In general, Stage 3, 4 and 5 may take longer due the types of activities involved such as more intense and targeted drilling and sampling, mine planning and resource estimation.

In some cases, the progression through exploration stages may not be sequential. In response to exploration results or other external circumstances, an authority holder may retreat in exploration stages or spend a longer period of time in a stage. Also, in some cases, the exploration stage may not start from Stage 1. For example, brownfield exploration, depending on the level of existing geological knowledge, may skip Stages 1, 2 or 3.

Table 3 Stages of exploration and their description.

Stage of exploration	Description (as per the Standards)
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. Prospecting 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 Mineral Resource ¹ .
4. Advanced prospect testing	An authority holder undertakes intensive assessment of a mineral deposit to determine if there is potential to identify a 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 Joint Ore Reserve Committee (JORC) or JORC equivalent estimate of categorised Mineral Resources and/or Ore Reserves.

Proposed expenditure for the term of the authority

A combined proposed estimated expenditure amount for exploration, environmental management and rehabilitation and community consultation activities for the term of the authority must be provided. The proposed expenditure should reasonably reflect the likely costs of proposed activities, with consideration of the inherent variability in estimating costs on proposed activities.

The proposed expenditure is an indicative estimate and is not a commitment. It is used by MEG as a guide to determine if an applicant has the capacity to fund the proposed work program.

Exploration rationale

The exploration rationale should demonstrate that the applicant/authority holder has a sound geological understanding of the application/authority area and provide reasons why the applicant/authority holder believes it to be prospective for the mineral group/s. The exploration rationale should include:

1. geological details of the application/authority area (e.g. geological province, sedimentary basin, features, previous exploration results and/or discoveries)
2. targeted commodities
3. targeted styles of mineralisation (where the area is historically under explored, it may not be reasonable to expect the applicant/authority holder to target specific styles of mineralisation)
4. if part of a project, reference to the exploration rationale of the project.

Exploration objectives

Exploration objectives should build on the rationale by highlighting a goal(s) intended to be achieved during the term of the authority as a result of the proposed activities. Exploration objectives must be outcome-based and reflect the exploration stage nominated. If more than one exploration stage is nominated, each exploration stage should have a clear exploration objective/s. A proposed work program must include at least one exploration objective for the authority. If an authority is part of a project, the exploration objectives of the project may also be included but still need to be relevant to the prospecting authority the work program is for.

¹ The term 'Mineral Resource' in this context refers to the term described in the [Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves 2012](#) (JORC code) (as amended from time to time).

Proposed exploration activities for the term of the authority

The proposed exploration activities for the term of the authority must be provided. The proposed exploration activities need to be selected in the relevant exploration stage/s at the beginning and end of the term, the type of exploration activity, what it relates to i.e. the whole authority, part of the authority or a named target/prospect/deposit and a brief description of the proposed methods to achieve the exploration stage. Refer to [the Standards](#) for typical activities that may be expected for each exploration stage.

For example, a proposed work program may include details about:

1. reconnaissance activities over a part or all of the authority
2. target definition activities over named targets or particular areas of the authority
3. prospect testing activities over named prospects within the authority or project.

The proposed exploration activities should be based on and be consistent with current geological knowledge and exploration rationale and when completed, meet the exploration objectives.

To cater for the iterative and dynamic nature of exploration, changing geological understanding, and difficulty of quantifying the proposed exploration activities, the quantities of each exploration activity are not required to be provided. For example, soil sampling may be used to help define an exploration target, however when a proposed work program is submitted, the exact number of soil samples will likely be unknown, particularly years in advance. Similarly, a proposed work program to test a prospect will generally involve drilling, however the exact number, final depths and method of drilling will likely be unknown, years in advance.

Only the proposed exploration activities on a prospecting authority can be included in the proposed work program for it i.e. if an authority is within a project, exploration activities on other authorities within the project must not be included.

Diagram of proposed exploration activities for the term of the authority

A diagram showing the location/s and types of proposed exploration activities must be provided in the work program form. It should also show the authority boundary and relevant geographical references such as towns and major infrastructure (e.g. roads, railways) and any other features that may be relevant to the exploration activities (geological targets/features, existing mines, environmentally sensitive areas etc).

Proposed environmental management and rehabilitation activities for the term of the authority

The proposed environmental management and rehabilitation activities for the term of the authority must be provided. The proposed environmental activities are indicative and not a commitment.

If prospecting operations² are proposed, the category of prospecting operations as referenced in [ESG5: Assessment requirements for exploration activities](#) must be identified, if applicable, that may include one or more of the following categories:

² As defined in the *Mining Act 1992*.

-
1. Exempt development³ (e.g. where the following activities are of minimal environmental impact; geological mapping and airborne surveying, sampling and coring using hand-held equipment, geophysical (but not seismic) surveying and downhole logging⁴, and accessing of areas by vehicle that does not involve the construction of an access way, such as a track or road).
 2. Complying exploration activities⁵ (CEA) (e.g. a drilling program that is outside sensitive areas and meets certain threshold limits).
 3. Non-complying exploration activities (Non-CEA) (e.g. intensive drilling program in sensitive areas).

If no prospecting operations are proposed, a category above does not need to be selected. For example, a prospecting authority in the resource definition stage may be proposing community consultation, geological modelling and resource estimation, environmental impact assessment studies and/or mine planning studies.

The type of proposed environmental management and rehabilitation activities must then be identified and briefly described.

If you are unsure which category of prospecting operations the proposed exploration activities will fall under you can select one or multiple. For example, an authority holder will not be in non-compliance or penalised if CEA is selected but when going through the environmental assessment process the exploration activities don't meet a threshold therefore is a Non-CEA. Similarly, if you are unsure of the exact type/s of environmental activities that will be carried out, you should indicate the activities you think would be required for the types of exploration activities proposed.

The environmental activities should be proportionate to the likely risk, type, scale, phases and length of exploration activities, and the potential impact on the environment. As the environmental activities will be dependent on the exploration activities, it may be necessary or appropriate to reduce or expand the environmental activities during the term to ensure environmental management and rehabilitation is adequately addressed. MEG does not expect that these unforeseen changes are captured in a proposed work program.

As the detail of environmental management and rehabilitation activities is high level and broad, the same activities may be included in all authorities within a project if they are relevant to the exploration activities proposed on that prospecting authority.

It should be noted that a work program approval is not an approval to undertake exploration activities. The requirements with respect to environmental approvals, for undertaking exploration activities are set out in [ESG5: Assessment requirements for exploration activities](#), the [Exploration code of practice: environmental management](#) and [Exploration code of practice: rehabilitation](#). For more information on [environmental approvals](#) refer to MEG's website.

Proposed community consultation activities for the term of the authority

The proposed community consultation activities for the term of the authority must be provided. The proposed community consultation activities are indicative and not a commitment.

³ Under the [State Environmental Planning Policy \(Mining, Petroleum Production and Extractive Industries\) 2007](#) (Mining SEPP).

⁴ The construction of the borehole to facilitate downhole logging is not exempt development under the Mining SEPP.

⁵ A prospecting operational can be considered complying if it avoids sensitive areas and meets certain threshold limits including vegetation clearing and groundwater take. Refer to [ESG5: Assessment requirements for exploration activities](#).

The type/s of proposed community consultation activities as required in accordance with the [Exploration code of practice: community consultation \(or Guideline for community consultation requirements for exploration for some Group 9 and 9A authorities\)](#) must be identified and briefly described.

Types of community consultation activities:

1. Stakeholder notifications (e.g. notification of proposed drilling to neighbouring landholders, notification of planned activities to the local council).
2. Provision of information (e.g. providing neighbouring landholders, other community members, local authorities with details of hours of operations and vehicle movements and/or copies of management plans relating to exploration sites).
3. Landholder liaison/negotiations (e.g. landholder negotiations for proposed drilling sites).
Note: specific details of where and who landholder negotiations are with are not to be included. Land access agreements are confidential agreements between the landholder and authority holder.
4. Public meetings (details of public meetings such as dates and invitees (generally – local landholders, local council, local environmental groups etc).
5. Community consultative committee (e.g. name of committee, scheduled meetings e.g. bi-monthly, updating committee information on website etc).
6. Other activities (any other types of community consultation activities that don't fall into the above activities).

If you are unsure of the exact types of community consultation activities that will be carried out, you should indicate the activities you think would be required for the types of exploration activities proposed. Refer to the [Exploration code of practice: community consultation \(or Guideline for community consultation requirements for exploration for some Group 9 and 9A authorities\)](#) for guidance on what activities would be required. For example, an authority holder will not be in non-compliance or penalised if landholder liaison/negotiations is selected but not carried out.

The community consultation activities should be proportionate to the likely risk, type, scale, phases and length of exploration activities, and the potential impact upon and concerns of relevant stakeholders such as landholders, neighbouring landholders and communities. As the community consultation activities will be dependent on the exploration activities, it may be necessary or appropriate to reduce or expand the community consultation activities during the term to ensure community consultation requirements are adequately addressed. MEG does not expect that these unforeseen changes are captured in a proposed work program.

As the detail of environmental management and rehabilitation activities is high level and broad, the same activities may be included in all authorities within a project if they are relevant to the exploration activities proposed on that prospecting authority.

Project-related work programs (if applicable)

Proposed work programs may be considered as part of project by having the exploration rationale, objectives and proposed exploration activities considered in the context of a project (project status). This recognises the administrative, financial and logistical benefits of conducting exploration on a project basis. Project status is not an approval, it is considered as part of the assessment of the work program.

For authorities to be considered as part of a project they should meet all the following standard criteria:

1. All be operated by a common entity with or joint venture partner.

-
2. All be partially or wholly within a maximum radius of 50 km of one another.
 3. All be geoscientifically related by geological province and mineralisation style, that is:
 - a. be within the same geological province (**Table 4**)
 - b. be for the same group of minerals
 - c. have the same mineralisation style.

Project status will be considered on a case-by-case basis. There may be circumstances where all the standard criteria for projects are not met. In these cases, applicant/authority holder should justify why it should still be considered a project.

If an applicant/authority holder wants the proposed work program for an authority to be considered in the context of a project, they must:

1. consider if the authorities within the project meet the standard criteria for projects
2. select the box on the first page of the [work program form](#)
3. complete the relevant fields in the 'Exploration and mining operation project' section of the [work program form](#) by providing:
 - a. a project name (mandatory for all proposed work programs within the project)
 - b. the geological province the project is in as per **Table 4** (from the drop-down box) (mandatory for all proposed work programs within the project)
 - c. project justification (only if not provided previously). This should include details (e.g. project rationale and objectives) explaining why the authorities should be considered as a project relevant to the definition of a project within [the Standards](#) and the standard criteria for projects.

As a general rule, project status does not allow limited exploration on newly granted prospecting authorities, unless strong justification is provided.

If MEG considers a prospecting authority to be included in a project, the proposed work program for one or more prospecting authorities in that project may be accepted to include limited exploration activities for a nominated period, where at least one of the following conditions are met:

- There is evidence to demonstrate the applicant/authority holder has made a serious commitment and significant investment in at least one prospecting authority in project in the past two years.
- There is evidence to demonstrate that exploration is appropriately focused on a target/prospect, or has appropriately increased in at least one prospecting authority, with the objective of proving up a resource to at least Stage 4, as per [the Standards](#). The Stage 4 requirement does not apply if a mining authority/ies is part of the project.
- The prospecting authority fully or substantially partially overlies a mining authority for the same mineral (group) and authority holder/entity.
- It is appropriate for the authority holder to hold ground adjacent to an existing mine or resource development project for longer term exploration objectives which will benefit NSW.

It is expected that all authorities in a project will demonstrate authentic and tangible exploration progress. However, noting that on some authorities in a project, the quantity of work completed will be less than would be expected if the authority was not part of a project.

Table 4 Sedimentary basins and orogenic provinces in NSW.

Sedimentary basin	Orogenic provinces
Darling Basin	Lachlan Orogen
Sydney Basin	New England Orogen
Gunnedah Basin	Thomson Orogen
Clarence Moreton Basin	Delamerian Orogen
Surat Basin	Curnamona Province
Murray Basin	
Gloucester Basin	
Oaklands Basin	
Eromanga Basin	
Bowen Basin	

Project map (if applicable)

A map showing the locations and boundaries of authorities within a project (proposed or existing) must be provided in the work program form, if applicable. Each authority within a project must be clearly labelled. It should also show relevant geographical references such as towns and infrastructure (e.g. roads, railways etc) and any other features that may be relevant to the project (e.g. geological targets/features, existing mines, environmental sensitive areas etc).

Part D: When and how a work program is assessed

MEG will assess whether the proposed work program meets this guideline and the mandatory requirements of the [Standards](#). The assessment will focus on the objectives and outcomes of the work program and whether the proposed activities and estimated expenditure are appropriate to meet the objectives and outcomes. **Table 5** outlines when, how and why a work program will be assessed.

Table 5 When, how and why a work program is assessed.

When is a work program assessed?	Assessment type	What is assessed and why?
On application for the grant, renewal or transfer of a prospecting authority	Forward facing assessment	The content of the proposed work program to determine if the proposed work program meets this guideline and the Standards
On application to amend an approved work program		The content of the proposed work program to determine if the proposed work program meets this guideline and the Standards
On application for renewal of a prospecting authority	Backward facing assessment (in addition to above)	The exploration objectives and stages of the approved work program for the current term (not the term being sought for renewal), and previous terms (if appropriate), to assess the exploration progress made during the current term and previous terms to determine compliance with the work program condition and if the relevant renewal policy has been met.

All applications submitted to MEG are treated with procedural fairness. This extends to the assessment of work programs. If a proposed work program is found to, for example, lack the required detail, not be clear, a box hasn't been filled out or there is a clear error, the applicant/authority holder will be provided with the opportunity to address the issue and resubmit.

Assessment of proposed environmental management, rehabilitation and community consultation activities

In assessing proposed environmental management and rehabilitation, and community consultation activities within a proposed work program, MEG will assess if:

- the proposed environmental management and rehabilitation activities are proportionate to the likely risk, type, scale, phase and length of the exploration activities proposed, and their potential impact on the environment are considered
- the proposed community consultation activities are proportionate to the likely risk, type, scale, phases and length of exploration activities proposed and the potential impact upon and concerns of relevant stakeholders are considered.

Assessment of proposed exploration activities

In assessing proposed exploration activities within a proposed work program, MEG will assess if the applicant/authority holder has:

-
- demonstrated an understanding of the geology and why the area (individual authority or authorities within a project) is considered prospective for the commodity(s) sought
 - proposed exploration activities that reflect the stated objectives, rationale and outcomes
 - proposed exploration activities that are appropriate to discover and/or define potentially economic resources
 - proposed activities that will result in authentic and tangible progress in advancing the geoscientific knowledge of the area and/or reasonably progressing a project towards mining status during the term.

Where unconventional exploration programs are proposed, MEG may seek further details from the applicant and/or external expert advice.

Additional assessment of proposed exploration activities if within a project

In determining if the exploration activities within a proposed work program for an authority should be considered in the context of a project, MEG will also:

- assess if the authorities with a project meet the standard criteria for projects
- assess the exploration rationale and objectives having regard to, and within the context of, the broader rationale and objectives of the project and the reason for grouping the authorities into a project
- assess the proposed exploration activities having regard to, and within the context of, the proposed exploration activities on all other authorities within the project.

This assessment will focus on ensuring that proposed exploration activities across all authorities within the project will result in tangible and authentic progress during the term of the authorities.

The project concept is designed to assist efficient and timely discovery and development of the state's resources and it not a mechanism for land/tenure banking.

Assessment of work program performance and exploration progress (for renewal applications)

An assessment of work program performance and exploration progress during the current and previous term of a prospecting authority, and project where applicable, will be carried out as part of applications for the renewal of prospecting authorities.

A key measure of work program performance is achieving the outcomes and objectives in an approved work program and evidence of:

- authentic and tangible progress in advancing the geoscientific knowledge of the resource potential of the authority and/or project area
- reasonable progress in advancing a project towards mining status.

To help understand MEG's expectations for work program performance and progression through the stages of exploration (as set out in [the Standards](#)), **Table 6** provides a comparison with the [Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves 2012](#) (JORC code) provides the general framework for assessing satisfactory progress through the five stages of exploration. The intention is not to require companies to submit or have already submitted reports under the JORC code, but to have acquired sufficient geoscientific data and information, at any exploration stage, so that a Competent Person (as defined in the JORC code) could generate such reports or technical studies.

Table 6 Comparison between exploration stages and JORC code.

Exploration stage	JORC code
<p>Stage 2 Target definition</p> <p>Completion of target definition stage that the authority holder will have acquired sufficient geoscientific data and information for a competent person (defined in the JORC code) to be able to produce a public report that would meet the requirements of JORC code in disclosing Exploration Targets.</p>	<p>The authority holder has confirmed the mineral potential of at least part of the authority, warranting prospect scale assessment.</p> <p>The prospect scale assessment must include the acquisition of new data and this will usually also include drilling.</p>
<p>Stage 3 Prospect testing</p> <p>At the end of Stage 3, the authority holder will have acquired sufficient geoscientific data and information for a competent person (defined in JORC code) to be able to produce a Public Report that would meet the requirements of the JORC code for an exploration target. The report would need to include new exploration data.</p>	<p>An <i>Exploration Target</i> 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 <i>Mineral Resource</i>.</p> <p>Disclosures of an Exploration Target and therefore a geoscientifically valid prospect test must be based on actual Exploration Results.</p>
<p>Stage 4 Advanced prospect testing</p> <p>At the end of Stage 4, the authority holder will have acquired sufficient geoscientific data and information for a competent person (defined in the JORC code) to be able to produce a scoping study public report that would meet the requirements of the JORC code.</p>	<p>A scoping study is an order of magnitude technical and economic study of the potential viability of mineral resources. It includes appropriate assessments of realistically assumed modifying factors, together with any other relevant operational factors that are necessary to demonstrate at the time of reporting that progress to a pre-feasibility study can be reasonably justified.</p>
<p>Stage 5 Resource assessment</p> <p>At the end of Stage 5, the authority holder will have acquired sufficient data and information for a competent person (defined in the JORC code) to be able to produce a public report that would meet the requirements of the JORC code for at least an inferred mineral resource.</p> <p>Note: When an authority holder has reached the stage of resource assessment, at an inferred level, MEG expects that in subsequent years further exploration will continue and the authority holder will continue to progress towards a development application to develop the resource.</p>	<p>A '<i>Mineral Resource</i>' 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. The location, quantity, grade (or quality), continuity and other geological characteristics of a <i>Mineral Resource</i> are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. <i>Mineral Resources</i> are subdivided, in order of increasing geological confidence, into inferred, indicated and measured categories.</p>

In cases where there is poor performance (partial or full non-completion) and/or unsatisfactory progress without valid extenuating factors, this may be considered non-compliance and referred to the NSW Resources Regulator for appropriate action.

Renewal justification and relinquishment in relation to work program performance and exploration progress

Authority holders should refer to MEG's [policy on renewal of exploration licences for minerals/coal](#) before lodging an application to renew a prospecting authority. This policy provides criteria that are required to be met for renewal to be granted.

In considering renewal applications, including the renewal policy, special circumstances and any extenuating factors, MEG will consider the performance and progress over the current and previous terms of the authority, and if applicable all authorities within a project, to determine if renewal is justified.

In most cases, where there is evidence of consistent poor performance and/or unsatisfactory progress over several consecutive terms of a prospecting authority and/or on other prospecting authorities within a project, without extenuating factors, renewal will not be supported.

In accordance with section 114A of the Mining Act and MEG's [policy on renewal of exploration licences for minerals/coal](#), a prospecting title can only be renewed for more than 50% of the area if the applicant claims and the decision-maker is satisfied, that special circumstances exist to justify renewal over more than 50% of the area.

Authority holders should consider part or full relinquishment of prospecting authorities, particularly if within a project, at their respective renewal. As new geological data is acquired on any authority in a project, MEG expects that such information would be used to inform the re-evaluation of the prospectivity of prospecting authorities, and if applicable all authorities in a project. This will assist in geoscientifically justifying retaining all or part of an authority in the project as part of a renewal application (in the renewal justification statement).

For example, where an authority within a project has had reduced exploration activities, from what would normally be expected for a stand-alone authority, requesting renewal of more than 50% of the area (special circumstances) requires geoscientific justification based on the improved understanding of the prospectivity of the project.

Effective relinquishment at the project level would be considered as part of the assessment of renewal applications for prospecting authorities within a project. Project status is not a means of circumventing the renewal policy or avoiding relinquishment requirements under section 114A of the Mining Act.

Part E: Amendments to approved work programs

What is an amendment to a work program and why would I need to apply for one?

Amendments to approved work programs may be required from time to time due to the iterative and dynamic nature of exploration. Amendments require prior approval from MEG and must meet the requirements of this guideline and [the Standards](#). Refer to Part B: When and how to submit a work program.

Complying with an approved work program is a condition of all prospecting authorities. When assessing a renewal application, compliance with the previous approved work program is considered. (Refer to Part D: When and how a work program is assessed; and MEG's [policy on renewal of exploration licences for minerals/coal](#)). Therefore, an authority holder may apply to amend an approved work program if the circumstance outlined below arises. Amendments must not be used to circumvent the renewal policy or to avoid non-compliance with the work program condition. MEG may refuse an amendment where valid justification cannot be demonstrated.

In most cases amendments will not be required. The work program form and required content has a large amount of flexibility such as exploration stages and providing activities for the term, not yearly. This allows for activities to change, increase or decrease throughout the term of an authority as long as the exploration stages and objectives are still achieved. For example, if the objectives and outcomes within the nominated exploration stage are achieved through different type/s and/or amounts of exploration activities to what is in the approved work program, an amendment is not required.

When is an amendment required?

MEG would normally only expect amendments to be requested in the following circumstance:

- **there is an unforeseen significant reduction in exploration activities over the term of the authority (without an increase in activities on other authorities within a project) that may result in a retreat in exploration stage/s planned to be achieved and/or a change in exploration objectives and/or outcomes of the exploration activities over the term of the authority.**

Work program amendments do not need to be requested as a result of changes to environmental management and community consultation activities, unless the changes are as a result of the circumstance described above.

Amendments are not required when:

1. additional exploration activities are proposed over the term of an authority (e.g. targeted geophysical or geochemical surveying in Stage 4 was not proposed in the approved work program but it will now be carried out)
2. exploration activities change or are substituted but the same objectives and/or exploration stage/s are achieved (e.g. substituting an EM geophysical survey for an IP geophysical survey or RC drilling for core drilling)
3. additional objectives and/or higher exploration stage/s will be achieved over the term of an authority (e.g. Stage 1 reconnaissance activities were proposed for the term, but Stage 2 target definition activities will be carried out and/or Stage 2 outcomes will be achieved)
4. there are difficulties accessing the land for exploration over part of the authority for a short period of the term, where it is anticipated that the exploration objectives and exploration

stage can still be achieved during the term (evidence of difficulties accessing land may be required to be provided at renewal).

Changes to approved work programs outlined in 1, 2, 3 and 4 above will be considered at renewal and do not require justification.

A reduction in exploration activities on an authority that is part of a project may be compensated by an increase in exploration activities on other authorities within the project.

If changes to the authorities within a project occur resulting in the circumstance above, for example, an authority is added to a project therefore less work is proposed on one or more authorities within that project, a request to amend affected approved work programs should be lodged.

If you are unsure if an amendment to an approved work program is required or for more information about amendments, contact the Mining and Exploration Assessment unit on **(02) 4063 6425** or minerals.explorationassessment@geoscience.nsw.gov.au

What if I don't apply to amend an approved work program or lodge an application too late?

Completion of the work program during the current term (and previous terms) and exploration progress is assessed at the end of the term of an authority as part of a renewal application. This assessment will consider compliance with the work program including work program performance and exploration progress. Extenuating factors may be considered to justify poor performance and unsatisfactory progress.

If an amendment is lodged past the cut-off, the approved work program will remain in place until the end of the term of the authority and extenuating factors may be considered as part of a renewal application.

How do I apply to amend an approved work program?

Refer to the [work program form](#) (when and how to submit on last page) on how to apply to amend an approved work program.

If an amendment is required (the above circumstance has occurred or is likely to occur), an application to amend an approved work program can be submitted as per the timeframes outlined in **Table 2**. Justification for the amendment must be provided.

How long do amendments take to process?

Work program amendments will normally take approximately two months to be processed. Amendment applications are not subject to any agreed service delivery standards.

While an amendment application is pending, the existing approved work program continues in place and the authority holder must continue, as much as reasonably practical, operating in accordance with it.

Glossary

Term	Definition
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> .
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.
JORC code	<i>Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves 2012</i>
MEG	Mining, Exploration and Geoscience is a group within the Department of Regional NSW
Prospecting operations	Prospecting operations has the same meaning as in the <i>Mining Act 1992</i> . Prospecting operations means the operations carried out in the course of prospecting.
The Standards	<i>Mineral prospecting the Standards for work programs and technical and financial capability</i>