



MINING & ENERGY

RELATED COUNCILS NSW

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Operational Rehabilitation Reforms
NSW Resources Regulator – Regulatory Programs

30 April 2021

rr.feedback@planning.nsw.gov.au

Dear Sir/Madam,

Re: Association of Mining & Energy Related Councils - Submission on draft guidelines to support operational mine rehabilitation regulatory reforms.

1. Message Summary

The NSW Association of Mining & Energy Related Councils ('MERC') welcomes the opportunity to comment on the draft guidelines to support the new rehabilitation standard conditions and associated requirements prepared by the NSW Resources Regulator ('RR'). MERC's comments relate primarily to State Significant Developments (SSD's) in rural and regional areas, which include both large and small mines within our local government areas.

In summary, our salient messages are:

- A. The application of a risk-focussed framework, including development of a set of "critical controls" for prioritising regulatory attention is strongly supported.
- B. Whilst the guidance provides a comprehensive and sensible regulatory framework, MERC considers an even greater issue is how DPIE will enforce the standards and hold proponents accountable - that is, the **process and governance** aspects.

In particular, we remain concerned that much of the decision-making being performed by RR will not be transparent. Whilst there are admirable requirements to post regular spatial updates on progressive rehabilitation efforts, there would be very limited opportunity for third-parties to understand or assess the design and progress of these rehabilitation efforts if the current proposals are adopted.

MERC recommends that:

1. All risk assessments be performed by an accredited specialist and be reviewed by RR for robustness and adequacy.
2. All rehabilitation objectives and benchmarked performance targets should be published with the spatial data, in a manner that makes it possible for interested third parties, such as local government, to understand the context of the spatial data published on RR's website.
3. All monitoring data used to track and validate the progress of the rehabilitation works should be provided by the mining companies in a suitable format to be ingested into the RR rehabilitation portal and/or the SEED Data Portal.

2. About MERC and its Members

MERC was founded in 1978 when several rural and regional councils recognised that Local Government Areas associated with coal developments would benefit from a coordinated approach when liaising with proponents and the NSW State Government.

In 1993 the scope broadened to include metalliferous mines. In 1999 it expanded further to represent Local Government on all extractive industries, including unconventional gas and in 2017 added renewable energy projects to its remit. Currently there are more than 20 rural and regional member councils of MERC.

A feature of the MERC membership is that it has extensive first-hand experience in the operational realities of the assessment and determination of State Significant Developments – including many mining projects, wind and solar farms. To that end, it has liaised closely with DPIE, RR and other NSW Government instrumentalities making contributions to public policy, including on matters such as:

- Reform of the Planning Agreement process (in collaboration with the NSW Minerals Council);
- Improving the infrastructure contributions system (NSW Productivity Commission, July 2020);
- Improving the environmental impact assessment and determination process (DPIE);
- Improving how the mining sector could better support businesses in regional economies (DPIE);
- Improving the standard of mine rehabilitation (DPIE);
- Planning for large scale solar projects (DPIE);
- Reform of the Resources for Regions policy criteria; and
- Being an active participant in DPIE's Resources Advisory Forum (now defunct).

3. Specific Draft Guideline Comments

a) Guideline 1: Rehabilitation Risk Assessment

MERC supports the risk-based approach spelt out by the draft guidance to comply with lease conditions.

However, the guidance currently suggests that this risk assessment need only be taken by “appropriately skilled people representing a cross section of the workforce.” Further, the mine should satisfy itself that “the level of detail in the rehabilitation risk assessment is proportionate to the type and scale of activities likely to cause disturbance, as well as the sensitivities of the surrounding environment” and that the “rehabilitation risk assessment remains current and relevant to the mining operations”.

Risk assessment can vary dramatically in quality, ranging from a rapid tick-box assessment of listed issues to quantified and detailed analysis. As the proposed risk assessments and associated documents are not to be routinely provided to RR for their assessment (only if requested), this clearly leaves potential for inappropriate minimisation of assessed risks and consequent controls and security deposits.

MERC considers the proposed “light-touch” approach is unlikely to result in substantially improved, or even adequate, rehabilitation outcomes. We recommend that a means be found for some professional accreditation to be required for at least the risk assessment leader/signatory. Alternatively, a proactive auditing of all rehabilitation risk assessments and reporting against relevant standards should be completed by RR or a suitable external body. Potentially relevant Australian Standards that the risk assessments could be audited on include:

AS/NZS IEC 31010:2020	Risk management - Risk assessment techniques
AS/NZS 5911- 2013	General guidelines on the verification, validation and assurance of environmental and sustainability reports
AS/NZS ISO 14015-2003	Environmental management - Environmental assessment of sites and organizations (EASO)

MERC recommends that:

1. At least one person in the risk assessment process should hold an appropriate professional accreditation in formal risk assessment, and that this person should sign off all risk assessments and derivative management plans.
2. Penalties for ignoring or inappropriately assessing risks should be advertised and rigorously applied as a disincentive to minimising assessed risks leading to unacceptable rehabilitation outcomes.
3. All risk assessments and derivative management plans should be reviewed and approved by RR before they become operational.

b) Guideline 2: Rehabilitation Records

The records which are required and/or recommended to be kept by this guidance appear fairly comprehensive, and are broadly supported by MERC.

However, the mine owners are not required to publish their rehabilitation monitoring records, nor to routinely furnish them to RR for review. It remains possible, and in some cases likely, that the quality of these monitoring records will be poor as there is no requirement that they be externally scrutinised unless they become subject to a Targeted Assessment Programs (TAP) or if a problem with the rehabilitation performance is somehow identified by the regulator.

A particular issue which is only addressed indirectly in the guidance documents (see Draft Guideline 6) is the size of the financial bond which is held by the government awaiting confirmation of regulatory sign-off of the rehabilitation works. Assessment of the appropriate monetary value, and eventual refund of, these security deposits provide a very strong incentive for risk assessments to be robust and performance monitoring and analysis to be much more thorough.

MERC recommends that:

1. All current and proposed rehabilitation targets, benchmarks and analogue site characteristics should be provided by company and posted on RR's rehabilitation portal, preferably in a visual format that helps RR and stakeholders compare the targets to the reported progress performance reports.
2. The licences, approvals and management plans that in which these targets and other relevant data are explained should also be linked and available on RR's rehabilitation portal.

c) Guideline 3: Rehabilitation Controls

Again, the overall risk-based approach is supported as a means of prioritising company and regulatory effort to where it is most needed. Again however, the guidance is not adequately specific about what is really needed to demonstrate that a designed control is capable of mitigating a particular effect.

The design and collection of adequate baseline data, for example, is a very difficult and complicated endeavour. It takes a very good understanding of what criteria will be accepted as evidence of successful rehabilitation at the end of the process, and then it requires sufficient resources to collect the necessary data to meet that criteria. Risk analysis will help prioritise resources but there also needs to be significant commitment of resources integrated across a range of mine roles to ensure rehabilitation performance measures are met.

In this regard, the control check boxes provided for each of the proposed appear simplistic – if some unnamed or unaccountable person within the company is allowed to tick these boxes it is difficult to imagine that there will be consistently satisfactory outcomes. There are more robust alternatives, such as board members signing off on risk assessments or their being subjected to external scrutiny by RR or using accredited auditors (like the certification process for land contamination auditors in NSW). Australian Standards which provide some relevant guidance are listed above in Section 3a.

One issue likely to worsen as time goes by is diffuse pollution from tailings and buried reject material stockpiles (even if capped) discharging into streams or internal voids. Modelling of groundwater

recovery should be coupled with monitoring and water quality modelling to design and inform the long-term management of dormant water quality impacts. This issue is theoretically covered by Contaminated Land Management Act 1997, and partly addressed in controls, but bears close and qualified scrutiny nonetheless.

MERC recommends that:

1. All risk assessments should be led by a suitably accredited and qualified risk assessor, who should be named on the relevant management plans.
2. Penalties should be applied rigorously for those who are found to have deliberately misled or are unable to subsequently justify their risk assessment conclusions.

d) Guideline 4: Mine Rehabilitation Portal

MERC concurs with RR that spatial rehabilitation monitoring data is likely the single most important data type to collect, and the intention to collect this data through your mine rehabilitation portal is in principle supported. The spatial data collection system available at RR's web portal provides a relatively resource-efficient way of tracking the progress of a mine's programmed rehabilitation activities.

However, spatial data is only one of several datasets that would ideally be reported for examination. Other datasets which would be extremely helpful to capture in the same process include relevant licence and approval requirements relating to surface water, groundwater, ecological and other environmental attributes (preferably as quantitative performance measures) and the monitoring data used to support reporting statement assessments.

In our view, the decision to exclude these documents and data from the RR's, community's other stakeholders' access renders this approach a much less powerful compliance position.

The reasons for excluding key rehabilitation performance information, such as environmental monitoring results, from the reporting framework is not discussed in the draft documentation. MERC anticipates that the two principal reasons would be to minimise reporting burdens on the mines and to limit the volume and types of data that RR has to ingest onto its reporting platform. If so, both of these issues can be technically overcome if there is sufficient government appetite to do so.

An "all of environment" data portal was identified as an essential requirement for the efficient long-term management and protection of the state's natural resources by the NSW Chief Scientist in 2014 (Measuring the cumulative impacts of all activities which impact ground and surface water in the Sydney Water Catchment). In particular, the Chief Scientist called for the NSW government to rapidly improve its overall monitoring capability by requiring industry-collected environmental monitoring data to be ingested into what has since become the SEED Portal.

Despite expectations and promises that industry monitoring data would be captured and available for scrutiny, mining companies and other permit-holders are not required to (or even encouraged to) publish their regular environmental monitoring data into the Seed Portal, and it remains an agency-only data portal. It is deeply frustrating to local government stakeholders that the NSW government is once again refusing to grasp the productivity-enhancing nettle of capturing industry-collected environmental monitoring data. Instead this valuable data will remain locked in company databases, apparently forever despite the recommendations of our Chief Scientist, outside the government data ingestion process and thus unavailable for environmental compliance monitoring and wider resource assessment.

MERC recommends that:

1. All management plans and interpretation reports relevant to the assessment of rehabilitation objectives, controls and performance targets should be linked to the spatial data provided to RR in its rehabilitation data ingestion process.
2. Collated monitoring data used to justify these reports and assessments should also be provided to RR and ingested into government databases, preferably in SEED, and made available through the RR's rehabilitation portal for external examination.

e) Guideline 5: Rehabilitation Objectives and Rehabilitation Completion Criteria

The effort that has been applied by RR to developing this guideline is applauded by MERC. We also appreciate the requirement to develop rehabilitation objectives and completion criteria through some level of stakeholder engagement is strongly supported.

But again, MERC's concern about robust and transparent threshold development remains that most of the guidance to develop remains qualitative and elastically worded, including the requirements for stakeholder consultation.

A key consideration in the setting of rehabilitation objectives is what the land was zoned and what landuses will be permissible following completion of rehabilitation. Close consultation with Councils is clearly essential in clarifying this step.

The guidance notes that in most cases there will be some consideration and intentions made at the EIS stage, and some of these will likely be converted into planning approval conditions. It is our experience however that final land uses identified in an EIS are often vague, lack planning, are not linked to any defined land use, and are almost never supported by feasibility studies. In reality, they are often deferred to much later in the mine life, and are often finalised only when a closure request is imminent. It is often not known whether the proposed landform design will meet any current or future proposed land uses that, at the time of approval, may be possible on the site. This inevitable complexity leads to a high level of uncertainty and the ability to track through multiple design changes is essential both for RR and local government.

Unless there are quantified, or at least detailed and unambiguous, definitions of what the rehabilitation targets and benchmarks should be and how completion will be measured and assessed, there remains a high risk of unsatisfactory rehabilitation outcomes. The rehabilitation plans need to unambiguously spell out locations for proposed actions, triggers for mitigations if required, clarification of which monitoring points which will be used in the assessment, and timeframes, e.g. what period will rehabilitation be continued and responses measured? Will this always include the time taken for water tables to return and stabilise?

It is important that current rehabilitation plans are consistent with planning requirements, and that modifications to proposed changes are agreed with relevant stakeholders and that modification versions can be readily tracked. It is also important that completion criteria are adequately and quantitatively (where possible) defined to demonstrate successful remediation, e.g. degree to which post-mining streamflows, groundwater levels and water quality will return to pre-mining (baseline) levels.

To achieve this level of detail and agreement there needs to be a high level of transparency and stakeholder consultation buy-in, which means the stakeholder engagement process needs to be thorough and all proposals and proposed amendments are externally available for appropriate consideration relative to the agreed rehabilitation objectives.

MERC recommends that:

1. Zoning approval is sought for all rehabilitation outcome proposals.
2. The rehabilitation portal should make proposed and current zoning requirements for all proposed zoning available for community and mine-owner information.
3. That appropriate levels of formal and informal consultation be required for each proposed rehabilitation plan modification after planning approval, and that these consultations be reported on the RR's rehabilitation portal for future scrutiny.

f) Guideline 6: Achieving Rehabilitation Completion (Sign-Off)

The guidance provides the mine owner with useful and important information about the steps they need to take to achieve departmental sign-off on their rehabilitation duties.

It does not however provide much information on how RR will assess the success of the rehabilitation. In some cases, such as landform contouring, analysing the point at which rehabilitation can be

considered successful is a simple matter of quantity surveying. In other cases however, such as deciding what proportion of pre-mining streamflows need to be replicated by post-mining flows to consider a stream's hydraulic functionality (not to mention its ecological and riparian functions) successfully rehabilitated, is a difficult undertaking and generally requires significant consultation with stakeholders.

Insufficient attention seems to be paid to these aspects, and a commitment to at least conduct the success assessment by the company and RR transparently is very important to RR's regulatory credibility. There is no commitment in the guidelines to discuss the sign-off with relevant stakeholders, or even with other agencies. Greater clarity on RR's assessment process, and a commitment to provide community transparency in this process, would be valued by MERC and other stakeholders.

MERC recommends that:

1. RR should commit within the final guidelines to requiring all, or at least large, mines to undertake an appropriate level of stakeholder consultation to both design and ultimately to assess rehabilitation completion. It is very important that local government is included in all stages of the rehabilitation design and completion verification.

4. Conclusions and Recommendations

MERC appreciates the opportunity to provide feedback on the abovementioned matters.

We support RR's proposed reforms to mine rehabilitation and closure processes. However, greater scrutiny of the risk assessments is essential as these underly all rehabilitation actions. We further feel that there is insufficient proposed access by RR and external stakeholders to the instruments, monitoring data and decision-making processes discussed in these guidelines.

In particular, we recommend the following additional measures be incorporated into the reform documents and rehabilitation assessment processes:

1. At least one person in the risk assessment process should hold an appropriate professional accreditation in formal risk assessment, and that this person should sign off all risk assessments and derivative management plans.
2. Penalties for ignoring or inappropriately assessing risks should be advertised and rigorously applied as a disincentive to minimising assessed risks leading to unacceptable rehabilitation outcomes.
3. All risk assessments and derivative management plans should be reviewed and approved by RR before they become operational.
4. All current and proposed rehabilitation targets, benchmarks and analogue site characteristics should be provided by company and posted on RR's rehabilitation portal, preferably in a visual format that helps RR and stakeholders compare the targets to the reported progress performance reports.
5. The licences, approvals and management plans that in which these targets and other relevant data are explained should also be linked and available on RR's rehabilitation portal.
6. Penalties should be applied rigorously for those who are found to have deliberately misled or are unable to subsequently justify their rehabilitation risk assessment conclusions.
7. All management plans and interpretation reports relevant to the assessment of rehabilitation objectives, controls and performance targets should be linked to the spatial data provided to RR in its rehabilitation data ingestion process.
8. Collated monitoring data used to justify these reports and assessments should also be provided to RR and ingested into government databases, preferably in SEED, and made available through the RR's rehabilitation portal for external examination.
9. Zoning compatibility and approval should be sought for all rehabilitation outcome proposals.
10. The rehabilitation portal should make proposed and current zoning requirements for all proposed zoning available for community and mine-owner information.

11. Appropriate levels of formal and informal consultation be required for each proposed rehabilitation plan modification after planning approval, and that these consultations be reported on the RR's rehabilitation portal for future scrutiny.
12. RR should commit within the final guidelines to requiring all, or at least large, mines to undertake an appropriate level of stakeholder consultation to both design and ultimately to assess rehabilitation completion. It is very important that local government is included in all stages of the rehabilitation design and completion verification.

Our organisation has extensive operational experience across all facets of mining and energy developments in rural and regional areas and would welcome the opportunity to discuss the matters raised herein in more detail. We extend an invitation to the Department to convene a Zoom or Microsoft Teams virtual meeting to discuss the topic.

If you have any queries please don't hesitate to contact the Executive Officer of MERC Mr Greg Lamont on phone 0407 937 636 or email info@miningrelatedcouncils.asn.au.

Yours sincerely,

Peter Shinton
Chairman
Association of Mining Related Councils