

September 2023

Mine Development Panel

Policy and requirements guide 2023

Supporting the sustainable growth of the minerals industry

Overview

The Mine Development Panel (MDP) convenes a meeting between the Department of Regional NSW's Mining, Exploration and Geoscience (MEG) group and the project proponent. The MDP provides valuable feedback to mine proponents from MEG at the early stages of mine planning and design, before lodging a development application with the relevant consent authority. The project must be at the Preliminary Feasibility Study (PFS) stage or later when engaging with the MDP.

MEG is to be engaged where a project seeks to extract minerals which require a Mining Lease under the *Mining Act 1992*. [A full list of Scheduled Minerals can be found here.](#)

What is a mineral?

A mineral is a material prescribed by the Mining Regulation 2016 (Schedule 1) and includes, but is not limited to: coal, oil shale, metallics, dimension stone, chert, clay/shale, structural clay, feldspathic materials, limestone, ilmenite, rutile, zircon, leucosene, marine aggregate, and quartzite.

Extractive materials such as those extracted in quarries, for example sand, soil, gravel/aggregate, rock or similar materials, are not considered a mineral unless prescribed under the Mining Regulation 2016 (Schedule 1).

What is mining?

The term mining is the removal of material to obtain a mineral or minerals.

Mining also encapsulates:

- Construction, operation and decommissioning of associated works.
- Stockpiling, processing, treatment and transport of extracted materials.
- Rehabilitation of land affected by mining.

The MDP comprises officers involved in mine development assessment from MEG's Titles, Geological Survey, Resources Regulator and Mining Concierge branches.

Presentations to the MDP should demonstrate how the project:

- is practical and feasible
- is achievable within existing legislative and best practice environmental constraints
- is a responsible and sustainable mining or petroleum development
- minimises impacts on the environment
- optimises resource recovery and use, while being in accordance with the;
 - Indicative Secretary’s Environmental Assessment Requirements (SEARs) (October 2015)
 - Guidelines for the Economic Assessment of Mining & Coal Seam Gas Proposals (December 2015).

Presentations to the MDP

Presentations to MDP can be arranged by contacting the Industry Advisory & Mining Concierge service on 02 4063 6860 or via email at Mining.Concierge@regional.nsw.gov.au.

Proponents should email their presentation along with any supporting information required below to Mining.Concierge@regional.nsw.gov.au at least five days before the presentation.

The presentation should consist of representative plans and cross-sections identifying geological, mining, commercial, topographical and other constraints to the operation. It should also include an overview of the proposed mining & production schedule and a report of major environmental issues.

Following the presentation to the MDP, MEG provides a written response to the proponent and consent authority. This advice may also inform further discussions with the consent authority.

Requirements

The presentation to the MDP must provide the following information in support of the project:

Project description

The proponent is to supply a comprehensive overview and description of all aspects of the project, including:

- location map showing the project area, titles held, nearest towns, major roads etc
- status of all existing titles (including mining and exploration) and additional titles required
- status of development consents in place and/or a timeline to obtain necessary approvals
- any relationships between the resource and existing mines or other infrastructure
- type of operation (for example, underground block caving) and minerals to be extracted.

Geology

The proponent is to supply a summary of the geological components of the mineral resource, including:

Coal and major mineral projects

- a description of the local and regional geology including supporting maps and diagrams
- a summary of the stratigraphic unit or units within which the resource is located and relationships or conflicts between mineralisation controls (lithology, structure, rheology, local/regional faults)
- a description of the physical characteristics and dimensions of the mineral resource, with representative plans and cross-sections including each ore body/lens (if appropriate), drill holes and the area proposed for extraction. Drill logs should be included or appended
- details of the ore and waste rock, including mineralogy and deleterious elements
- evidence of geological and grade (or quality) continuity of mineralisation in the deposit such as
 - contaminants and/or ore specifications
 - model grade domains
 - an independent audit of the model
 - details of assumptions that have been used for converting resources to reserves.

Small-scale and industrial mineral projects

- document the physical dimensions of the mineral resource. Plans and cross-sections showing the location of drill holes and the area proposed for extraction. Relevant supporting documentation such as drill logs should be included or appended.

Mineral resources and ore reserves

The proponent is to supply the most recent resource and reserve statement (this can be in draft).

Coal and major mineral projects

- a current resource/reserve statement based that has been prepared in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves of the Joint Ore Reserves Committee (the JORC code)
 - a minimum of indicated resource level is required to demonstrate sufficient resources are identified to support at least the initial stage of the proposal
 - this must be lodged prior to the presentation to the MDP

The minimum submission requirement is the “Table 1 Checklist of Assessment & Reporting Criteria” page 26 to 35 of the JORC Code 2012 - www.jorc.org/docs/JORC_code_2012.pdf

Small-scale (consultation with the Mining Concierge required) and industrial mineral projects

- provide a current basic resource/reserve estimate including the anticipated tonnage and grades for the project.

Resource recovery and mine design

The proponent is to supply evidence that the resource extraction is sustainable and maximised. Such evidence will include:

- a description of how the proposed mine plan and extraction method maximises resource recovery and is achievable and consistent with current industry best practices.
 - if this is a modification, why is this an improvement to the currently approved project?
- specify why the mine design has been chosen (noting resource, design, commercial/economic constraints) and why this is the best outcome; detailing the options considered in arriving at the final landform design
- a summary of the processing and recovery methods including equipment and mining loss and dilution
- all economic, environmental, geological, geotechnical and other constraints to the recovery of the resource/reserve impacting the project.

Life-of-mine production schedule

The proponent must supply a life-of-mine production schedule for each year of operation of the mine and for the life of the project. The production schedule is to include:

- demonstration that resource recovery has been optimised and waste minimised, accounting for any environmental, geological, geotechnical and economic constraints, including but not limited to
 - Where the proposed mining/production scheme excludes resources that would normally be regarded as potentially economic by current industry standards, MEG requires appropriate economic and/or technical justification
- in terms of text, plans or charts, show the proposed extent and sequence of the development
- a comparison of the life-of-mine production schedule of any currently approved operation against the proposed project in excel format – this must clearly show the impact on the operation should the project not be approved.

Geotechnical assessment

The proponent is to supply an overview of geotechnical considerations that support chosen mining methods and mine design that includes, but is not limited to:

- consideration of local geological structure and its influence on stability and ground control/coal mine strata control. General and relevant site conditions including; depths of cover, geological, hydrogeological, hydrological, geotechnical and conditions.

Note: this section does not apply to small-scale mines and industrial minerals.

Economics, royalty and target market

The proponent is to supply an overview of project economics including:

- price forecasts by product type used by the proponent
- capex and opex necessary for the project broken down into the various sub-categories and equipment types. Include any changes that the project will have on existing mine infrastructure and broader mine infrastructure - rail, processing plant, etc
- estimates of employment generation broken down into direct and indirect, ongoing and construction and operator and contract workers as full-time equivalent roles
- total royalty generated annually and over the life of the project
- relationship and interaction with other mines and detail the project impacts on the existing mine and surrounding mines
- year-by-year production schedule and why this is the optimum schedule
- project funding source and assurance of ongoing project and operations funding from the proponent or parent. MEG is seeking the proponent's commitment to advancing the project.
- transport types and routes from site to market.

Coal (additional requirements)

- product tonnages split into market segment
- justification for the market segment based on:
 - quality parameters
 - domestic/export market

MEG understands that an estimate of product split into individual market segments is difficult to estimate at a point in time and is dependent on market conditions as the life of the project progresses, however MEG requires the proponent to provide its best estimate of their market mix at the initial stages of the project.

Rehabilitation and final landform

The proponent must supply an analysis of proposed rehabilitation and final landform including:

- rehabilitation methodology, objectives and outcomes, including life-of-mine tailings management strategy
- conceptual final landform design (including any voids) accounting for mine design, engineering feasibility, economic feasibility and balance of environmental and social outcomes
- post-mining land use and barriers or limitations to effective rehabilitation.

It should be noted that rehabilitation is assessed by the Resources Regulator. The Resources Regulator does not provide any endorsement of the proposed rehabilitation methodologies presented in the Environmental Impact Statement (EIS). Under the conditions of a mining authority granted under the *Mining Act 1992* and conditions of the Mining Regulation 2016, the Resources Regulator requires an authority holder to adopt a risk-based approach to achieving the required rehabilitation outcomes.

A detailed rehabilitation strategy is to be presented to the Rehabilitation and Securities Panel (RASP). See the section below for further information on RASP.

For further information on mine rehabilitation follow this [link](#).

Project constraints

The proponent must supply an analysis of all key issues and any major constraints to the project.

Project timeline

The proponent must include a proposed timeline for evaluation and development:

- Preliminary Feasibility Study and Feasibility Study
- Key stages of the development assessment pathway
- Commencement of construction and mining operations.

Review

MEG reviews the proposal based on:

- the level of resource recovery and utilisation
- mine design and feasibility including final voids, landform and rehabilitation outcomes and alternate options explored
- broad-scale environmental issues and any major constraints
- the outline and analysis of economic and social benefits and project feasibility presented.

Further information

Resource and Economic Assessment

Before any determination by the relevant consent authority, MEG is responsible for ensuring the efficient and optimised development of the resource.

This is assessed by undertaking a Resource and Economic Assessment (REA), as part of MEG's review process at the Environmental Impact Statement or Modification Report stage. The REA allows detailed assessment of the resource/reserve estimates and social and economic benefits to NSW as stated in the project and supporting material.

MEG's analysis concentrates on geological, mining and economic aspects of the project and will confirm if the production schedule and economics are considered feasible.

A REA meeting should take place approximately four weeks before submission of the EIS or Modification Report.

The REA can be arranged by contacting the Industry Advisory & Mining Concierge on 02 4063 6860 or via email at mining.concierge@regional.nsw.gov.au

Rehabilitation and Securities Panel

The Resources Regulator has established the Rehabilitation and Securities Panel (RASP) to aid continual improvement in the regulatory oversight of rehabilitation and mine closure across the mining sector.

RASP provides valuable feedback to proponents at the early stages of mine planning to ensure rehabilitation and post-mining land uses are properly considered early in the design stages and before lodging a development application. In addition, proponents are also encouraged to consult with RASP for feedback as required in the development and execution of rehabilitation strategies during the operational and closure phases of a mine.

Presentations to RASP can be arranged by contacting the Mining Act Inspectorate on 1300 814 609 (option 2, then 5) or via email at nswresourcesregulator@service-now.com

For further information on rehabilitation and RASP see the following [link](#).

NSW integrated mining policy

Proponents of mining projects are encouraged to refer to the NSW Government's Integrated mining policy in NSW.

The policy is a whole-of-government project that aims to:

- improve the regulation and assessment of major mining projects
- strike a balance between the significant benefits mining can bring to the economy and the potential impacts on communities and the environment
- help manage the environmental and social impacts of mining
- ensure the community has access to relevant and timely information about mining projects
- improve transparency, consistency and accountability for assessment decisions.

Industry Advisory and Mining Concierge

MEG's Industry Advisory and Mining Concierge service aims to facilitate the ecologically sustainable development of the state's mineral resources. The service manages the provision of technical and regulatory advice for mine development projects to industry and government agencies.

Contact details

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