Queensland Government Consultation Report

Managing Residual Risks in Queensland

Discussion Paper

Department of Environment and Science
Department of Natural Resources, Mines and Energy
Queensland Treasury

Queensland Government

Contents

Executive Summary

On 19 November 2018 the Queensland Government released the Managing Residual Risks in Queensland[1] discussion paper (residual risk paper) for public consultation.

The residual risk paper was developed as part of a package of reforms, designed in response to the results of a review into the State's financial assurance framework by Queensland Treasury Corporation (QTC)[2]. The review identified that further work was desirable to provide clarity about the processes for determining and managing these 'residual risks'. The development of the residual risk policy has followed the development of a mined land rehabilitation policy, progressive rehabilitation and closure plan (PRCP) requirements and a new financial provisioning scheme.

The residual risk paper presented a range of proposals to strengthen the State's residual risk framework. This framework allows the State to receive any funds necessary to ensure enduring rehabilitation outcomes at the surrender of an environmental authority (EA).

Over the consultation period 12 submissions were received and 7 external stakeholder consultation meetings held. Attendees at stakeholder meetings included industry, environmental groups, landholder groups and university representatives. The Department of Environment and Science also met with members of peak bodies including Queensland Resources Council (QRC), Australian Petroleum Production and Exploration Association (APPEA), Association of Mining and Exploration Companies (AMEC) and individual resource companies in tailored meetings.

All stakeholders generally supported the key proposals in the residual risk paper. Most stakeholders supported the mandatory calculation of residual risk at surrender of the EA and agreed that a simple cost methodology should be used as the default cost estimate method. Stakeholders also agreed that post surrender, a land management plan with appropriate administration was a suitable tool to ensure suitable land management after surrender.

There was support for:

- A residual risk cost calculation tool – both the calculator and the concept of an expert panel.
- A post-surrender management plan as an appropriate instrument to ensure suitable land management after surrender.
- The scheme manager under the *Mineral and Energy Resources (Financial Provisioning) Act 2018* to administer funds associated with residual risk.
- Residual risk funds being pooled.
- All sites to consider residual risks through a risk assessment process.
- Independent experts with suitable qualifications and experience, and a government chair to sit on an expert panel where one is required to determine the cost estimate.

The key concerns with the proposed policy largely centred on a need for greater detail regarding how the policy will be implemented, including how a minimum threshold would work, and a desire for flexibility and clarity around how and who would manage land post surrender. Some other concerns raised included ensuring definitions are clear and unambiguous and that stakeholders are effectively included in the development of calculation methodologies.

It is expected that in 2019 policy proposals will be finalised and approval obtained to draft the necessary legislative amendments. There will be further development of the calculation methodologies in conjunction with stakeholders.

In response to consultation feedback, final proposals will be developed which clearly set out the Queensland Government's expectations for residual risk. Implementation will follow agreement to these proposals and development of the calculation methodology which is a critical aspect of managing residual risks in Queensland.

[1] https://s3.treasury.qld.gov.au/files/Residual-Risk-discussion-paper-Nov-2018.pdf
[2] https://s3.treasury.qld.gov.au/files/review-of-queenslands-financial-assurance-framework.pdf

Purpose

The purpose of this report is to summarise the results of public consultation on the Managing Residual Risks in Queensland discussion paper (the residual risk paper). This report outlines the key themes raised during consultation as well as specific feedback and the actions or responses to each.

Background

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

The QTC Review recommended an alternative financial assurance system, 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
- an approval process for transfer or asset sale.

Figure 1: The multiple elements of the Financial Assurance Framework reform package

In November 2018, the *Mineral and Energy Resources (Financial Provisioning) Act 2018* (the Act) was passed. The Act replaces existing financial assurance requirements for resources activities with the Financial Provisioning Scheme (the Scheme), to be administered by Queensland Treasury. The Act also amended the *Environmental Protection Act 1994* (EP Act) requiring mining companies to develop Progressive Rehabilitation and Closure Plans.

The Act delivered two new requirements:

- introducing requirements for the planning and delivery of progressive rehabilitation of disturbed land for the biggest mines in the State
- setting up a new risk-based financial provisioning scheme to ensure funding is available to cover rehabilitation costs when resource companies can't meet their environmental rehabilitation obligations.

These two core initiatives were integral to achieving three of the six outcomes of the Queensland Government's broader Financial Assurance Framework Reforms package.

Following passage of the Act, the residual risk reforms are one of the complementary measures that is being progressed as part of the government's broader financial assurance and mine rehabilitation reforms.

The QTC Review identified that managing the environmental and financial risks of resource activities required policy work on a number of fronts to provide clarity about the processes for determining and managing residual risks.

The residual risk reforms aim to ensure there will be sufficient money available for government to manage the work associated with risks left on site following surrender, to ensure enduring rehabilitation outcomes in Queensland.

The residual risk paper outlined the current residual risk requirements and how they sit within the broader environmental regulation framework. It also clarified the distinction between EA obligations and post-surrender management requirements.

The residual risk paper provided a number of proposals and clarifications including:

- principles to be used in developing a standardised risk assessment methodology
- two options to assist with the estimation of post-surrender costs:
  - a calculation tool to be used in most circumstances
  - an expert panel to be used in particular circumstances
- clarification of payment requirements
- identification of the need to record post-surrender management activities including how these could be communicated to relevant stakeholders
- identification of key roles in the post-surrender management of land and funds.

The proposals would apply to all resource operators that apply to surrender an EA (including all mining and petroleum and gas sites).

The Queensland Government sought feedback on these proposals to determine the final form of the residual risk framework and its implementation.

Public consultation

On 19 November 2018 the Honourable Jackie Trad and the Honourable Leeanne Enoch jointly released the residual risk paper for comment. A summary document was also released by Government to assist with public consultation. Public consultation on the residual risk paper was open from 19 November 2018 to 1 February 2019. Small extensions were given on a case-by-case basis.

On release of the residual risk paper, Queensland Treasury and the Department of Environment and Science contacted a diverse range of stakeholders (Appendix 1) inviting submissions on the paper. Stakeholders included industry, environmental groups, commercial groups and academia. Notices inviting written submissions on the paper were also provided on the Queensland Government's Get Involved, Queensland Treasury and the Department of Environment and Science websites.

To assist stakeholders with reviewing the policy, the residual risk paper included specific questions about the policy, framework elements and proposed implementation. During the public consultation period the Department of Environment and Science invited stakeholders to presentations and one-on-one meetings were held upon request. A summary of external stakeholder consultation is summarised in Table 1.

Table 1: List of external stakeholder presentations and meetings

Date	Who	Where
5/12/18	Green and Community Groups meeting • Lock the Gate • Environmental Defenders Office	Brisbane
6/12/18	Resource Industry Advisory Committee • Queensland Resources Council (QRC) • Australia Pacific Liquefied Natural Gas (APLNG) • APPEA • Glencore	Brisbane
17/12/18	Queensland Resources Council (QRC) and members	Brisbane
16/01/19	Lock the Gate and Environmental Defenders Office (EDO)	Brisbane
22/01/19	Australian Petroleum Production and Exploration Association (APPEA) • APLNG • Conoco Phillips • Arrow • Comet Ridge • Queensland Gas Company (QGC) • Origin • Santos • Senex Energy	Brisbane
23/01/19	Queensland Farmers Federation (QFF)	Brisbane
Post consultation follow up		
08/02/19	Gas Fields Commission Queensland	Brisbane
12/02/19	AgForce	Brisbane
20/03/19	Association of Mining and Exploration Companies (AMEC)	Brisbane
04-05/04/19	Gas Fields Commission Queensland and landholders	Dalby and Wandoan

Results and Analysis of Consultation

Submissions were received from a total of 12 stakeholders. This Consultation Report attempts to present the information in full. A list of submissions received is provided in Appendix 1.

All submissions relating to the residual risk paper were reviewed and their contents summarised and collated by issues. The responses received in consultation referenced both the residual risk paper and Queensland Treasury Corporation's *Framework for Queensland's Residual Risk in the Resource Sector* paper[3].

In general there was overall agreement with the high level concepts proposed in the residual risk paper.

Table 2 provides a summary of the key issues identified in the submissions and presentations, meetings on the residual risk paper, and the Queensland Government's responses to each issue.

All relevant issues and suggestions made will be considered in finalising the residual risk policy and framework.

Table 2: Summary of key issues raised during consultation period and Queensland Government's Response

Issue	Issue description	Response
Progressive Certification		
Residual risk payment at progressive certification Progressive rehabilitation certification under Part 6 of the EP Act is a process that allows an area of rehabilitation to be "certified" during operations where it can be demonstrated to have met the environmental authority conditions.	Submitters were split on this topic, with some agreement and some disagreement with this proposal. The majority of responses were from the resource industry. The mining sector supports *"that the State does not need to require a residual risk payment at the stage of progressive certification"*. In contrast, submissions that stated the need to keep the residual risk payment at the certification of progressive rehabilitation predominantly came from the petroleum and gas sector. *"Progressing residual risk management without considering progressive certification denies industry the ability to demonstrate that in most cases there is no risk remaining" Petroleum and gas sector.* The petroleum and gas sector suggests that certification of progressive rehabilitation should allow them to *"transfer liability [of rehabilitated infrastructure] to government [or another party] without full or partial surrender of the tenure and environmental authority"*.	The Government introduced certification of progressive rehabilitation in 2005 to ensure rehabilitation requirements will not change for those areas where rehabilitation has been completed early in the life of a mining project. The introduction of progressive rehabilitation certification was therefore about increasing certainty around progressive rehabilitation. It was not intended to allow companies to transfer liability of rehabilitated infrastructure to another party (government or landholder) without full or partial surrender of the tenure and environmental authority. Government will continue to work with the Petroleum and Gas industry to understand their specific needs in regards to progressive certification and determine an appropriate response.

[3] https://s3.treasury.qld.gov.au/files/Framework-for-Queenslands-Environmental-Residual-Risks-in-the-Resources....pdf

Issue	Issue description	Response
Cost estimate and calculation methodology		
Mandatory calculation of residual risk at Environmental Authority (EA) surrender	There was strong support for the residual risk requirement to be calculated at the time of EA surrender. Further, most stakeholders agreed with the proposal to only make the calculation of residual risk mandatory at surrender. The conservation sector suggested the calculation of residual risk should be mandatory at key points from approval throughout the operation and life of the mine through to closure. Concerns were raised in submissions that financial assurance funds do not sufficiently account for residual risk, and that this should be addressed with a specific line for residual risk in the Estimated Rehabilitation Calculator: *"To protect [the State] from residual risks [it is important to] ensure there is a separate and additional line item in the ERC calculator." Conservation group.* All submitters highlighted the value of using the proposed residual risk calculation tool throughout a project's life, however they differed on whether use of the tool should be voluntary or mandatory. *"Although estimation of the residual management costs can only occur with high certainty after full rehabilitation, early estimation allows for the entity to take caution to manage future residual risk" Resource industry.*	The Government appreciates that the full costs and potential outcomes of rehabilitation decision is an important consideration at various stages throughout the life of a mine. The residual risk framework is just one part of the risk management the State undertakes in regards to resource activities. For example, there are a number of compliance tools under the *Environmental Protection Act 1994* that can help to assess the risks during the life of a resource activity and direct the EA holder to address those. Further, the rehabilitation reforms have introduced the requirement for Progressive Rehabilitation and Closure (PRC) Plans for all site specific mines. These PRC Plans need to include information about final land forms, the rehabilitation necessary to achieve those, and consider the risks of not achieving those outcomes. The Government will continue to require a cost estimate for residual risk be mandatorily provided only at surrender of the environmental authority. However, the residual risk cost estimation methodologies will be available to be used at any time by resource companies.
Simple calculation method as default cost estimate method	Submitters were generally supportive of the simple calculation method being used as the default method. Industry articulated that they would like the opportunity to be a part of the development and testing of the tool. Some suggested in certain circumstances, the expert panel should be the default cost estimate method. *"Those with a higher risk profile will needs to engage in the expert panel process… the deployment of the Expert Panel at every justifiable interval will ensure that institutional risk is mitigated" Conservation group.* A number of areas were suggested as missing when credible risk events are discussed. Hydrology and erosion were prominent in several submissions. Submitters also suggested that the definition of credible risk should be in legislation.	The Government proposes to implement the supported proposal that the calculation tool is a default method for cost estimates on all sites. As was supported in consultation, for more complex sites and features the calculator tool cannot contemplate, the expert panel is considered an appropriate process to calculate the residual risk cost estimate. The Government does not propose to introduce a definition for *credible risk event* into legislation as a definition is provided in ISO 31000. The Queensland Government commits to undertaking further development on the calculation tool in conjunction with stakeholders to ensure it contemplates site features on a former resource site, to the greatest possible extent.

Issue	Issue description	Response
Minimum threshold for requiring a surrender payment	There was strong support for the proposal to have a minimum threshold for surrender payments. Most responses proposed with a nominal minimum payment amount should be taken when any level of disturbance has occurred.	The Queensland Government is committed to completing further work on the residual risk calculator that will inform how a payment threshold is determined and implemented. The threshold must be informed by the State's total residual risk liability. Determination of the threshold value will involve a technical process of risk assessments and determination of risk profiles for resource activities across the state. Further work is essential to ensure this threshold is set at a fair and accurate value.
Funding of activities that fall under the minimum threshold, if a threshold is implemented	There was no strong support for any one option. Industry suggested nominal payments of between $5-10k should be considered when any disturbance to land has occurred. Where no disturbance occurs, no payment should be required. Some in the resource industry supported the threshold without a nominal amount, with some submissions stating that any shortfall should 'come from consolidated revenue'. One submitter supported that the funds for these activities would come from the pooled residual risk fund.	The residual risk payment should cover any potential actions that would occur on a site. Setting any payment threshold would need to reflect the possible risks, their likelihood and consequences and their management activities. Therefore setting a threshold will be determined following further work in identifying possible risks across the State's portfolio of resource activities. Determination of this threshold will take time and require further technical investigation. Further work is essential to making sure this threshold is set at a fair and accurate value. The Government will be undertaking a data-driven process involving experts to consider the potential risks of resources in Queensland and will involve stakeholders where appropriate.
Identification of and approach to low and high risk sites	There was very strong support that all sites should go through a risk assessment process to identify their risk level. *"The tool should be used to determine risk and a site should not automatically be considered "high risk" because a number of factors play into this" Resource industry.* *"As risk is a function of the likelihood of an event occurring and the consequences once it does occur, assigning a risk quotient or residual risk profile to an un-rehabilitated site would be premature and completely inappropriate" Resource industry.* There was a strong consensus that risk levels for sites should be evaluated rather than pre-determined. The calculation tool is able to assess any level of risk. It's only constraint in relation to estimating a residual risk cost - is complexity.	It is essential that sites are not "pre-assessed" but rather put through a rigorous risk assessment that determines the risk profile. The Queensland Government will require all sites with the potential to have residual risks post surrender (i.e. the environmental authority has conditions about rehabilitation) undertake an environmental risk assessment and provide a cost estimate using an approved risk assessment methodology.

Issue	Issue description	Response
When an expert panel should be used	Whilst the results would suggest no general consensus, there was support for calling an expert panel only when the simple calculation tool cannot assess the site (including complex sites), or where the EA holder elects to use a panel had broad support. *"The expert panel should only be compulsorily triggered in relation to those credible risks that are beyond the scope of the standard calculator, or where voluntarily sought by the holders." Resource industry.* The conservation sector indicated that there should be a larger number of triggers for an expert panel to be called to assess residual risk including during mine operations.	All residual risk cost estimate methodologies will be available for environmental authority holders (the EA holder) from the commencement of the reforms. The EA holder may use any approved methodology (either solely or in combination with another approved methodology). Criteria for this decision will be developed and consultation undertaken with stakeholders. The expert panel will be asked to consider the same aspects of the site the calculation tool would (such as remoteness, sensitive receptors etc.) at a minimum.
Who should be on an Expert Panel	All submitters agreed that, if called, an expert panel should consist of only those experts with actual technical experience related to the specific risk or where contentious or complex issues exist.	It is important that the expert panel consist of recognised experts in risk assessment and in the site features or disturbed land present on the site being assessed. The Queensland Government proposes that where an EA holder has called an expert panel the panel members must meet a set of stated criteria. When the environmental authority holder is directed to call an expert panel the Government may determine the composition of the expert panel. An approved methodology and criteria will be developed and published in a guideline on how to identify suitable candidates.
Post surrender land management and administration		
Post-surrender management plan as an appropriate instrument to ensure appropriate land management after surrender	There was very strong support for a post surrender land management plan that was enduring, binding, and most critically, was apparent on any type of title search. Most submitters supported the principle that *"post-surrender land management requirements must be recorded to provide certainty and clarity on required actions, and the role and responsibilities for those actions". Resource industry*	Reflecting feedback received, the Queensland Government will introduce a post surrender land management plan to manage post surrender land monitoring and management requirements. The plan will set a schedule that ensures that the requirements are met. There is the intent to design an instrument that will be noted on a relevant land register through an administrative advice so that it is apparent through a title search.

Issue	Issue description	Response
Post surrender land management and administration		
Who manages post surrender land activities	There was no definite agreement or disagreement on who should manage post surrender land activities. There was a very strong consensus from across all stakeholders that the landholder should be offered the ability to undertake any post surrender land management work as a first preference where appropriate. It was suggested that *"monitoring and management activities [be outsourced] to the landholder where it is possible to do so and ensure that associated funding is awarded to the landholder to take over responsibility" Statutory body*	The Queensland Government proposes that initially, any residual risk related monitoring or management is administered by the existing Technical Services in DNRME. It is likely that any existing procurement practices used by this program will continue including various monitoring and maintenance activities to be undertaken by the landholder as appropriate. This will reduce the administrative burden of setting up a new entity to manage land with residual risks. In the medium to long term the Government may review this role.
Framework for post surrender land management plans	A majority of responses supported an agreement with the landholder. The responses did not call out the Land Access Framework directly, however the responses were strong on the need for agreements to be made with owner/occupier of lands. Multiple landholders and some community members gave clear feedback that they would be resistant to having their properties listed under the contaminated land framework when there was no contamination, and that any notation on title must be done carefully. Landholders expressed they would prefer to negotiate how the land will be accessed to complete post surrender works. Most responses supported the use of the contaminated land framework, environmental management register or a similar, new framework.	Consideration was given to the use of the contaminated land framework to manage residual risk site management plans however some of the key principles and concepts do not align. The Queensland Government proposes to introduce a framework that will be designed to function in a similar fashion as the contaminated land framework, but will manage uncontaminated rehabilitation. The Queensland Government is exploring avenues to achieve the best outcomes for stakeholders when accessing the land post surrender.
Post surrender fund administration		
Funds should be pooled	There was very strong support for residual risk to be pooled. All stakeholders understood the advantages of pooling funds as a management strategy. A small number of submitters were concerned about the funds associated with the Estimated Rehabilitation Cost (ERC) being mixed with those of Residual Risk purposes, rather than the entity administering the funds.	The Queensland Government agrees that funds should be pooled to achieve a reasonable and secure investment return to the State. Pooling the fund will also help to manage the collective risk to the State.

Issue	Issue description	Response
The entity that will administer funds associated with residual risk to be the same as the financial provisioning scheme under the reforms introduced by the *Mineral and Energy Resources (Financial Provisioning) Act 2018*	There was strong support to have the funds administered by the same entity as the financial provisioning scheme (FPS). "[We] are generally supportive of the residual management costs being pooled and managed by the Scheme Manager for the financial provisions framework so long as the funds remain separate to the pool; for financial provisioning." Resource industry.	The Queensland Government proposes that funds be managed by the FPS scheme manager. This would provide a consistent approach to how the FPS and residual risk payments are managed during the life of a mine, and post surrender. The scheme manager also provides a professional, responsible and dedicated financial manager who can identify investment opportunities to grow the fund and provide sound and transparent budget functions.
Other considerations		
Time period considered	The conservation sector suggest the timeframe that residual risk is contemplated for to be at least 1000 years.	It is proposed to use a time period of approximately 100 years in relation to calculating net present value dollar amount. This may be adjusted based on further work on the cost estimate methodologies. In terms of time period contemplated when assessing monitoring requirements and failure rates, the Queensland Government does not seek to cap this.
Minimum mandated monitoring	The conservation sector suggest that at least 30 years of monitoring must occur prior to a surrender being accepted as a mandated provision of the residual risk framework.	The Queensland Government will not be considering mandatory monitoring periods prior to surrender in these residual risk reforms. The decision on surrender considers compliance against the EA and the assessed risk of the site meeting an acceptable level.
Liability after surrender	Industry suggested that legislation be amended to reflect they would be absolved after surrender with no possible recourse except in the circumstances where fraud or misleading conduct was involved. *"contingent liability will never be removed from the company balance sheets unless legislation confirms that the company is no longer liable [after surrender]" Resource industry.*	The rights and obligations for resource extraction are only conferred via the tenure and EA. The surrender process requires the holder to surrender both tenure and EA. At this stage the Queensland Government is not considering amending legislation.

Next steps

Initial feedback indicates that all stakeholders are in general agreement on the proposed policies. The Queensland Government is currently undertaking policy development on multiple aspects of the project. The Queensland Government will continue to engage with stakeholders to determine how best these concepts will be implemented.

In developing the detail of the final policy positions and implementation particulars the Department of Environment and Science will meet with stakeholders where further engagement on key issues is necessary. Stakeholders will also be consulted during the development of implementation products.

As one example, the Department will be engaging with stakeholders to further develop the calculation methodologies proposed in the residual risk paper. A key part of this engagement will be through a series of workshops that will occur throughout 2019. These workshops have multiple objectives:

- Achieve a mutually agreed understanding of what credible risk events (CREs) are and what the relevant CREs for resource activities in Queensland.
- Test elements and options for the expert panel process.
- Involve stakeholders to maximise transparency and understanding of the two calculation methodologies.
- Ensure the data in the prototype calculator is the best available. This will involve gathering more data to inform the calculator and the identification of more credible risk events.

These workshops will be an important part of developing the two cost estimate methodologies.

The Department will also be developing, in conjunction with stakeholders:

- Supporting guidance on the consideration of residual risks during the surrender process including use of risk assessment methodologies
- a framework for post surrender administration.

It is likely that legislative amendments will be required to implement the residual risk proposals.

Significant milestones for the residual risk reforms in 2019 include:

- To finalise all policy proposals and obtain approval to draft the necessary legislative amendments.
- Development of the calculation methodologies in conjunction with stakeholders.

It is envisaged that processes will continue through 2019 into 2020 as the Queensland Government works on legislative amendments, guidance and implementation materials for the residual risk reforms.

Appendix 1: Consultation details

Submission Details

A total of 12 separate submissions were received from a mix of the Resource Industry (5 submissions), Green groups (2 submission), individuals (2 submissions), landholders (1 submission), State Government statutory bodies (1 submission) and academia (1 submission). See Table 4 below.

Table 3: Details of submissions by sector

Submitter	Sector
Lock the Gate/Environmental Defenders Office	Conservation Sector
World Wildlife Fund	Conservation Sector
Mr. Robert Hirst	Individual
Mr. Andrew Gray	Individual
Queensland Farmer's Federation	Landholder
Queensland Resources Council	Resource Industry
Glencore	Resource Industry
Golder	Resource Industry
Australian Petroleum Production Exploration Association (APPEA)	Resource Industry
Gasfields Commission Queensland	Statutory body
Confidential	Academia
Confidential	Resource Industry

Appendix 2: Context

Questions from the Residual Risk Discussion Paper

Question 1. Should it only be mandatory to calculate the residual risk requirement at the point of EA surrender?

Question 2. Should risk profiles from former resource sites be made publicly available?

Question 3. Do you agree with the general principles proposed for developing a calculation tool?

For example, basing it on site features, potential risk factors, using credible risk events, etc.

Question 4. Is a semi-quantitative methodology for quantifying consequence adequate?

Question 5. Under what circumstances could an expert panel be useful?

Question 6. What sites should be considered 'high risk'?

Question 7. What is the most appropriate way to estimate residual risk cost at a 'high risk' site?

Question 8. Are there alternative ways to get expert advice to determine residual risk costs other than a calculation tool or an expert panel process?

Question 9. Who should be on the expert panel?

Question 10. Should a minimum threshold for requiring a surrender payment be implemented?

Question 11. Are there any circumstances where the payment requirement should be a different amount than the cost estimate?

Question 12. If a threshold is implemented, how should the State fund any activities required at sites that fall under the minimal threshold?

Question 13. Is a post-surrender management plan an appropriate instrument to ensure appropriate land management after surrender?

Question 14. What should the plan cover?

Question 15. What is the best way to ensure that activity limits on rehabilitated land are maintained?

Question 16. What is the best way to ensure that rehabilitation standards are maintained and risks mitigated post-surrender?

Question 17. Should the entity that will administer the financial provisioning scheme under the reforms introduced by the Mineral and Energy Resources (Financial Provisioning) Bill 2018 also administer funds associated with residual risk?

Question 18. Should funds be pooled?

Question 19. Do you believe the governance proposed over the residual risk framework is sufficient?

Question 20. What other elements could be included?

Definition of Residual Risk – Environmental Protection Act 1994

residual risks, of an area within a resource tenure or land to which a site management plan relates, means all or any of the following—

(a) the risk that, although the rehabilitation appeared to be satisfactory when the area was assessed for a progressive certification application, surrender application or site management plan—

i. it will, in the foreseeable future, fail to perform as predicted in a relevant progressive rehabilitation report, a relevant final rehabilitation report or the site management plan; and

ii. the failure will result in the need for repair, replacement or maintenance work for the area;

(b) the risk that the area will need ongoing management;

Examples of ongoing management—

- maintenance of fences to ensure the safety of steep slopes or to prevent access to contaminated areas
- providing a pump-back system to manage the discharge of contaminants
- continuation of a monitoring and verification plan under the GHG storage Act for the relevant area to ensure GHG stream storage under that Act is taking place as predicted

(c) the risk of contaminants being released from the area by animals, water or wind and potentially causing environmental harm that may require a program to monitor what management action should be taken for the release.

Residual Risk Context

Residual risks are those risks remaining at a rehabilitated and surrendered resource site, when the resource company is generally no longer responsible for the monitoring, maintenance or rectification of the site. Residual risks covers the risk of rehabilitation failing, ongoing management, and the risk of contaminants being released from the area and potentially causing environmental harm after the environmental authority (EA) has been surrendered.

Although the surrendered site has been rehabilitated, there is a risk rehabilitation may fail in the future. The site may also require ongoing monitoring and maintenance of engineered structures to ensure they continue to meet their design function, and also possible rectification of any subsequent failures of rehabilitation that occur after the surrender. Monitoring and maintenance may reduce the risk of failure by sampling soil and water on the site, visual inspections, and operating pumps after wet weather events, etc.

Nominally anything that has the potential to fail, require ongoing monitoring and management or could cause environmental harm associated with the former resource activity would be considered within the residual risk framework. For example, a residual risk payment may be taken to ensure a waste rock encapsulation feature remains safe, stable and non-polluting over time.

The *Environmental Protection Act 1994* (EP Act) provides a head of power for the administering authority (the Department of Environment and Science (DES)) to take a residual risk payment from a surrender applicant for an EA for a resource activity. However, to date the administering authority has not taken a payment.

Residual risk payments will be taken at surrender of an environmental authority to cover ongoing monitoring, maintenance and repair costs of previously rehabilitated sites, payments for specified credible risk events, and any other costs specifically identified when the original residual risk payment for a site was determined.