



# Queensland Government Consultation Report

*Better Mine Rehabilitation for Queensland*

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Discussion Paper

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# Executive Summary

On 4 May 2017 the Queensland government released the Better Mine Rehabilitation for Queensland discussion paper (rehabilitation paper) for public consultation. The rehabilitation paper was released simultaneously with the Financial Assurance Framework Reform discussion paper (financial assurance paper).

The rehabilitation paper presented a proposed mine rehabilitation policy and six delivery elements that together form an integrated mined land management framework. The paper was developed in response to the results of a recent review into the State's financial assurance system by Queensland Treasury Corporation (QTC), and community concerns about the quality of mine site rehabilitation under existing arrangements. A lack of rehabilitation increases the risk of financial impacts to the State and the community and the risk of environmental harm.

Over the consultation period 521 submissions were received and 16 external stakeholder consultation meetings held. Attendees at stakeholder meetings included industry, environmental groups, local government and university representatives. Industry stakeholders including Queensland Resources Council (QRC), Australian Petroleum Production & Exploration Association (APPEA), Association of Mining and Exploration Companies (AMEC) and individual resource companies also engaged the Department of Environment and Heritage Protection in one-on-one meetings.

All stakeholders have generally supported the rehabilitation policy as proposed. Most stakeholders support the introduction of the requirement for a site-specific mine to have a life-of-mine plan and agree that mined land should be progressively rehabilitated throughout the life of the mine. The key concerns with the proposed policy largely centred on a desire for flexibility, a need for greater detail regarding how the policy will be implemented, what the transitional arrangements will be and ensuring definitions are clear and unambiguous. All of these concerns can be accommodated in finalising the policy and plan and its effective implementation.

A key theme raised by multiple submitters was the need for clear definitions for terms used within the policy including: limited circumstances; special management areas, land 'available' for rehabilitation, rehabilitation/rehabilitated, progressive rehabilitation, large mines, high risk mines, care and maintenance, and stakeholder consultation.

Submitters were also interested in the development and content requirements of life of mine plans including how they would be enacted, would Plan of Operations still be required and who would be involved in deciding the future land use. Submitters also questioned what rehabilitation milestones will look like, how milestone frequency would be determined and how detailed the rehabilitation completion criteria would be.

The need for flexibility was also a major theme, and submitters discussed what might constitute a major amendment to a life of mine plan and whether disturbance to rehabilitation ratios could/should be used. Some submitters contended that current regulatory processes have not been effective thus far at holding mining companies responsible for their actions, and questioned the reliability of using a company's rehabilitation history as a performance indicator. Submitters agreed with the need for increased transparency of rehabilitation performance. There were various opinions on how often operators should be audited and what information will be made available to the public.

In response to consultation feedback, a final policy will be released which clearly sets out the Queensland Government's expectations for mine rehabilitation. Implementation of the policy is currently targeted for July 2018, to coincide with the reform to the financial assurance framework. New mines will be brought into the new framework from 1 July 2018 onwards and will also be the date for which transitional provisions will apply to all existing site-specific mines operating on a mining lease. Existing mines will be transitioned to the new framework over at least a three year period, although the Queensland Government will continue to work through transitional arrangements.



# Better Mine Rehabilitation for Queensland Consultation Report

## Purpose

The purpose of this report is to summarise the results of public consultation on the Better Mine Rehabilitation for Queensland discussion paper (the rehabilitation paper). This report outlines the key themes raised during consultation as well as specific issues concerns/raised and the actions or responses to each.

## Background

While mining in Queensland comes with an obligation to rehabilitate mined land, there are growing concerns about the quantity and quality of rehabilitation undertaken to date. Peak bodies that represent resource companies accept that rehabilitation is a mining company's responsibility and recognise that it is an important part of maintaining a social licence to operate. The Queensland Government has a key role in supporting a sustainable resources industry and ensuring that resources companies meet their responsibilities for rehabilitation and management of mined land.

In 2016 the Queensland Government commissioned the Queensland Treasury Corporation (QTC) to a review the State's financial assurance framework for the resources sector (the QTC Review).

The QTC Review recommended an alternative financial assurance system, namely the tailored solution, and a range of complementary measures to reduce the State's exposure to the financial and environmental risks of un-rehabilitated mined land. The complementary measures include:

- a rehabilitation policy;
- a residual risk framework;
- expanded forms of surety for providing financial assurance;
- expanded abandoned mines program;
- improved information systems and governance;
- management of care and maintenance sites; and
- an approval process for transfer or asset sale.

Based on the QTC review, the Queensland Government provided in-principle support for a redesigned financial assurance framework and a series of complementary measures that can significantly improve the State's ability to manage risks associated with rehabilitation.

The first complementary measure, the Better Mine Rehabilitation for Queensland discussion paper was released for public consultation on 4 May 2017, simultaneously with the Financial Assurance Framework Reform discussion paper. Public consultation closed on 15 June 2017, although the Queensland Government accepted submissions received post this date on a case by case basis.

The rehabilitation paper set out a policy on mined land rehabilitation to improve rehabilitation performance in Queensland. The proposed rehabilitation policy and six delivery elements together form an integrated mined land management framework which reflects world-wide best practice and covers all mining stages. From commencement, the policy is proposed to apply to mines applying for an environmental authority through a site-specific application process. It is proposed that existing site-specific operations would be transitioned to the scheme over a number of years.

The six elements of the proposed integrated mined land management framework were:

1. Introducing life-of-mine plans for all site-specific mines
2. Regular monitoring, assessment and reporting
3. Enforceable requirements for progressive rehabilitation
4. Clear completion and sign-off requirements
5. Performance based incentives
6. Good quality data to inform policy and regulatory implementation



# Public consultation

Public consultation on the Better Mine Rehabilitation for Queensland discussion paper (rehabilitation paper) was held from 4 May 2017 to 15 June 2017. Small extensions were given on a case by case basis.

On release of the rehabilitation paper, Queensland Treasury sent an email to a diverse range of stakeholders inviting submissions on the paper. Stakeholders included industry, environmental groups, law associations, commercial groups, regional councils and researchers.

A notice inviting written submissions on the paper was provided on the Queensland Government's Get Involved and Queensland Treasury's websites and links to an online survey was also available at both the aforementioned websites. To assist stakeholders with reviewing the policy, the rehabilitation paper included specific questions about the policy, framework elements and proposed implementation. Stakeholders were also invited to complete the survey in addition or as an alternative to providing a submission.

During the public consultation period the Department of Environment and Heritage Protection invited a diverse range of stakeholders to presentations that were delivered in multiple key mining business centres: Brisbane, Cairns, Townsville, Mackay, Rockhampton and Emerald. Approximately 160 targeted stakeholders were invited and the sessions attracted approximately 30% of the invitees. One on one sessions with stakeholders were held upon request. A summary of external stakeholder consultation is summarised in Table 1.

*Table 1: List of external stakeholder presentations and meetings*

| When         | Who                               | Where       |
|--------------|-----------------------------------|-------------|
| 10 May 2017  | APPEA                             | Brisbane    |
| 11 May 2017  | QRC                               | Brisbane    |
| 26 May 2017  | BHP                               | Brisbane    |
| 29 May 2017  | External Stakeholder Presentation | Townsville  |
| 30 May 2017  | External Stakeholder Presentation | Cairns      |
| 1 June 2017  | External Stakeholder Presentation | Brisbane    |
| 2 June 2017  | External Stakeholder Presentation | Brisbane    |
| 2 June 2017  | Santos                            | Brisbane    |
| 2 June 2017  | Glencore                          | Brisbane    |
| 5 June 2017  | External Stakeholder Presentation | Mackay      |
| 6 June 2017  | External Stakeholder Presentation | Rockhampton |
| 6 June 2017  | Orica                             | Brisbane    |
| 8 June 2017  | External Stakeholder Presentation | Emerald     |
| 12 June 2017 | Rio Tinto                         | Brisbane    |
| 15 June 2017 | QRC                               | Brisbane    |
| 4 July 2017  | AMEC                              | Brisbane    |

# Results of consultation and responses

Submissions were received from a total of 521 stakeholders: 78 submitted individual feedback; 389 submitted a standard form; and 54 opened the online survey. Of the 54 respondents to the online survey, 37 provided responses to all questions.

All submissions relating to the rehabilitation paper were reviewed and their contents summarised and collated by themes as well as issues. Submissions relating to financial assurance or requesting amendments to the financial assurance paper are not within the scope of this consultation report.

Table 2 provides a summary of the key themes identified in the submissions and presentations/ meetings for the rehabilitation paper, and the Queensland Government’s responses to each issue. Table 3 provides a more detailed grouping of specific issues and comments as raised in the written submissions, and the Queensland Government’s specific response to these.

Appendix 1 provides a list of submitters, each of which has been allocated a submission number. The submission numbers listed in Appendix 1 correspond to Table 3, column 2 ‘Issues raised by’ and are the persons and organisations that made a submission on the discussion paper during the public consultation period. Persons that completed the online survey are also referenced in this column, and denoted with an “S” prior to their identification number. Those that provided feedback via the standard form are denoted with a “B” prior to the number of supporters. Any submitters that requested their submission remain confidential have been marked as ‘anonymous’. Appendix 2 summarises a number of the key questions and responses from the online survey.

All relevant issues and suggestions made will be considered in finalising the rehabilitation policy and refining the integrated mined land management framework.

*Table 2: Summary of key themes raised during consultation period and Queensland Government’s response*

| Issue  | Issue description  | Response   |
|--|--|--|
| Definitions within the policy: <ul style="list-style-type: none"> <li>• Land ‘available’ for rehabilitation</li> <li>• Rehabilitation</li> <li>• Progressive Rehabilitation</li> </ul> | <p>Submitters indicated that they would like greater clarity around each of the definition components of when land is ‘available’.</p> <p>There are concerns from industry that the proposed definition of “rehabilitation” and “progressive rehabilitation” does not allow for mining companies to demonstrate that ongoing or progressive rehabilitation is being carried out, and that they can only report on the final state of rehabilitation.</p> | <p>Defining when land is ‘available’ for rehabilitation is important as it will signal to mining companies about when the State expects rehabilitation to commence and be carried out.</p> <p>The Queensland Government will clarify that the term ‘rehabilitation’ is the act of carrying out rehabilitation rather than the final end state land that has had all stages of rehabilitation completed. The definition will refer to land currently under or being rehabilitated, rehabilitation activities and rehabilitated land (the final end state).</p> <p>Annual reporting on rehabilitation progress generally and against progressive milestones will also give companies the opportunity to report on all stages of rehabilitation activities e.g. from bulk earthworks through to establishment and certification/ surrender.</p> |





| Issue  | Issue description   | Response   |
|--|---|--|
| Name of “Life of mine plan”  | Submitters noted that the term “life of mine plans” is duplicative in name of plans already in use internally within mining companies. Strong support was given for changing the name of the plan to minimise confusion about the purpose and content of the proposed plan.   | The Queensland Government is proposing that these plans instead be called a “Progressive Rehabilitation and Closure Plan” or PRCP.   |
| Rehabilitation ratios  | Submitters were split on this topic. Some raised concern that the use of disturbance to rehabilitation ratios will be very difficult to determine and enforce due to spatial, economical and operational differences between mining activities. Others suggested that the ratio be used as a tool to encourage rehabilitation as part of an incentive system. | <p>It is proposed that a maximum disturbance to rehabilitation ratio will not be mandatory across all sites, but may be considered appropriate for particular types of mining or on an individual site if proposed in a life-of-mine plan.</p> <p>Detail on this will be included in guidelines developed by the Department of Environment and Heritage Protection.</p>  |
| Life of mine plans, milestones and completion criteria                                   | Some submitters suggested that the discussion paper did not provide enough detail on life of mine plans, milestones and rehabilitation completion criteria  | <p>The intent of the discussion paper was to consult on the new proposed framework, and to use the results of consultation to assist with determining how it can be best implemented.</p> <p>The Queensland Government will be developing detailed guidance to assist companies to develop life of mine plans and milestones with appropriate rehabilitation completion criteria.</p> <p>The Queensland Government will be seeking external technical advice in the development of this guidance.</p>  |
| Link between life of mine plan and environmental authority processes including amendment | Where a change to mine operations triggers the need to amend both a life of mine plan and an environmental authority, industry would like the process for amending these documents, including public notification to be aligned.  | The intent of the policy is to streamline processes, wherever possible. Both Queensland Government and industry will benefit from an efficient and streamlined amendment process. Therefore the Queensland Government intends to provide a mechanism whereby a change in mine operation that necessitates an amendment process in both an environmental authority and life of mine plan could be integrated.   |
| Public comment on ‘first’ life of mine plan for existing mines                           | Industry are not supportive of a transitional outcome that would require the first life-of-mine plan developed for existing mines to be put out for public notification.  | The Queensland Government acknowledges that rehabilitation requirements and commitments as stated in existing environmental authorities have already been subjected to public notification and or/ approved by the regulator. The intent for implementation will be that as long as the life of mine plan is consistent with delivering the rehabilitation requirements as set out in the environmental authority, the initial life of mine plan would not be subject to public notification. Where there is an absence of information or ambiguity in the existing environmental authority conditions, greater specificity will be required to provide certainty about the outcomes and timing of rehabilitation. |

| Issue              | Issue description   | Response   |
|--------------------|---|--|
| Plan of Operations | Industry has sought clarification on how the proposed policy interacts with the existing progressive certification framework. | <p>The intent of the policy is to ensure that rehabilitation is carried out progressively throughout the life of a mine, to reduce the risk to the State in the event that a company defaults on their obligations.</p> <p>Progressive certification is an industry driven process to have rehabilitation signed off as satisfactory by the regulator prior to surrender of the environmental authority.</p> <p>The progressive certification process is supported by the integrated mined land management framework in a number of ways:</p> <ul style="list-style-type: none"> <li>• clearer rehabilitation completion criteria will support certification processes by ensuring mutual understanding of the rehabilitation to be delivered.</li> <li>• companies will be able to report on the area of land that has achieved a progressive certification signoff.</li> </ul> |

Table 3: All issues and comments raised in public submissions (including the online survey)

| Issue                                | Submitter reference   | Issue description (as raised by submitter)  | Response   |
|--------------------------------------|---|---|--|
| <b>General</b>                       |   |   |  |
| Rehabilitation data                  | 1, 8, 9, 45   | Some submissions suggested that current rehabilitation data may be exaggerated. It is felt that the discussion paper did not accurately reflect current industry rehabilitation efforts.  | The rate of rehabilitation compared to disturbance was calculated using the best data available to the Department of Environment and Heritage Protection at the time. The new policy provides an opportunity for collection of more granular data collection to understand better rehabilitation performance over time.  |
| Disturbance to rehabilitation ratios | 34, 45, 53, 54, 55, 56, 77<br>S4, S10, S12, S20, S22, S32, S38, S42, S43, S44 | Concern was raised that the use of disturbance to rehabilitation ratios will be very difficult to determine and enforce due to spatial, economical and operational differences between mining activities. Others suggested that the ratio could be used as a tool to encourage rehabilitation as part of an incentive system. | <p>It is proposed that a maximum disturbance to rehabilitation ratio will not be mandatory across all sites, but may be considered appropriate for particular types of mining or on an individual site if proposed in a life-of-mine plan.</p> <p>Detail on this aspect will be included in guidelines developed by the Department of Environment and Heritage Protection.</p> |



| Issue   | Submitter reference  | Issue description (as raised by submitter)   | Response  |
|---|--|--|---|
| Detail of requirements under proposed policy                              | 4, 29, 44  | Industry requested additional clarity on the legal and regulatory requirements.  | <p>The final policy will clearly state the Queensland Government’s expectations on mine rehabilitation, including when land will be considered available for rehabilitation and the circumstances in which it may not be possible or practical to rehabilitate an area.</p> <p>The life-of-mine plan guideline will clearly state what must be included in life-of-mine plans. Similarly, a completion criteria guideline will state the Department of Environment and Heritage Protection’s expectations of completion criteria, and assist mining companies in developing rehabilitation completion criteria.</p> |
| “Life of Mine Plan”   | 45, 54, 77<br>S4, S14  | Current internal industry practice already uses the phrase “life of mine plan”. There is concern duplication will cause confusion, so it has been recommended that the new policy change the name of the life of mine plan.  | The name is proposed to be changed to “Progressive rehabilitation and Closure Plan (PRCP)”.   |
| <b>Definitions</b>  |  |  |   |
| ‘Limited circumstances’ for rehabilitation and ‘special management areas’ | 2, 9, 10, 28, 31, 34, 44, 45, 52, 55, 72<br>S7, S9, S14, S22, S35, S47<br>B389 | <p>The proposed policy identified three circumstances in which rehabilitation efforts may be limited or not possible:</p> <ul style="list-style-type: none"> <li>• Where rehabilitating the area would pose a greater risk</li> <li>• Where the environmental risks are localised</li> <li>• Where the cost of rehabilitation would be so excessive as to not be in the public interest.</li> </ul> <p>There were concerns raised about the inclusion of these limited circumstances within the policy, and how these provisions may allow for loopholes.</p> <p>Concern was also raised that the amount of rehabilitation cost is no matter for the public interest. Furthermore, it was argued that regardless of who bears the cost of rehabilitation, the financial cost of rehabilitation should not be an allowable reason for not doing the rehabilitation. If rehabilitation efforts become so excessive as to not be in the public interest, then the resource was likely not cost-effective to extract in the first place.</p> <p>There was a strong desire for clear definitions and criteria detailing the limited circumstances for rehabilitation.</p> | The issues raised through consultation about the leaving of special management areas and the need for more detail around definitions will be further considered by the Queensland Government as it works through the detail of implementation.  |

| Issue                        | Submitter reference   | Issue description (as raised by submitter)  | Response   |
|------------------------------|---|---|--|
| <b>Definitions</b>           |   |   |  |
|                              |   | <p>There was also an argument for “limited circumstances” to only be applicable for existing mining operations.</p> <p>There was concern about the clarity of these parameters, including who will make the determination, how and what information will be assessed, and how they will trigger the need for enforceable action. There was strong support for a clear definition of each exemption.</p>                     |  |
| ‘Available’ land             | <p>33, 44, 45, 54, 56, 72, 77</p> <p>S2, S5, S7, S8, S9, S13, S14, S15, S16, S20, S26, S30, S31, S35, S38, S44, S49</p> | <p>The policy proposed that particular use and time parameters will define when land becomes ‘available’ for rehabilitation.</p> <p>Industry was not supportive of a specific timeframe for extraction and concerned about re-disturbance of completed rehabilitation if the resource become economically viable in the future.</p>   | <p>The issues raised through consultation about the need for more detail around definitions will be further considered by the Queensland Government as it works through the detail of implementation.</p>  |
| ‘Rehabilitation’             | <p>2, 4, 8, 9, 23, 28, 31, 45, 54, 55</p> <p>S2, S4, S8, S13, S14, S20, S21, S44, S47</p>                               | <p>There is concern that the current policy definition of ‘rehabilitation’ is not comprehensive enough and does not consider ecosystem functions. Clear criteria need to be developed to identify rehabilitation requirements and progress.</p> <p>Clarification is also needed as to whether final pit voids, tailings and waste dumps will be classified as rehabilitated if that is a pre-determined final land use.</p> | <p>The issues raised through consultation about the leaving of special management areas and the need for more detail around definitions will be further considered by the Queensland Government as it works through the detail of implementation.</p>  |
| ‘Progressive rehabilitation’ | <p>4, 8, 26, 45, 54</p> <p>B382</p>   | <p>Some submissions suggested that the policy lacks a clear definition of progressive rehabilitation and the requirements for criteria development. Questions were raised as to how progressive rehabilitation criteria will be assessed over time, and how flexibility in criteria will be maintained.</p>   | <p>Progressive rehabilitation will be inclusive of activities that are necessary to achieve the final rehabilitation outcome as well as areas of land that have been rehabilitated to the final rehabilitation outcome and are either being monitored/ maintained or have received progressive certification signoff.</p> <p>Flexibility will be provided to allow companies to provide more detailed information on proposed actions within a more constrained outlook (perhaps five years) and to amend plans as necessary for market or technological changes and to provide increasing detail as time progresses on future milestones. Provision will be made for minor amendments that do not require public consultation and major amendments that will require public consultation.</p> |



| Issue  | Submitter reference                    | Issue description (as raised by submitter)   | Response   |
|--|--|--|--|
| <b>Definitions</b>   |  |  |  |
| 'Large mines'  | 8, 54<br>B389                          | Clarification is required as to whether only "large mines" (and subsequently what constitutes a large mine) or all mining activities will be required to develop a LOMP.   | The policy's intent is that all mining companies who apply for a site-specific environmental authority for a mining lease will be required to develop and implement a life-of-mine plan. All existing site-specific mines will be required to transition to this new framework over time.<br><br>The requirement to prepare and submit for approval a life-of-mine plan may be extended to standard and variation operations and petroleum and gas operations at a later date. |
| 'High risk' mines'   | 28, 43, 54, 73                         | Submissions suggested that there is ambiguity surrounding the classification of 'high risk' mines. Any unclear definition may allow critical polluters to avoid certain life of mine plan requirements.  | Issues raised through consultation about the need for more detail around definitions will be further considered by the Queensland Government as it works through the detail of implementation.   |
| 'Care and maintenance'   | 24, 28, 29, 30, 33, 45, 54, 70<br>B389 | Once a mine site has been classified as in 'care and maintenance' there is ambiguity surrounding its productivity, functionality and rehabilitation status. It is also noted that mines in such as state must still comply with environmental authority obligations. Clarification is needed on the definition criteria of mines in care and maintenance and how the policy applies. | Progressive rehabilitation milestones as stated in a life-of-mine plan must be met irrespective of the operational status of a mine.<br><br>As part of the broader package of reforms responding to the FA review, the Queensland Government has committed to considering risks to the state of mines in care and maintenance. This is under a separate process being run by the Department of Natural Resources and Mines.  |
| <b>Integrated mined land use management framework – policy</b> |  |  |  |
| <b>Policy</b>  |  |  |  |
| Inconsistency in policy statement                              | 11, 45, 52, 54, 77                     | Submissions contended there was a contradiction in the discussion paper on the definition of rehabilitated land. The policy states that the government is seeking to ensure all mined land is rehabilitated, however then recognises that not all mined land areas can be rehabilitated. Clarification is needed on the policy intent.   | The proposed policy was to ensure all mined land is rehabilitated to be safe, stable, not cause environmental harm and be able to sustain a post-mining land use. The policy recognises that there may be limited circumstances where it may not be possible or preferable to rehabilitate some areas to sustain a post-mining land use. However these areas must be managed to be safe, stable and non-polluting.   |

| Issue   | Submitter reference                                       | Issue description (as raised by submitter)  | Response   |
|---|---|---|--|
| <b>Integrated mined land use management framework – policy</b>            |   |   |  |
| <b>Policy</b>   |   |   |  |
| Progressive certification process   | 45, 54  | There is ambiguity about where certified rehabilitation will fit in with the rehabilitation reforms. Industry believes that this process should play an important part in recognising successful rehabilitation and have appropriate incentives to support companies achieving early certification. | <p>The intent of the policy is to ensure that rehabilitation is carried out progressively throughout the life of a mine, to reduce the risk to the State in the event that a company defaults.</p> <p>Progressive certification is an industry driven process to have rehabilitation signed off as completed by the regulator prior to surrender of the environmental authority.</p> <p>The progressive certification process is supported by the integrated mined land management framework in a number of ways:</p> <ul style="list-style-type: none"> <li>• clearer rehabilitation completion criteria will support certification processes by ensuring mutual understanding of the rehabilitation to be delivered.</li> <li>• companies will be able to report on the area of land that has achieved a progressive certification signoff.</li> </ul> |
| <b>Integrated mined land use management framework – Delivery elements</b> |   |   |  |
| <b>1 Life of mine plan contents and operation</b>                         |   |   |  |
| Future land use decision  | 2, 6, 8, 9, 10, 14, 28, 29, 31, 73<br>S14, S35, S43<br>B7 | The definition and choice of desired future land use can influence rehabilitation costs and efforts by operators. There were concerns raised about who will be involved, and what the process and criteria will be for deciding upon future land use.   | Mining activities are a temporary use of land. Therefore it is important that future land use is determined having regard to regional plans and consultation with stakeholders including landholders and the local community. The final land uses will be proposed in a life-of-mine plan which will be assessed by the Queensland Government.   |
| Criteria for “stakeholder consultation”                                   | 11, 34, 41, 54, 55, 73, 77<br>S12, S15, S31, S35, S44     | Submitters requested further information on what the purpose of consultation would be and the expectation of the consultation participants, and suggested the consultation process requires definition on who, why, how and when the public will be consulted.                                      | The requirements for stakeholder consultation are clearly defined in the EP Act for the environmental impact statement process and the environmental authority application process. Similar provisions are proposed to apply to stakeholder consultation for life-of-mine plans.   |



| Issue   | Submitter reference  | Issue description (as raised by submitter)   | Response  |
|---|--|--|---|
| <b>Integrated mined land use management framework – Delivery elements</b> |  |  |   |
| <b>1 Life of mine plan contents and operation</b>                         |  |  |   |
| Life of mine plan development   | 1, 3, 4, 8, 28, 43, 44, 54<br>S14, S20, S34, S35   | <p>Submitters contended that the Department of Environment and Heritage Protection alone is not equipped to assess all aspects of life of mine plan. Life of mine plan development will require consultation with industry, local community, auditors and other Queensland Government departments.</p> <p>Given operators will be writing life of mine plans and developing binding requirements, there is concern as to how those requirements will be assessed for adequacy, measurability and enforceability.</p> | <p>It is acknowledged that additional expertise and resources may be needed to support the Queensland Government in assessing life-of-mine plans and determining if any additional conditions are required.</p> <p>Life-of-mine plans will need to meet the statutory guideline which will give detailed requirements about life of mine plan requirements.</p>   |
| Life of mine plan milestone frequency                                     | 34, 55, 56<br>S2, S3, S5, S8, S10, S13, S14, S15, S16, S20, S26, S29, S31, S34, S35, S38, S42, S43, S44, | There were questions about how milestone frequency will be determined given the different lifespans of different mining operations.  | The intent for the life of mine plan development is that mine operators will be able to propose appropriate milestone frequency relevant to the life span of their mine site. However flexibility will be provided to allow companies to provide more detailed information on proposed actions within a more constrained outlook (perhaps five years) and to amend plans as necessary for market or technological changes and to provide increasing detail as time progresses on future milestones. Provision will be made for minor amendments that do not require public consultation and major amendments that will require public consultation. |
| Major amendments  | 2, 45, 54, 56, 77<br>S7, S9, S22, S31, S35, S43  | Submissions suggested that the discussion paper was not clear on what constitutes a major amendment and that guidelines need to be developed to clarify the amendment level triggers and how these will involve community consultation.  | <p>The Queensland Government is proposing that major amendment triggers would be clearly defined. It is also proposed that only some amendments such as where the scale or impact of the change would be of interest to the broader public would be released for public notification.</p> <p>These could include a :</p> <ul style="list-style-type: none"> <li>• Significant change to the final rehabilitation outcome for example, proposed final land uses</li> <li>• Significant increase to the disturbance footprint</li> <li>• Significant change to the life of mine timeframe</li> </ul>  |

| Issue   | Submitter reference  | Issue description (as raised by submitter)  | Response   |
|---|--|---|--|
| <b>Integrated mined land use management framework – Delivery elements</b> |  |   |  |
| <b>1 Life of mine plan contents and operation</b>                         |  |   |  |
| Milestones  | 2, 23, 44, 45, 53, 56, 77<br><br>S2, S3, S5, S7, S10, S13, S14, S16, S20, S26, S35, S38, S44 | To be enforceable, the progressive rehabilitation milestones and completion criteria need to be clearly detailed. This raises concerns about the flexibility and binding nature of milestones when developed at the initial stages of planning. There is a need for flexibility in determining criteria and milestones in order to apply adaptive management. | The Queensland Government proposed that milestones will be enforceable, and the final framework will enable that.<br><br>In order to provide certainty to industry about the level of detail required in the construction of a milestone or final rehabilitation outcome, guidelines will be developed. The Queensland Government will be seeking external technical advice on best practice for development of rehabilitation completion criteria.<br><br>Milestones will be amendable, with the approval of the Department of Environment and Heritage Protection. |
| Life of mine plan enactment   | 4, 43, 44, 45, 54, 56<br><br>S3, S9, S44, S49<br><br>B7                                      | Some submissions suggested it was unclear from the policy as to how the life of mine plan will be enacted. If the life of mine plan is to stand alone to the environmental authority as a statutory document, there is a need to clarify what milestones and criteria will become binding.  | The Queensland Government proposes to give statutory effect to the life-of-mine plan specifically through the <i>Environmental Protection Act 1994</i> and will be standalone from the environmental authority. All milestones and milestone completion criteria will be binding.  |
| Interaction between environmental authority and life of mine plan         | 4, 43, 44, 45, 54, 56<br><br>S3, S9, S44, S49<br><br>B7                                      | Submissions raised the need for further information on how the reforms will recognise existing environmental authority conditions, provide for non-compliance and enforcement action, and whether the consultation process for a life of mine plan will be in addition to the notification required for the environmental authority application.              | The Queensland Government intends to ensure assessment and reporting processes for environmental authorities and life of mine plans would be integrated or streamlined where possible.   |
| Plan of Operations  | 28, 34, 44, 53, 56, 72, 77<br><br>S3, S9, S16, S29, S35, S38, S42, S43, S44, S47             | Clarity is needed as to whether Plan of Operations will be replaced or integrated into life of mine plans.  | The Queensland Government is keen to draw upon, or even replace, existing reporting processes wherever possible. If the content of the plan of operation can be captured in the life of mine plan or other existing mechanisms. The need for a plan of operations will be redundant.   |
| Field trials  | 54   | One submitter suggested that the proposal for rehabilitation and field-based management trials to be included within a life of mine plan is unnecessary and should not be mandatory, given that it would be dependent upon the mining operation and the future land use.  | Whilst the plan must set out clear milestones to achieve rehabilitation outcomes, it must also have the ability to evolve as more information becomes available. Rehabilitation field trials may be an appropriate pathway for achieving best-practice progressive and final rehabilitation in some cases.   |





| Issue  | Submitter reference   | Issue description (as raised by submitter)  | Response   |
|--|---|---|--|
| <b>2 Monitoring, assessment and reporting</b>                      |   |   |  |
| Monitoring and Reporting timeframes                                | 10, 21, 28, 33, 34, 43, 44, 45, 53, 54, 55, 56<br>S9, S12, S15, S16, S20, S22, S29, S31, S44, S50<br>B389     | <p>Public consultation raised the concern that the regularity of auditing will determine transparency, public confidence and progressive rehabilitation activities. Clarification of auditing regularity is needed, for both industry and community benefit.</p> <p>The policy suggested auditing be carried out every 3 years, with companies with good performance being rewarded with 5-yearly audits. There is overall support for annual reporting, however it is unclear as to what auditing requirements will be and how they will tie in with reporting efforts and life of mine plan milestone progress. A careful balance and clear schedule for reporting and auditing requirements was considered</p> | <p>Element 2 of the integrated mined land management framework proposes annual self-assessments by companies to assess their rehabilitation performance against the life of mine plan. The reports would need to assess both the quantity and quality of work undertaken. The Queensland Government will take into consideration feedback received on the frequency of audits and the value of linking the frequency to a performance based incentive.</p> <p>The annual self-assessment by mining companies and audit reports completed will be made publically available.</p>  |
| Public reporting   | 1, 8, 10, 28, 29, 33, 34, 43, 45, 53, 54, 55, 56<br>S2, S9, S13, S16, S22, S43, S44                           | <p>Operator and auditor reports need to be as transparent as possible to allow for assessment, adaptive management, cross-jurisdictional information transfer and for community understanding and support. A lack of transparency on measureable outcomes can lead to uncertainty and antagonism within a community. There is confusion as to how open communication will be achieved and what parameters ensure the mining company keeps the community informed.</p> <p>There is also industry concern about how much information is made publicly available in regards to privacy and confidentiality at a commercial level.</p>  | <p>Element 2 of the framework supports regular monitoring, assessment and public reporting of progress against rehabilitation outcomes over the life of the mine. Public reporting of overall rehabilitation performance was generally supported and will be pursued as an outcome of the final framework.</p>   |
| <b>3 – Enforceable requirements for progressive rehabilitation</b> |   |   |  |
| Current regulatory processes                                       | 1, 2, 4, 10, 11, 17, 19, 26, 28, 29, 33, 52, 53, 55, 72<br>S5, S8, S9, S10, S13, S14, S15, S16, S30, S31, S35 | <p>There is significant concern that current regulatory processes and complexity mean that it is difficult to hold mining companies accountable for ineffective mine closure. There is also concern from the public that current policy regulations are not in line with best practice, and as such, mining activities are resulting in poor and inefficient rehabilitation efforts. New regulatory processes need to be clear and enforceable to facilitate successful rehabilitation.</p>   | <p>The requirement to have a life-of-mine plan for all site-specific mines is a critical element of the framework which requires early planning for rehabilitation and land management. Adopting a formal requirement for a life-of-mine plan brings Queensland into line with other Australian jurisdictions and best practice mining regulation. Adopting a formal requirement for a life-of-mine plan brings Queensland into line with other Australian jurisdictions and best practice mining regulation. Adopting a life-of-mine requirement would increase mining companies' accountability for carrying out progressive rehabilitation.</p> |

| Issue  | Submitter reference  | Issue description (as raised by submitter)   | Response   |
|--|--|--|--|
| <b>3 – Enforceable requirements for progressive rehabilitation</b> |  |  |  |
|  |  |  | Together with, clear, scientifically founded completion criteria the new planning, reporting and milestone enforcement requirements will improve rehabilitation outcomes.  |
| <b>4 - Completion and sign-off criteria</b>                        |  |  |  |
| Completion criteria  | 1, 2, 3, 15, 23, 45, 53, 54<br>S2, S5, S7, S13, S14, S20, S21, S26, S38, S44 | <p>Submitters would like more information as to how milestones and criteria are to be developed at the planning stage for end-of-life actions. There has been concern raised about the need to maintain flexibility of criteria, but confusion as to how the policy's planned enforceability will maintain such flexibility.</p> <p>It needs to be recognised that different mine sites will require different criteria to address their specific activities and location.</p> | <p>The rehabilitation completion criteria for each site will need to be developed on a site-specific basis with reference to the guideline (to be developed). The Department of Environment and Heritage Protection will seek external, technical advice on best practice for the development of rehabilitation completion criteria, and is considering whether standard rehabilitation completion criteria for certain site features is possible.</p> <p>It is intended that rehabilitation completion criteria will be developed at the beginning of a mine's life. Changes to rehabilitation completion criteria will likely be required over the mines life, and a pathway for amendments will be provided. The policy recognises the need to allow industry evolution and adoption of best practice rehabilitation.</p> |
| Mine site premature closure  | 8,   | The FA calculator assumes a 'rehabilitation and premature closure plan' has been prepared and can be implemented. Concern has been raised that unless it is a policy requirement, the exclusion of a premature closure plan will omit significant costs to total mine planning and rehabilitation.   | It is proposed that a life-of-mine plan will include a consideration of alternative closure scenarios which should include the potential for an unplanned, early closure. A consideration of alternative closure scenarios will also identify the risks and circumstances where closure might otherwise occur and the strategies for managing those risks.   |



| Issue  | Submitter reference                                       | Issue description (as raised by submitter)  | Response  |
|--|---|---|---|
| <b>4 - Completion and sign-off criteria</b>                  |   |   |   |
| Transfer of ownership and ongoing maintenance requirements   | 3, 8, 15, 23, 28, 29, 34, 54, 70<br>S7                    | There is concern that operators may be able to pass on rehabilitation liability and responsibility without first showing significant effort to work towards end-stage rehabilitation milestones. There is also concern that rehabilitation efforts may not be effective and successful in the long term, resulting in increased State or community liability.   | <p>It is proposed that once developed and in place, life-of-mine plans will transfer to all future environmental authority holders who will be required to comply with the life of mine plan. Being a publically available document, transferees will be able to see up-front their rehabilitation obligations and therefore be able to make financial provision for the carrying out of the rehabilitation obligations.</p> <p>With respect to future liability if rehabilitation is not successful in the long term, a complementary initiative of the FA review is for the Queensland Government to look at residual risk policy.</p> <p>Residual risk is the risk that apparently satisfactory rehabilitation will need ongoing monitoring, management and/or repair, and the risk that contaminants released from the area will cause environmental harm, thereby requiring a program to monitor what management action should be taken for the release.</p> <p>Residual risks are not considered or covered by FA, and relate only to post-EA surrender activities. A payment can be collected by Government from mine operators to cover the costs associated with the residual risks of a site post EA surrender.</p> |
| <b>5 - Incentives</b>  |   |   |   |
| Company history is not a definitive indicator of performance | 11, 33, 34, 43, 45, 54<br>S2, S4, S14, S16, S29, S31, S38 | <p>If mining tenure, auditing schedule and FA are to be assessed and based upon an operators past history, it needs to be made very clear and publicly available what that history is. There is concern that simply relying on past performance history will not be a reliable indicator of future performance. The issue is raised that performance history alone should not influence the allocation of incentives.</p> <p>It must also be noted that new companies investing in mining in QLD will not be able to demonstrate past rehabilitation performance.</p> | <p>There is a benefit to the State in having rehabilitation work completed early, and as such, the policy proposed preferential treatment when granting tenure to mining companies with good rehabilitation performance as a possible incentive.</p> <p>This element of the policy is still under consideration.</p>  |

| Issue  | Submitter reference  | Issue description (as raised by submitter)   | Response  |
|--|--|--|---|
| <b>5 - Incentives</b>  |  |  |   |
| Company history is not a definitive indicator of performance                   | 11, 33, 34, 43, 45, 54<br>S2, S4, S14, S16, S29, S31, S38                      | If mining tenure, auditing schedule and FA are to be assessed and based upon an operators past history, it needs to be made very clear and publicly available what that history is. There is concern that simply relying on past performance history will not be a reliable indicator of future performance. The issue is raised that performance history alone should not influence the allocation of incentives.<br><br>It must also be noted that new companies investing in mining in QLD will not be able to demonstrate past rehabilitation performance.   | There is a benefit to the State in having rehabilitation work completed early, and as such, the policy proposed preferential treatment when granting tenure to mining companies with good rehabilitation performance as a possible incentive.<br><br>This element of the policy is still under consideration.   |
| Incentives for good performance  | 24, 45, 52, 54, 55, 56, 70, 72<br><br>S2, S3, S7, S13, S15, S22, S32, S35, S44 | Industry would like more financial incentives for good performance, and feel that there should be a range of criteria and incentives for companies performing above agreed life of mine plan criteria. It is noted by the public that although there is general support for incentives for good behaviour, there needs to be significant and tangible benefits to avoiding the disincentives.<br><br>Incentives for good performance need to be determined and clearly identified.   | The completion of rehabilitation is a statutory obligation and integral component of any mining project.<br><br>The framework as proposed was to provide incentives for companies to manage rehabilitation well, and disincentives for poor management.<br><br>Incentives are still under consideration.  |
| <b>Other concerns</b>  |  |  |   |
| Specific attention to rehabilitate surface and groundwater resources is needed | 6, 7, 8, 11, 19, 25, 26, 28, 36, 72<br><br>B389                                | It has been noted that mining operations can significantly alter landforms and catchment hydrology (overland flow, aquifers, groundwater recharge). Concern has been raised that the policy does not specifically address surface and groundwater management and rehabilitation. Rehabilitation guidelines need to pay specific attention to catchment hydrology and water resources.  | The policy framework proposed is to support progressive and final rehabilitation being carried out in a way that best suits the site specific needs of each mining activity. In the circumstances where catchment hydrology and water resources are critical factors to successful rehabilitation, the life of mine plan will need to consider them.  |
| Development of a regional rehabilitation industry                              | 24, 41 43, 45, 54  | The development and enhancement of a rehabilitation industry is strongly supported. However there is a need for more information as to who will be responsible for rehabilitation activities and what consultation there may be between rehabilitation/management groups and mining operators. There will be two instances of rehabilitation activities – when the operator is conducting progressive rehab as per the life of mine plan, and when the Queensland Government is conducting rehabilitation activities through the financial assurance rehabilitation fund.<br><br>In the case where the operator completes the rehabilitation, it is noted that the existing workforce is utilised, and subsequently there was questions as to how the proposed policy will positively increase job opportunities within the rehabilitation sector. | The framework encourages companies to invest in a greater quantity and quality of rehabilitation sooner rather than later. Bringing forward the expenditure of just a small proportion of the estimated \$7.3 billion of outstanding mine rehabilitation liability represents a significant opportunity to expand the rehabilitation industry and stimulate regional economic growth.<br><br>Having progressive rehabilitation as a mining operations requirement will create certainty of demand that a necessity for a strong rehabilitation industry to prosper. |

# Online Survey



There were 54 respondents to the online survey, and 37 provided responses to all questions.

Approximately 30% of the online survey respondents identified themselves as members of the public and another 30% were from a range of mining industries and related business. Just over 15% of the respondents were affiliated with the rehabilitation industry or environmental groups. Appendix 2 summarises the key questions of the survey. Appendix 6 contains the survey questions.

Overall, the proposed rehabilitation policy was well received and is generally supported.

There was strong support for:

- the provision of flexibility when developing time-based milestones when there could be an acceptable explanation provided
- disturbance to rehabilitation maximum ratios
- integration of other mine planning documents into the life of mine plan
- annual publishing of rehabilitation related information
- enforceable requirements for progressive rehabilitation
- the provision of incentives to encourage rehabilitation, and
- the future application of the policy to petroleum and standard environmental authority activities.
- Regarding life of mine plans, there was very strong support (>95%) for:
  - life of mine plans to address all stages of the mine lifecycle
  - objective and measurable rehabilitation completion criteria for each area
  - post closure management and rehabilitation actions.

The opportunity was provided for the submitters to provide suggestions for what else could be included in life of mine plans, which will be considered and integrated into the associated guidelines if appropriate.

The most relevant issues raised related to the definitions of certain terminology within the policy, as well as core fundamentals of developing the policy i.e. auditing and public consultation processes, and the flexibility of milestones and criteria development.

From the online survey results, the most notable disagreement with the policy was in relation to the timeframe proposed for future extraction of resources. Only 28.57% of respondents (10 people) supported the proposed 10 year leeway, with 42.86% (15 people) supporting a 5 year extraction limit. A strict definition of “available land” was the desired provision.

# Appendix 1: List of persons and organisations who provided a written submission

| Submission number | Person or organisation                | Submission number | Person or organisation                 |
|-------------------|---------------------------------------|-------------------|--|
| 1                 | Anonymous                             | 29                | TJ Ryan Foundation                     |
| 2                 | G Dickens, Naturally Spatial          | 30                | ECO Central QLD                        |
| 3                 | RGS Environmental                     | 31                | QFF                                    |
| 4                 | T Anderson, NRA                       | 32                | QLD NRM                                |
| 5                 | D Draper                              | 33                | EDO NQLD                               |
| 6                 | J Bonsy                               | 34                | D Marlow<br>(PDF to be kept Anonymous) |
| 7                 | S Corrigan                            | 35                | E Thomas                               |
| 8                 | D Doley, CMLR                         | 36                | Karawatha Forest<br>Protection Society |
| 9                 | M Irwin, NRM                          | 37                | Cement Australia                       |
| 10                | C Dewar, EIANZ/Viridis<br>AustralAsia | 38                | Gecko Environmental Council            |
| 11                | Save Hinchinbrook Alliance            | 39                | Anglo American                         |
| 12                | S Meggitt                             | 40                | Asset Insure                           |
| 13                | M Brindle                             | 41                | Adani (Rehab)                          |
| 14                | B Jean                                | 42                | Marsh                                  |
| 15                | C Apelt                               | 43                | G Edwards                              |
| 16                | N Carroll, Interphase/TMNHA           | 44                | A Broadfoot DESR                       |
| 17                | J Kornfeld                            | 45                | Peabody                                |
| 18                | MOP - L Agar                          | 46                | Mackay Conservation Group              |
| 19                | F Jones                               | 47                | ASBG                                   |
| 20                | P Taylor                              | 48                | NQ Conservation Council                |
| 21                | D Palmer                              | 49                | Chubb                                  |
| 22                | J Monto                               | 50                | M Irwin                                |
| 23                | G Bartrim                             | 51                | Anonymous                              |
| 24                | Virentia                              | 52                | PHAA                                   |
| 25                | ACF                                   | 53                | CHRC                                   |
| 26                | P Dart                                | 54                | QRC                                    |
| 27                | A Clark                               | 55                | J Rolfe                                |
| 28                | N Parratt, WWF                        | 56                | Idemitsu                               |



| Submission number | Person or organisation | Submission number | Person or organisation   |
|-------------------|------------------------|-------------------|--|
| 57                | Bridgeport             | 70                | Anonymous  |
| 58                | APLNG                  | 71                | SCAP   |
| 59                | EDO                    | 72                | Mackay Conservation Group #2                                   |
| 60                | Lock the Gate Alliance | 73                | AMEC   |
| 61                | APPEA                  | 74                | New Century Resources  |
| 62                | Anonymous              | 75                | Sojitz Minerva Mine  |
| 63                | Shell                  | 76                | Sibelco  |
| 64                | Glencore               | 77                | Rio Tinto  |
| 65                | Senex Energy           | 78                | Batchfire  |
| 66                | Santos                 | 79                | Standard form letter 1 – Financial Assurance (382 signatories) |
| 67                | Anonymous              | 80                | Standard form letter 2 – Rehabilitation (7 signatories)        |
| 68                | QPE                    | 81                | Online survey (54 respondents)                                 |
| 69                | Arrow Energy           |                   |  |

## Appendix 2: Summarised Online Survey results

| # | Survey Question   | Support | Lack of Support | Unsure or Other | Issues Raised   |
|---|---|---------|-----------------|-----------------|---|
| 3 | Do you think a clearly stated mine rehabilitation policy will support good quality, progressive rehabilitation of mined land? | 80%     | 8.57%           | 11.43%          | <p>It may support good quality rehabilitation but this will only occur if senior managers within the industry are held to account for non-compliance and adequate penalties are applied for non-compliance.</p> <p>It will need to be backed up by real support by way of government officers on the ground to: Ensure, regulate and monitor that mining companies do indeed follow through and undertake their obligations.</p> <p>Greater emphasis needs to be applied to address rehabilitation design and rehabilitation completion criteria.</p> |

| # | Survey Question   | Support | Lack of Support | Unsure or Other | Issues Raised   |
|---|---|---------|-----------------|-----------------|---|
| 4 | Mined land should be considered available for rehabilitation if it  | 28.57%  | 45.72%          | 25.71%          | <p>There should be flexibility within any policy to consider what type or mining is being undertaken, how it is being mined and the inherent derived demand of the product being mined. There needs to be a strict definition of “available” land.</p> <p>There needs to be a strict definition of “mined land”.</p> <p>A shorter timeframe than that proposed is to ensure that Industry remains focused on the rehabilitation imperative.</p> |
| 5 | In some circumstances it may not be possible or preferable to rehabilitate all areas of a site.                               | 51.51%  | 39.39%          | 9.09%           |   |
| 6 | Are there other circumstances or considerations that are relevant to considering whether land should be rehabilitated or not? | 60.61%  | 39.39%          | -               | <p>Stakeholder/landholder requests.</p> <p>The future land use.</p> <p>Slope and soil composition.</p> <p>Risk of long-term effects.</p> <p>The potential biological productivity of the land.</p>  |
| 8 | Do you agree that requiring companies to develop a LOMP, will improve confidence in rehabilitation outcomes being delivered?  | 71.88%  | 12.5%           | 15.63%          | <p>There MUST be enough compliance or regulatory officers to check them thoroughly.</p> <p>Only if the plan contains sufficient detail and once accepted is a commitment from the government not to amend the scope of the rehabilitation to satisfy a political or other agenda.</p>   |





| #  | Survey Question   |    | Support                        | Lack of Support                            | Unsure or Other | Issues Raised   |
|----|---|----|--------------------------------|--|-----------------|---|
| 10 | Do you agree with the proposals about what a LOMP should include, as identified in the discussion paper?      | 1  | 90.32                          | 0  | 9.68            | A case-by-case basis would be best  |
|    |   | 2  | 100                            | 0  | 0               |   |
|    |   | 3  | 90.32                          | 6.45                                       | 3.23            | Should utilise mapping files ie SHP files.  |
|    |   | 4  | 93.55                          | 3.23                                       | 3.23            | Must maintain flexibility.  |
|    |   | 5  | 83.87                          | 9.68                                       | 6.45            | Milestones need to relate to time following mining rather than a pre-determined schedule per se. Time based milestones can be included but it needs flexibility.  |
|    |   | 6  | 96.77                          | 0  | 3.23            | Closure criteria need to be specific.   |
|    |   | 7  | 87.10                          | 3.23                                       | 9.68            |   |
|    |   | 8  | 93.55                          | 3.23                                       | 3.23            |   |
|    |   | 9  | 96.77                          | 3.23                                       | 0               |   |
|    |   | 10 | 83.87                          | 6.45                                       | 9.68            | The relevance of stakeholders may need to be assessed. The requirement for continued consultation and incorporation may be impractical.   |
|    |   | 11 | 90                             | 6.67                                       | 3.33            | Standard criteria under the EPAct should have been considered when granting the environmental authority.  |
| 13 | When should an amendment to the life of mine plan be classified as a major amendment and publically notified? |    | Change to post-mining land use | Change to a timeframe for completing rehab | Other           | When there is a change in the intent of land use.<br><br>LOMP should come under existing regulations and require an annual update and review.<br><br>When the mine applies for a temporary water release exemption. |
|    |   |    | 71.88%                         | 81.25%                                     | 37.5%           | When a change of ownership/ transfer of assets is proposed.<br><br>When there is a change to cost benefit or viability of mine operations.<br><br>Mine expansion or change of mining technique.                     |

| #  | Survey Question  | Support | Lack of Support | Unsure or Other | Issues Raised   |  |
|----|--|---------|-----------------|-----------------|---|--|
| 14 | What option would be appropriate for milestones?   | 2yrs    | 5yrs            | Other           |   |  |
|    |  | 41.94%  | 29.03%          | 29.03%          |   |  |
| 15 | Should flexibility be allowed in relation to meeting time-based milestones, if an explanation can be provided? | 70.97%  | 22.58%          | 6.45%           | It depends on the milestone and the progress status of rehabilitation.<br>It should be a case-by-case basis.  |  |
| 16 | Would a disturbance to rehabilitation maximum ration be appropriate to impose on mines?                        | 66.66   | 33.33           | -               |   |  |
| 17 | Can a LOMP replace of be integrated with other mine planning documents?  | 64.52%  | 16.13%          | 19.35%          | With Plan of Operations.<br>LOMP should be independent.<br>Incorporated with EIS, and replace RMP.  |  |
| 18 | Are there other options to ensure that early and ongoing rehabilitation is achieved?                           | 66.67%  | 33.33%          | -               | Public scrutiny.<br>Incentives and penalties – financial and legal accountability.<br>Statutory requirement.<br>Enforce and regulate rehabilitation efforts and quality.<br>Educate to demonstrate importance and benefits of rehabilitation. |  |
| 19 | What should be in the annual report?   | 1       | 93.55           | -               | 45.16   |  |
|    |  | 2       | 96.77           |                 |   |  |
|    |  | 3       | 96.77           |                 |   |  |
|    |  | 4       | 87.10           |                 |   |  |
|    |  | 5       | 93.55           |                 |   |  |
|    |  | 6       | 61.29           |                 |   |  |
|    |  | 7       | 87.10           |                 |   |  |
|    |  | 8       | 90.32           |                 |   |  |
|    |  | 9       | 87.10           |                 |   |  |



| #  | Survey Question   | Support                  | Lack of Support | Unsure or Other | Issues Raised  |
|----|---|--------------------------|-----------------|-----------------|--|
| 20 | Should information be published annually?   | 74.19%                   | More often      | Less often      |  |
|    |   |                          | 16.13%          | 9.68%           |  |
| 21 | Where should data be published?   | EHP                      | Operator        | Other           | Company websites.<br>Both EHP and operator.<br>Media outlets.  |
|    |   | 61.29%                   | 19.35%          | 19.35%          |  |
| 22 | Does allowing operators to propose milestones in the LOMP for each site ensure there is sufficient flexibility to reflect operational requirements?   | 51.61%                   | 12.9%           | 35.48%          | Milestones require flexibility for various techniques and demand.<br>Milestones should be reviewed annually.<br>Milestones should be proposed according to the LOMP.<br>Landholder and EHP should also have a say in proposing milestones.   |
| 23 | Will having enforceable requirements for progressive rehabilitation throughout the life of a mine ensure regular, ongoing and quality rehabilitation? | 67.74%                   | 19.35%          | 12.9%           | If they are enforceable.<br>There needs to be a culture of continuous improvement.<br>There needs to be significantly deterring repercussions/penalties.<br>Need to enforce quality, not simply quantity.  |
| 24 | Can you suggest parameters for completion criteria that could be developed to apply state-wide?   | 59.26%<br>(16 responses) | 40.74%          | -               | Water quality.<br>Groundwater flow and morphology.<br>Erosion and sediment control standards.<br>Soil parameters (acidity, heavy metals, nutrients).<br>Vegetation cover % and species composition.<br>Regional ecosystems.<br>National standards for the practice of ecological restoration in Australia. |

| #  | Survey Question  | Support | Lack of Support | Unsure or Other | Issues Raised   |
|----|--|---------|-----------------|-----------------|---|
| 24 |  |         |                 |                 | <p>State-wide outcomes should be outcome focused, not prescriptive.</p> <p>Parameters will require a site-by-site application.</p> <p>No final voids.</p> <p>Creation of nature refuge.</p> <p>SMART parameters.</p> <p>Contaminants don't leave site.</p> <p>Required endemic species for defined end land use.</p> <p>Maintain an evidence-based approach.</p> <p>Management of weed species.</p>   |
| 26 | Do you agree that incentives should be available to encourage better rehabilitation?   | 66.67%  | 26.67%          | 6.67%           | <p>Reduced external monitoring if a company demonstrates application of actual best practice and go beyond minimum environmental authority /LOMP requirements.</p> <p>Best practice logo? Green and Red points system?</p> <p>Financial incentives – fee cuts, FA reduction, royalty reductions, credits for legacy,</p> <p>Productivity of post-mining landscapes (history).</p> <p>Any incentive should not be financial.</p> <p>Incentives should be process-based, not monetary eg. Improved production outcomes.</p> |
| 27 | Is it appropriate to consider an incentive that recognises a good record of rehabilitation performance as part of tenure applications? | 65.52%  | 24.14%          | 10.34%          | <p>Previous performance doesn't guarantee future performance.</p> <p>This may play with market forces too much.</p>   |



| #  | Survey Question  | Support  | Lack of Support | Unsure or Other | Issues Raised   |       |   |       |   |       |   |    |   |       |   |        |   |
|----|--|--|-----------------|-----------------|---|-------|---|-------|---|-------|---|----|---|-------|---|--------|---|
| 28 | Can you suggest any other incentives or disincentives for rehabilitation outcomes? | 51.85%   | 48.15%          | -               | <p>Public exposure for best/worst performances.</p> <p>% of FA is returned based on % of final rehabilitation that is completed.</p> <p>State awards for excellence in mining.</p> <p>Terms of imprisonment for directors/CEOs/CFOs etc if they don't meet environmental management and rehabilitation commitments.</p> <p>Fines for not progressively rehabilitating, poor rehab/weed management, not meeting land use or community expectations.</p> <p>Publically published KPIs.</p> <p>Disincentives are more important than incentives.</p> |       |   |       |   |       |   |    |   |       |   |        |   |
| 29 | How should data be presented to the public?  | <table border="1"> <tr> <td>1</td> <td>63.33</td> </tr> <tr> <td>2</td> <td>36.67</td> </tr> <tr> <td>3</td> <td>33.33</td> </tr> <tr> <td>4</td> <td>66.67</td> </tr> <tr> <td>5</td> <td>50</td> </tr> <tr> <td>6</td> <td>56.67</td> </tr> </table> | 1               | 63.33           | 2   | 36.67 | 3 | 33.33 | 4 | 66.67 | 5 | 50 | 6 | 56.67 | - | 23.33% | <p>Raw data could be made available selectively or on request.</p> <p>Newspaper and press.</p> <p>Information on companies that have more than one mine within the state.</p> <p>Public reporting must be clear, concise and consistent (max 2 page brief, with access to full report).</p> <p>Life plan, stage, current requirements delivered, penalties, upcoming goals.</p> |
| 1  | 63.33  |  |                 |                 |   |       |   |       |   |       |   |    |   |       |   |        |   |
| 2  | 36.67  |  |                 |                 |   |       |   |       |   |       |   |    |   |       |   |        |   |
| 3  | 33.33  |  |                 |                 |   |       |   |       |   |       |   |    |   |       |   |        |   |
| 4  | 66.67  |  |                 |                 |   |       |   |       |   |       |   |    |   |       |   |        |   |
| 5  | 50   |  |                 |                 |   |       |   |       |   |       |   |    |   |       |   |        |   |
| 6  | 56.67  |  |                 |                 |   |       |   |       |   |       |   |    |   |       |   |        |   |
| 30 | Is the proposed transition period for existing mines appropriate?                  | 78.57%   | 10.71%          | 10.71%          | <p>There is suggestion that the legislation needs to be implemented prior to the next election.</p> <p>Only appropriate if there is no proposal to close or transfer ownership of an existing mine.</p>   |       |   |       |   |       |   |    |   |       |   |        |   |

| #  | Survey Question   |   | Support | Lack of Support | Unsure or Other | Issues Raised   |
|----|---|---|---------|-----------------|-----------------|---|
| 31 | In future, do you consider it relevant to apply all or parts of this policy to: | Petroleum activities                        | 82.14%  | 7.14%           | 10.71%          | All industries should be considered equally.  |
|    |   | Applications for an environmental authority | 82.14%  | 7.14%           | 10.71%          | Some industries may need special provisions.<br>It should be applied to any industry that has ERAs or EAs.<br>Refineries and processing plants should also be considered. |

## Appendix 3: List of Recipients for Emails Announcing Release of Discussion Paper

Local Government Association Queensland

Carpentaria Land Council Aboriginal Corporation

North Queensland Land Council Native Title Representative Body Aboriginal Council

Torres Strait Regional Authority

Cape York Land Council

Queensland South Native Title Services Ltd

AgForce

Alliance to Save Hinchinbrook

Association of Mining and Exploration Companies

Australian Conservation Foundation

Australian Marine Conservation Society

BirdLife Southern Queensland & Birds Qld & Protect Bush Alliance

Brisbane and Regions Environment Council

Cairns and Far North Environment Centre

Capricorn Conservation Council

Clean Air Queensland

Closure Services

Darling Downs Environment Council

Environmental Defenders Office

Fraser Island Defenders Organisation

Friends of the Earth

GECKO - Gold Coast and Hinterland Environment Council

Gladstone Environment Council

Gold Coast Environment Council

Greenpeace

Logan and Albert Conservation Organisation

Mackay Conservation Group

National Parks Association of Queensland (NPAQ)

North Queensland Conservation Council

Queensland Conservation Council

Sunshine Coast Environment Council

The University of Queensland

Wide Bay Burnett Environment Council

Wildlife Preservation Society Of Queensland

World Wildlife Fund



WWF Australia/QCC

Earth Systems

Accent Environmental

Environment Institute of Australia and New Zealand (EIANZ)

Sustainable Minerals Institute, The University of Queensland

DESWICK

Pandanus Solutions

AusIMM - Strategy and Communications Department

Lock the Gate

QRC

APPEA

AMEC

## Appendix 4: Proposed Mined Land Rehabilitation Policy

### Proposed policy statement for mine-site rehabilitation in Queensland

The Queensland Government is committed to ensuring mined land is rehabilitated. All mined land should be rehabilitated so it is able to support another use.

Mined land will be rehabilitated progressively to minimise risks of environmental impacts and demonstrate the success of proposed waste and land management solutions. To provide certainty about the outcomes and timing of rehabilitation, mining companies with large mines will prepare a life-of-mine plan. The plan will include binding milestones that support transition to its future use.

When preparing the life-of-mine plan, the mining company will identify suitable future land uses having regard to the community views and any desired use expressed in local and regional planning strategies.

Mined land will be considered available for rehabilitation unless it is:

- being mined, or
- is being used for operating mining infrastructure, or
- overlays a mineral reserve that has been assessed as economically viable for extraction within ten years.

The mined land will be considered to be rehabilitated when it can be demonstrated it is safe, stable, will not cause environmental harm and is able to sustain the post mining land use.

There are limited circumstances where it may not be possible or preferable to rehabilitate some areas of a mine site to sustain a future post-mining land use. This will be restricted to where:

- rehabilitating the area would pose a greater environmental risk than not rehabilitating, or
- the environmental risks of the site are localised, and
- the cost of rehabilitation would be so excessive as to not be in the public interest.

## Proposed policy statement for mine-site rehabilitation in Queensland

These areas must be managed to be safe, stable and non-polluting and the mining companies must make provision for the on-going management of these areas as part of the residual risk payment to the Government on surrender of the lease. Such areas may include final voids and tailings and waste rock storages, and the need must be demonstrated on a case by case basis.

For new mines, the community will be consulted on the life-of-mine plan in the environmental authority application process. Existing mines will also transition to have a life-of-mine plan, prepared with a consultative process. Any significant amendment to the life-of-mine plan will also be the subject of public consultation.

Information on the progress towards the post mining land use and the monitoring of the success of rehabilitation activities will be communicated to the public throughout the life of the mine.

# Appendix 5: Questions from discussion paper

## Delivering better mine rehabilitation

Are there further critical matters that the Rehabilitation Policy should address?

Are the timeframes for future extraction appropriate given the nature of the industry?

Under what criteria could it be acceptable for an area of mined land to remain unrehabilitated?

Proposed framework delivery elements:

### 1. Introducing life-of-mine plans for all site-specific mines

Are there key points missing from the life-of-mine plan requirements?

What is the maximum period that should be allowed between life-of-mine plan milestones?

Would a maximum 'disturbance to rehabilitation' ratio be appropriate?

Could a single, life-of-mine plan replace the requirement for other plans, such as plan of operations?

### 2. Regular monitoring, assessment and reporting

What should be included in the assessment report?

Where should companies publish their reports?

How often should a company publish reports?





### 3. Enforceable requirements for progressive rehabilitation

Would this approach provide sufficient flexibility for requirements to be tailored to the specific requirements of a site?

Would this approach provide sufficient regulatory oversight to ensure consistent good performance across the industry sector?

### 4. Clear completion and sign-off requirements

How much detail should the State require in completion criteria?

How often should companies report against performance indicators?

Is there anything else Queensland needs to do to achieve the outcomes?

### 5. Performance based incentives

Should rehabilitation performance be considered when granting tenure?

Are there other incentives or disincentives the State could provide?

### 6. Good quality data to inform policy and regulatory Implementation

What data should the State be collecting?

How often should the data be published?

Where should the data be published?

## Implementation

Is the proposed transition period for current mines appropriate or should it be longer or shorter?

Should all or parts of the Framework be applied to standard and variation applications or petroleum activities?

# Attachment 6: List of Survey Questions

