



Latrobe Valley
Mine Rehabilitation
Commissioner

LATROBE VALLEY REHABILITATION MONITORING & EVALUATION FRAMEWORK 2018

Executive Summary

The *Mineral Resources (Sustainable Development) Act 1990 (Vic)* requires the Commissioner to prepare a document that sets out a monitoring and evaluation framework for rehabilitation planning activities. The framework presented herein has been prepared based on the first year's activities (July 2017-June 2018) with the relevant organisations concerned with the Latrobe Valley's brown coal mines' rehabilitation.

Rehabilitation planning for the brown coal mines encompasses a broad range of actions that are subject to oversight by the Commissioner. These actions include the work of the Latrobe Valley Regional Rehabilitation Strategy project, the individual planning by the operators of the three Latrobe Valley brown coal mines, the collective research program of the three mine operators under the auspices of the Integrated Mines Research Group and the deliberations of public-sector bodies including the regulators (Earth Resources Regulation and the Environment Protection Authority) and the planning and development departments (DELWP and DJPR) that have a stake in the outcomes of rehabilitation of the mines. This rehabilitation monitoring and evaluation framework has been constructed around each of the activities of these four key groups.

For monitoring and evaluation of these groups' activities, the Commissioner has adopted a log framework approach. The log framework format defines a hierarchy of activities, outputs and outcomes leading to the

required goal. It highlights the indicators and the verification of the indicators required to confirm that progress has been made. In this case, progress is determined by feedback showing how the monitoring and evaluation process has contributed to progress. The log framework further highlights the risks and assumptions that are implicit in the steps from activities to goal for the stakeholder. The monitoring and evaluation framework is established as the means of verification of the activities, outputs and outcomes as well as the assessment of the performance of these against the identified risks and assumptions.

A key goal for the design of the monitoring and evaluation framework has been to use, as far as possible, the operational arrangements that are already in place in the major stakeholder organisations, including the reporting, meeting and dissemination pathways adopted by these organisations. This approach's advantage lies in the use of existing stakeholder activities and outputs for the operation of the framework and avoids creating new processes and new reporting activities solely for the Commissioner's use.

The major components of the framework are presented in four tables, one for each key group. While the framework identifies activities that will take place in future years, it has been designed specifically to be most relevant for the period up to the



completion and publication of the Latrobe Valley Regional Rehabilitation Strategy, expected to be publicly available at the end of June 2020. The application of the framework will be reviewed at the end of this period.

In addition to the day-to-day operational requirements of the monitoring and evaluation framework, consideration is also given to undertaking specific strategic audits of organisations or groups involved in the planning for rehabilitation.

The outputs from the framework's application will be a series of reviews detailing the feedback provided to each major stakeholder on the work completed and reported on rehabilitation and closure planning. The primary goal of the reviews is to highlight issues for the development of rehabilitation plans as well as to highlight the risks that arise either from the time needed to complete the work or that remain unresolved for the final closure of the mines and the relinquishment of the mining sites and the related bonds.

The framework will be subject to regular evaluation of fitness for purpose and updates. Commentary on the implementation and outputs of the framework's application are welcomed.



Rae Mackay
Latrobe Valley Mine Rehabilitation
Commissioner

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Introduction

The Latrobe Valley Mine Rehabilitation Commissioner (the Commissioner) has prepared this Monitoring and Evaluation Framework in accordance with Clause 84AZC of the *Mineral Resources (Sustainable Development) Act 1990* (the Act). This clause requires the Commissioner to 'prepare a document that sets out a framework for the monitoring and evaluation of rehabilitation planning activities' and to publish this document. The framework has been prepared in consultation with the relevant organisations concerned with the Latrobe Valley's brown coal mines rehabilitation.

The development of the framework has used the knowledge acquired by the Commissioner since 30th June 2017 through engagement with a broad range of stakeholders, as well as an assessment of the activities and approaches applied within each stakeholder organisation.

The Minister for Resources has been informed of significant actions and issues that have arisen over the first year of the Commissioner's activities (July 2017 – June 2018).

An office of the Commissioner has been established through the Department of Jobs, Precincts and Regions with funding approved by the Victorian Government. The office includes a Business Support Manager, a Technical Specialist and an Engagement Officer, who report to the Commissioner.

Legislation

The Commissioner's role was created by the *Mineral Resources (Sustainable Development) Amendment (Latrobe Valley Mine Rehabilitation Commissioner) Act 2017* in May 2017. The creation of the role was a recommendation of the Hazelwood Mine Fire Inquiry (HMFI, 2016). All recommendations of the Inquiry were accepted by the Victorian Government and an Implementation Plan was established in 2016. The progress of the plan is monitored by the Inspector General for Emergency Management (IGEM). The Commissioner was appointed on the 30th June 2017.

The Commissioner's role has the following objectives:

- (a) to provide assurance to the Victorian community that public sector bodies and the Latrobe Valley licensees are—
 - a. planning for the rehabilitation of coal mine land; and,
 - b. implementing the regional rehabilitation strategy; and
- (b) to promote the participation of the community and stakeholders from the Latrobe Valley region in the development and implementation of the regional rehabilitation strategy; and
- (c) to promote the effective and consistent rehabilitation of coal mine land in accordance with the regional rehabilitation strategy.

To meet these objectives the Commissioner has the following functions:

- (a) to develop and maintain a framework for the monitoring and evaluation of rehabilitation planning activities;
- (b) to carry out strategic audits of public sector bodies and Latrobe Valley licensees in relation to rehabilitation planning activities;
- (c) to monitor and evaluate rehabilitation planning activities in accordance with the framework;
- (d) to review any research plan in relation to the rehabilitation of coal mine land prepared by a Latrobe Valley licensee and make recommendations, if any, following a review to the relevant Latrobe Valley licensee;
- (e) to coordinate rehabilitation planning activities;
- (f) to engage with the following groups and persons in relation to the rehabilitation of coal mine land—
 - a. the Victorian community;
 - b. other stakeholders;
 - c. public sector bodies;
 - d. the Latrobe Valley licensees;
- (g) to conduct and support meetings between the following groups and persons in relation to rehabilitation planning activities that promote communication and the resolution of issues—
 - a. the Victorian community;
 - b. other stakeholders;
 - c. public sector bodies;
 - d. the Latrobe Valley licensees;
- (h) to provide advice and recommendations to the Minister in relation to—
 - a. the possible changes to the regulatory framework; and
 - b. the outcomes of any engagement by the Commissioner with the Victorian community or stakeholders; and
 - c. the planning for the monitoring, and completion, of the rehabilitation of coal mine land; and
 - d. the planning for the monitoring and maintenance of coal mine land that has been rehabilitated; and
 - e. the regional rehabilitation strategy; and the rehabilitation plans of the Latrobe Valley licensees;
- (i) to provide information and education to the Victorian community about—
 - a. the planning for the rehabilitation of coal mine land; and
 - b. the regional rehabilitation strategy;
- (j) to carry out investigations on the referral of the Minister;
- (k) to provide advice, reports and recommendations to the Minister on matters referred to the Commissioner;
- (l) to provide advice, recommendations and reports to the Minister on the exercise of the Commissioner's functions;
- (m) other functions conferred on the Commissioner under this Act.

The Commissioner has all the powers that are necessary or convenient to perform these functions.

Background

Mining of brown coal has a long history in the Latrobe Valley, with the earliest mining taking place in the late 19th Century. The State Electricity Commission of Victoria was the primary architect of the major expansion of brown coal mining for electricity generation with the initial coal extraction sited at the Yallourn mine. Hazelwood mine was commissioned to service the coal requirements of Hazelwood power station, which was constructed between 1964 and 1971. Finally, Loy Yang mine was commissioned to service a substantial expansion of power generation with the introduction of the Loy Yang A and Loy Yang B power stations, which were completed in 1988 and 1996, respectively. At the height of power generation, the Latrobe Valley was generating ninety percent of Victoria's electrical power needs. This

has led to three very large pits with more than 2.5 billion tonnes of brown coal having been mined to date. A plan view of the mined area showing the mining leases, the current mine extents and their relationship to the local townships and infrastructure is shown in Figure 1.

Each mine is required to operate according to an approved work plan. While the original work plans included outline plans for the remediation of the sites and plans for some progressive rehabilitation prior to mine closure, the details of the plans were largely conceptual with little prior assessment of feasibility. The lack of adequate feasibility assessment and underpinning research was highlighted after the Hazelwood mine fire in 2014. The fire in the mine burned for 45 days and led to 2 inquiries that highlighted significant gaps in knowledge required for rehabilitation and confirmed that these gaps needed to be filled to demonstrate the validity of the technically preferred rehabilitation land form of a partial or full pit lake for each mine. The second inquiry also highlighted a significant requirement to increase research by the mine operators and the rate of progressive rehabilitation.

The lack of preparedness for rehabilitation of the brown coal mines was further reinforced when Hazelwood mine, under the ownership of ENGIE, ceased mining operations in March 2017. ENGIE submitted a work plan variation in 2016 for a 4- to 7-year period of activity designed to create a complete rehabilitation and closure plan for the final rehabilitation of the mine and the surrounding mining licence area.

Yallourn mine is planned to cease coal mining in 2032, while Loy Yang is planned to cease mining in 2048. These dates are defined by the planned end dates for power generation at both sites. Both mines have recently had their mining licences extended (2051 and 2065, respectively) to allow for a lengthy period of rehabilitation and closure works to deliver safe, stable and sustainable landforms prior to relinquishment of the sites.

All mines have an obligation to consult with the community both as part of their license to operate and as part of the requirements for development of the final land forms for the rehabilitated pits and the identification of future land uses.

In response to the knowledge gaps identified by the Hazelwood Mine Fire Inquiry, the Victorian government undertook to develop a Regional Rehabilitation Strategy for the Latrobe Valley. A four-year project to deliver the strategy was established in 2016 under the leadership of the Earth Resources Division of the Department of Economic Development, Jobs, Transport and Resources, and in association with the Department for Environment, Land, Water and Planning with the requirement to prepare a strategy for publication by June 2020.

Rehabilitation planning for the brown coal mines encompasses a broad range of actions that are subject to oversight. These actions include the work of the Latrobe Valley Regional Rehabilitation Strategy project, the individual planning of the three mine operators, the

collective research program of the three mine operators and the deliberations of public-sector bodies that have a stake in the outcomes of rehabilitation of the mines.

Scope and Aim

The Act states that the Commissioner must:

- (a) develop and maintain a framework for the monitoring and evaluation of rehabilitation planning activities;
- (b) carry out strategic audits of public sector bodies and Latrobe Valley licensees in relation to rehabilitation planning activities;
- (c) monitor and evaluate rehabilitation planning activities in accordance with the framework.

The framework document is required to set out:

- (a) the outcomes to be achieved including measures to be undertaken to achieve the outcomes and the effectiveness of those measures; and
- (b) the carrying out of strategic audits of public sector bodies and Latrobe Valley licensees in relation to the implementation of rehabilitation planning activities.

Furthermore, the Act states that the Commissioner must prepare the framework in consultation with:

- (a) community members and stakeholders of the Latrobe Valley region; and
- (b) public sector bodies; and
- (c) the Latrobe Valley licensees.

Based on the requirements of the Act above, the scope of the framework covers the following:

- the structure of the framework
- the identification of the contributors to rehabilitation planning
- the methodology for monitoring and evaluation of rehabilitation activities by each contributor
- the outcomes to be achieved and the measures to achieve the outcomes
- the methodology for carrying out strategic audits, as required.
- the dissemination of the results of the monitoring and audit actions.

The aim is to ensure that the oversight of rehabilitation planning activities has sufficient breadth to encapsulate the relevant activities being undertaken. The framework is designed to ensure that the knowledge acquired through the monitoring and evaluation processes is fed back effectively and in a timely manner to the different stakeholder to inform their current and planned activities.

The monitoring and evaluation framework can be updated at any time by the Commissioner.

Definitions

For the purpose of this framework document the following definitions are extracted from the Act.

- **coal mine land** means the land covered by any of the following licences (whether or not the licences are in force)—
 - the mining licence No. 5003; or
 - the mining licence No. 5004; or
 - the mining licence No. 5189; or

- the mining licence No. 5216; or
- the mining licence No. 5304;
- **Latrobe Valley licensee** means the holder or the former holder of a **coal mine land** licence
- **Latrobe Valley region** means the region constituted by the municipal districts of the Latrobe City Council, Baw Baw Shire Council and Wellington Shire Council;
- **public sector body** is one of the following entities—
 - the Department Head of the Department of Economic Development, Jobs, Transport and Resources;
 - the Department Head of the Department of Environment, Land, Water and Planning;
 - the Environment Protection Authority under the **Environment Protection Act 1970**;
 - the Victorian WorkCover Authority under the **Workplace Injury Rehabilitation and Compensation Act 2013**;
 - a responsible authority within the meaning of the **Planning and Environment Act 1987** that performs functions under that Act in the Latrobe Valley region;
 - an Authority within the meaning of the **Water Act 1989** that performs functions under that Act in the Latrobe Valley region;
 - the Aboriginal Heritage Council under the **Aboriginal Heritage Act 2006**;
 - the Victorian Rail Track under the **Transport Integration Act 2010**;
 - the V/Line Corporation under the **Transport Integration Act 2010**;
 - the Roads Corporation under the **Transport Integration Act 2010**;
 - a public sector body (within the meaning of the **Public Administration Act 2004**) that is prescribed.
- **referral investigation** means an investigation commenced by the referral of a matter by the Minister to the Commissioner
- **regional rehabilitation strategy** means the strategy for the rehabilitation of **coal mine land**
- **rehabilitation planning activity** means an activity carried out by a **public sector body** or a **Latrobe Valley licensee** to plan in relation to the rehabilitation of coal mine land including—
 - the preparation of a research plan; or
 - the carrying out of research; or
 - the carrying out of a technical investigation; or
 - the carrying out of a rehabilitation trial; or
 - the preparation of a rehabilitation plan or activity to assist the preparation of the regional rehabilitation strategy.

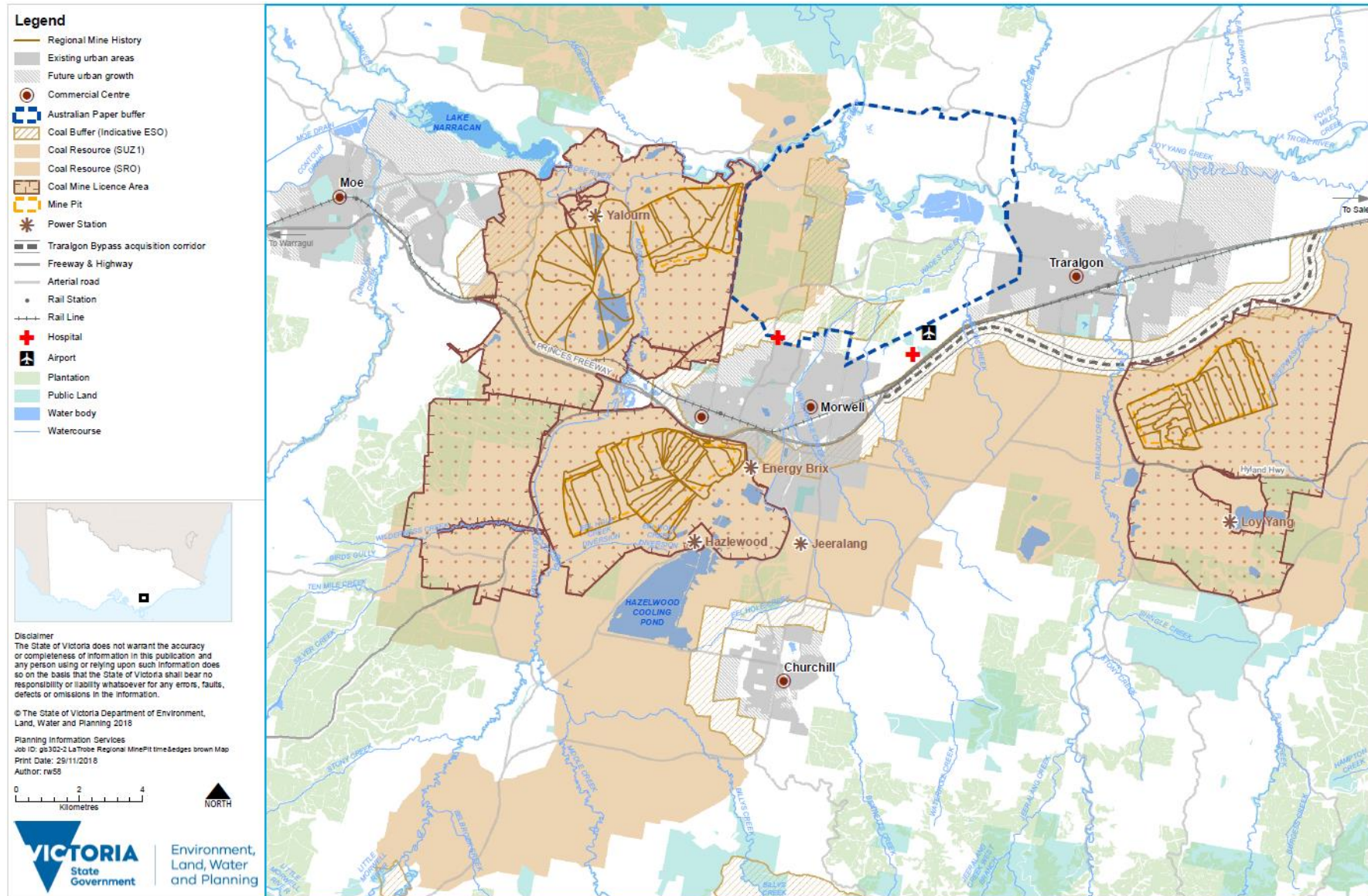
Additional acronyms and terms introduced in this framework are defined as follows:

- **DJPR** is the Department of Jobs, Precincts and Regions
- **DELWP** is the Department of Environment, Land and Water Planning
- **EPA** is the Environment Protection Authority who protect the environment and people by preventing and reducing harm from pollution and waste.
- **ERR** is Earth Resources Regulation, who regulates mines and quarries under the *Mineral Resources (Sustainable Development) Act 1990* and petroleum activities under the *Petroleum Act 1998*.
- **IMRG** is the Integrated Mines Research Group, a collaboration of the 3 mine licensees.
- **Latrobe Valley Regional Rehabilitation Strategy (LVRRS)** is the project being undertaken by the Victorian Government to test the feasibility of the pit lake option for rehabilitation of the brown coal mines and to develop the strategic plan for rehabilitation of the Latrobe Valley mines at the regional level.
- **Rehabilitation and Closure Plan** means the document prepared for the implementation of the final rehabilitation and closure works following cessation of mining. The rehabilitation and closure plan is a live document that evolves over time depending on the stage of mining and the knowledge that has been acquired. In the early stages of mining, the rehabilitation and closure plan will be a largely conceptual document. At the commencement of the final closure phase the rehabilitation and closure plan should be largely complete with few or no concepts requiring additional research.

- **Technical Review Board** is a team of experts with international mining experience who provide advice to the Minister for Resources on mine, quarry stability and rehabilitation issues, specifically in relation to reducing risks to the environment, public safety and infrastructure and the continuity of mining operations where the coal supply to Victorian Power Stations may be affected.



Figure 1 Location Map for the three brown coal mines (reproduced with kind permission of the LVRRS)



Rehabilitation and Closure Timelines

The two remaining operating brown coal mines in the Latrobe Valley will, like Hazelwood in 2017, eventually cease production and move into a period of final rehabilitation and closure. The goal of rehabilitation and closure is to allow the mine licensee to relinquish the mined land for future uses and to recover any remaining rehabilitation bond.

Relinquishment requires that the government regulator agrees that closure criteria have been met and that any residual risks applicable to the mined land can be appropriately managed by the state and/or transferred to future land owners.

Relinquishment requires that the land is appropriate for agreed future uses. The three overarching requirements of rehabilitation are that the relinquished land should be safe, stable and sustainable. There is no indication presently that safe and stable can be achieved for brown coal mined land without ongoing environmental management. This is an important consideration as the selection of safe and stable landscapes is then directly dependent on the long-term environmental management effort that is considered acceptable. Future monitoring requirements are also impacted by the requirements for ongoing post closure management. Under these conditions, agreements on the future land forms and land uses are needed alongside agreements on acceptable future management. Only then can the development of closure criteria applicable to the immediate post-closure land use be undertaken. Each step becomes an essential component of rehabilitation and closure planning. All stakeholders have a role to play in completing these steps, including the mine licensees, the community, the mining regulator, the post closure regulator and land managers.

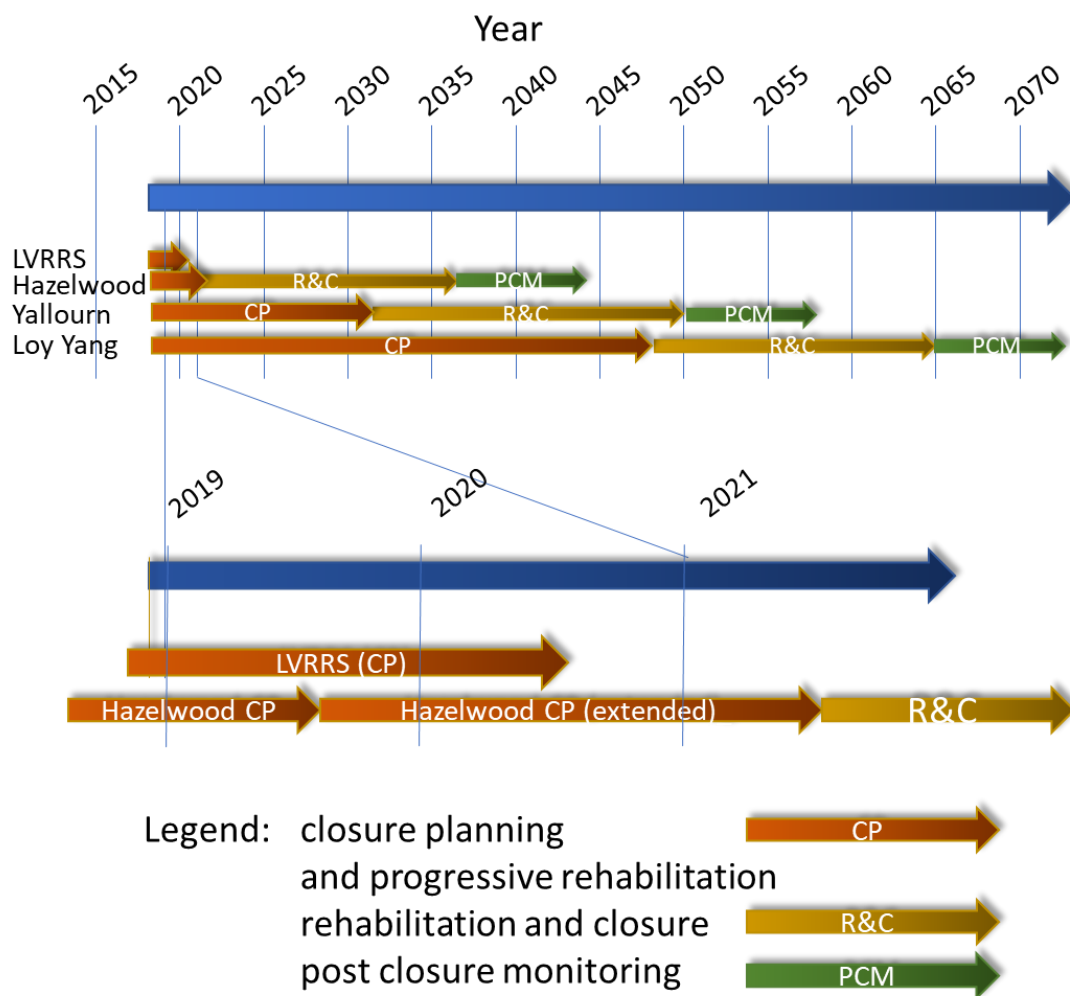
Some rehabilitation of mined land can take place prior to the cessation of production. One of the observations from the Hazelwood Mine Fire Inquiry (Recommendations 14 and 19, HMFV Volume IV) is that there should be an increase in the rate of progressive rehabilitation for each of the mines, monitored and encouraged by the regulator (ERR) and the Technical Review Board.

The Latrobe Valley mines are relatively close to one another and their groundwater depressurisation operations collectively impact on the regional groundwater system and the land subsidence across the region. Understanding the collective impacts of the mines during rehabilitation and closure is important not only for groundwater and subsidence and rebound but also for the impacts on the surface water courses and the downstream aquatic environments.

As Hazelwood has already ceased mining, it is currently working through the studies and actions necessary to develop a rehabilitation and closure plan. It is currently undertaking 'no regrets' earthworks that are assumed will be applicable no matter what the final rehabilitation and closure plan looks like. The rehabilitation and closure plan for Hazelwood is anticipated to be ready in 2021. Yallourn is presently projected to cease mining in 2032

and Loy Yang is presently projected to cease mining in 2048. These dates are indicative and are subject to significant uncertainties; driven by factors including changes in Australia’s energy market, the appetite for new coal products including the recently announced assessment of coal to hydrogen and the final landscapes permitted by State Government. If large scale brown coal mining continues, then the expansion of the current mines or even the creation of new mines can be envisaged. A consequent extension of timescales before final rehabilitation and a major reassessment of the approach and planning for rehabilitation and closure would become essential. The uncertainties expressed here highlight that the future outcomes for the region could change both in scope and timing. Nevertheless, the key requirements of creating a safe, stable and sustainable outcome at the three current mines will remain and this requirement will be placed on any new mine. A key requirement for any new mine proposal will be an assurance that the approach to mine closure is agreed prior to mine-approval and that the necessary methodologies for mine closure are practicable and acceptable to the State Government, including financial provisions to ensure mine closure will be completed.

Figure 2 Indicative Rehabilitation and Closure Timelines for the Latrobe Valley Mines



The timeline presented in Figure 2 is indicative of the current expectations for rehabilitation and closure of each of the existing three mines. The end date of the major works of approximately 2075 highlights the very long timescales that are implicit in the completion of rehabilitation and closure of the three mines. While a monitoring and evaluation framework will need to provide government and community assurances for the whole of this period, the current framework is targeted at the period to June 2020, with some consideration of the larger timescales, notably as these affect the work of the three mining licensees and the research program of the Integrated Mines Research Group.

Framework Purpose

Framework Structure

The framework structure is summarised in two Figures. Figure 3 shows the Stakeholders and their operational domains related to rehabilitation planning. Figure 4 shows the monitoring and evaluation framework that will be applied to each of the stakeholders and their operational domains. The framework is based on a log framework format, which defines a hierarchy of activities, outputs and outcomes leading to the required goal. The advantage of the log framework is that it highlights the indicators and the verification of the indicators required to confirm that progress has been made. In this case, progress is determined by feedback showing how the monitoring and evaluation process has contributed to progress. The log framework further highlights the risks and assumptions that are implicit in the delivery of the activities and outcomes. The monitoring and evaluation framework is integrally tied with the means of verification and the assessment of the performance against the identified risks and assumptions.

A key goal for the design of the framework has been to use, as far as possible, the operational arrangements that are already in place in the major stakeholder organisations, including the reporting, meeting and dissemination pathways adopted by these organisations. The advantage of this approach lies in the use of existing activities for the operation of the framework and the avoidance of new processes or new reporting activities prepared solely for the Commissioner's review.

While considerable value is derived from maintaining an open dialogue through regular face-to-face meetings with the different stakeholders as part of the monitoring activities, the framework is largely focused on reviews of the documentary evidence of activities. This approach provides a cleaner pathway for providing commentary than through meeting notes and meeting minutes alone.

The arrows in Figure 3 highlight the flow of the chart from activities to outputs to outcomes to the goal. The activities, outputs, outcomes, and the goal are described in high level terms

for the individual stakeholder groups, rather than in terms of the specific activities of the stakeholders. There are two reasons for this. The first is that the specific activities of the stakeholders are subject to regular revision and redefinition and this would render the framework out of date too quickly for effective application. The second is that the use of high level activities, outputs and outcomes identifies those aspects of the stakeholder's operations that are assessed to be the most critical in terms of demonstrating the progress and adequacy of the rehabilitation planning.

The means of verification is also a point in the review cycle where the Commissioner is best able to contribute feedback on the activities' and outputs' direction and content to assist with improvement of the works being undertaken.



Figure 3 Stakeholders and operational domains

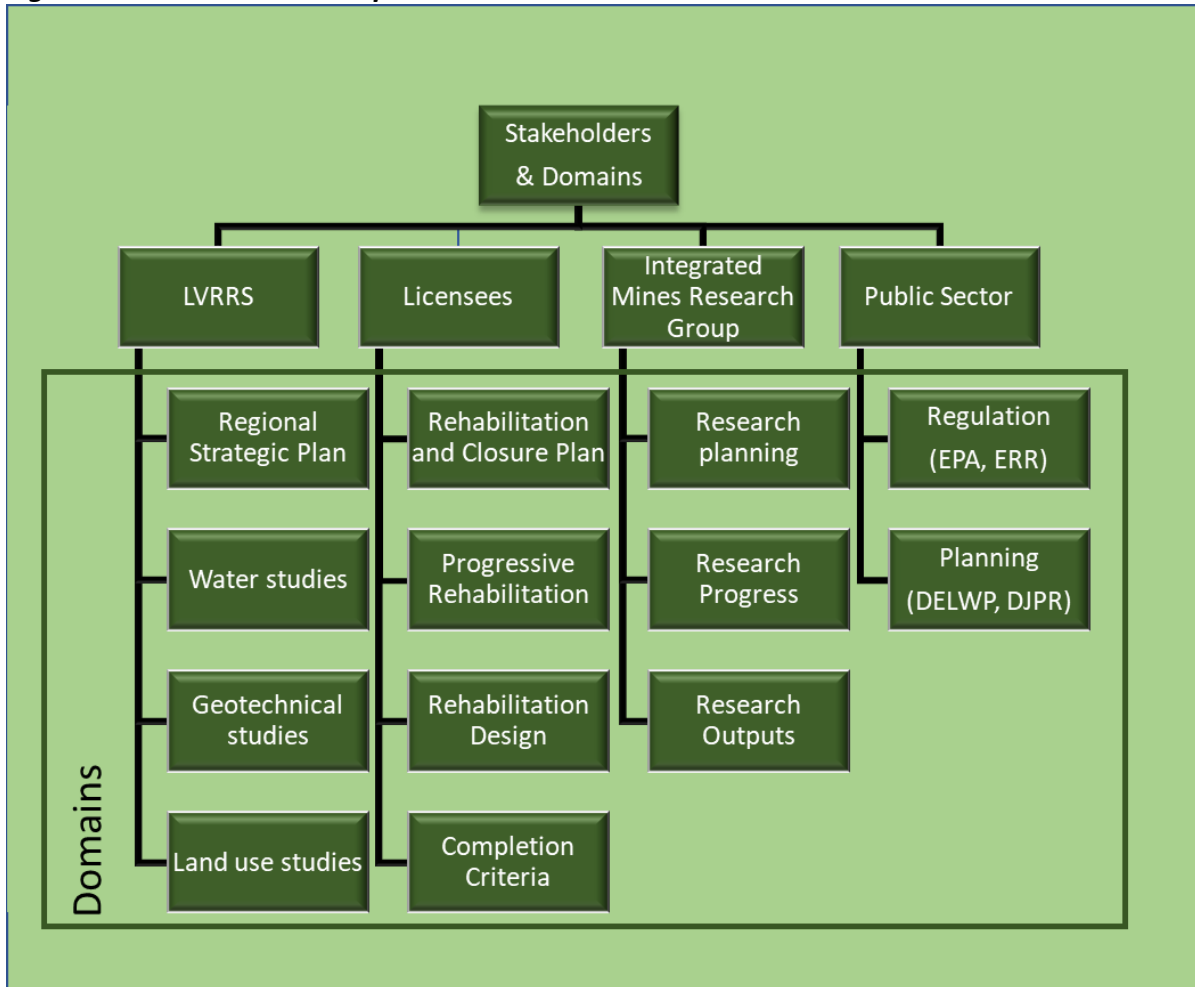


Figure 4 Monitoring and Evaluation Framework

	Monitoring/ Evaluation	Indicators	Means of Verification	Risks/ Assumptions
Goal	←			
Outcome	←		→	
Outputs	←		→	
Activities			→	

LVERRS

The LVERRS monitoring and evaluation framework is presented in Table 1.

The framework covers:

1. Strategic goal and implementation
2. Project Design
3. Project Progress
4. Project Outputs
5. Document release to the public.

The framework for the LVERRS has the following purposes:

1. To evaluate the progress of the work against the timelines that need to be met to achieve a completed strategy for regional rehabilitation for the Valley.
2. To ensure that the goal of the LVERRS project is clearly recognized in decision making about activities and outputs being prepared for the project.
3. To ensure that outputs omitted from the project are clearly understood and are not important for the formulation of the strategy but may be included as part of the strategy.
4. To reinforce the need for traceability of information and data used to support analyses.
5. To ensure that comparability of information and risks derived from the modelling studies of each of the technical streams is possible.
6. To assess whether delivery risks/assumptions are not being mitigated/met and to provide clear feedback to the LVERRS project team around this.
7. To allow for the modification of the LVERRS project structure without compromising the monitoring and evaluation framework.

The following points are worth noting when reading the framework.

1. Approval in the framework implies approval by the LVERRS project team.
2. A protocol exists for the provision of feedback by the Commissioner on the outputs of the LVERRS. The adoption of this protocol is not affected by the existence of the framework.
3. While the core of the feedback is to be provided through written responses to written outputs, additional feedback on overarching issues related to the LVERRS project organization, milestones, and future outputs will be included as applicable to meet the needs of the framework.
4. Regular update meetings with the LVERRS Director, the Project Manager and the stream leaders will continue on a broadly monthly basis throughout the project delivery. The aim of these meetings is to ensure good communications between the Commissioner and the project team and to provide cross-over information from other stakeholder monitoring and evaluation activities.

The latest program chart for the LVERRS is included in Figure 5. This chart highlights the major milestones and the areas of significant interactions between the streams. In consequence, it highlights the time points that are critical to the success of the LVERRS and therefore are of most significance in the monitoring and evaluation of the project.

Where significant concerns are identified during the monitoring and evaluation, then these will be formally reported in writing to the LVERRS Director and Project Manager. Appropriate mention of these concerns will also be made to the Minister for Resources through the Commissioner's monthly briefing reports.

Figure 5 LVRRS timeline (reproduced by permission of the LVRRS)

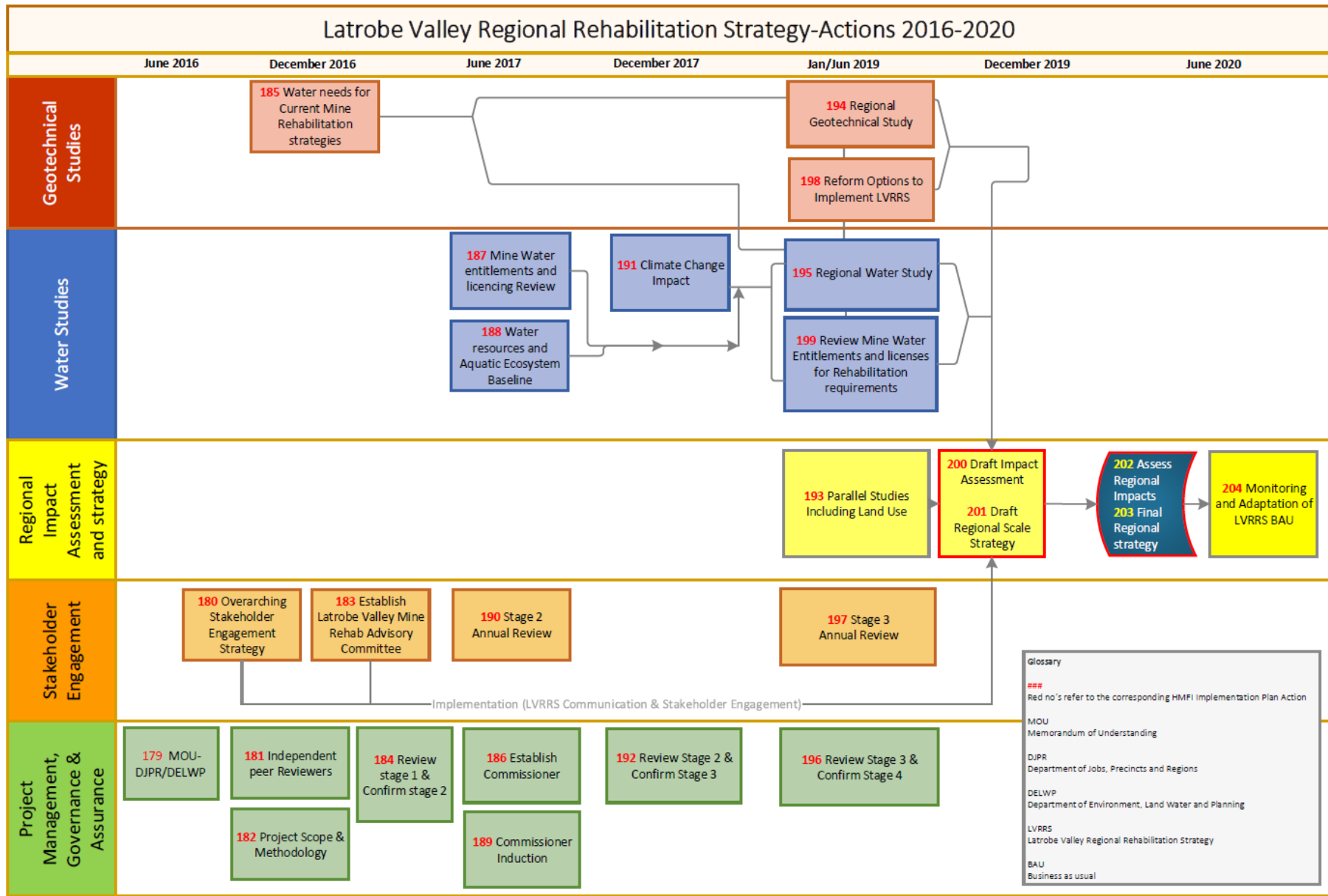


Table 1

LVRRS monitoring and evaluation framework	Monitoring/Evaluation	Indicators	Means of Verification (Commissioner)	Risks/Assumptions
Goal	Completion of the Strategic Plan by June 2020			
Outcome	<ol style="list-style-type: none"> 1. Water modelling completed for agreed scenarios and receptors. 2. Geotechnical modelling completed for agreed scenarios and receptors. 3. Land use visions prepared and their relationship to rehabilitation scenarios confirmed. 4. Comparison of agreed priority geotechnical, water and land use risks completed and the significance for the strategic directions for regional rehabilitation are understood. 5. Strategic plan prepared including a monitoring plan. 	<ol style="list-style-type: none"> 1. Completed final report(s) on water modelling components. 2. Completed final report(s) on geotechnical modelling. 3. Completed report(s) land use visions. 4. Completed report(s) on comparisons. 5. Completed Strategic plan for community consultation. 	<ol style="list-style-type: none"> 1. Reports and summaries reviewed prior to publication in the public domain. Summaries uploaded to LVMRC website. 2. Strategic plan documentation reviewed. 3. Plan document distributed to the community. 	<p>The major risk concerns relates to delays to the completion of the strategic plan. Unrecoverable delays must be identified early. Any decision to defer release of the strategic plan should be made well in advance of the June deadline.</p> <p>Supplementary risks are that the:</p> <ul style="list-style-type: none"> - Strategic plan is based on incomplete knowledge that impacts the certainty and/or timetable for mine rehabilitation. - Comparison of modelled impacts is incomplete and reduces the value of the assessments.
Outputs	<ol style="list-style-type: none"> 1. Modelling scenarios for strategic planning defined. 2. Key receptors and receptor metrics for water and geotechnical assessment identified. 3. Geotechnical background and scoping studies published. 4. Surface water resources scoping studies published. 5. Pit lake water balance and water quality scoping studies published. 6. Groundwater resources scoping studies published. 7. Qualitative assessments of impact risks for key receptors published. 8. Quantitative geotechnical models developed and verified. 9. Quantitative regional water balance models developed and verified. 10. Quantitative groundwater and subsidence models developed and verified. 11. Simulation requirements for quantitative calculations defined for strategic planning purposes. 12. Data for required simulations defined, collected, collated and recorded in the data management framework. 13. Quantitative studies required for strategic planning recorded in the data management system and summaries published. 14. Modelling qualitative and quantitative calculations not included for use for the strategic plan, but still required prior to rehabilitation completion, are specified, justified and recorded. 15. Environmental monitoring plans developed for ground movement and environmental impacts. 	<ol style="list-style-type: none"> 1. Selected scenarios for water and geotechnical assessment reported. 2. Key receptors and receptor metrics finalised and recorded. 3. Geotechnical scoping studies reported. 4. Surface water scoping studies reported. 5. Pit lake water balance and water quality scoping studies reported. 6. Groundwater resources scoping studies reported. 7. Qualitative impact risk assessments reported. 8/9/10. Quantitative model reports available detailing development, testing and verification. 11. Simulation plans detailed and recorded. 12. Modelling data sets collated, agreed and entered into the data management system. 13. Agreed quantitative modelling results reported. 14. Calculations and assessments to be deferred to become part of the strategic plan rather than to inform the plan are reported. 15. Environmental monitoring plans reported. 	<ol style="list-style-type: none"> 1. (Agreed scenarios) reviewed 2. Final receptors and metrics reports reviewed 3/4/5/6/7. As per 1. and 2. 8/9/10. Reports received and related simulation data included in the data management framework. Review of data management completed. 11. Simulation plans reviewed. 12. Tests of data recovery performed on the Data Management System. 13. As per 1. 14. As per 1. 15. Environmental monitoring plans reviewed. 	<ol style="list-style-type: none"> 1. Not enough consideration has been given to the final form of the strategic plan to be developed from the feasibility studies. 2. The approach proposed for comparison of the receptor risks for each scenario is not sufficiently well defined prior to final report production for each individual work stream. 3. Insufficient attention is paid to what is not being covered by the modelling studies to allow a meaningful assessment of strategic options to be developed. 4. Data management is not sufficiently well embedded within the modelling processes to reliably perform any recalculations.

Table 1 (continued)

LVRRS monitoring and evaluation framework	Monitoring/Evaluation	Indicators	Means of Verification (Commissioner)	Risks/Assumptions
Activities	<ol style="list-style-type: none"> 1. Modelling scenarios are defined. 2a. Receptors for water and geotechnical impacts are identified. 2b. Receptor metrics detailed for water and geotechnical impacts. 3. Geotechnical baseline methods and data identified and collated. 4. Water flow and quality baseline data identified and collated. 5. Tender specifications prepared for: <ul style="list-style-type: none"> - Geotechnical quantitative and qualitative scoping studies and modelling; - Water resources scoping and modelling; - Pit lake scoping and modelling; - Climate change forecasting; - Groundwater and subsidence scoping studies and modelling; - Receptor metrics; and - Land use visioning. 6. Tenders prepared and Contractors appointed for the required studies. 7. Required conceptual scoping studies undertaken. 8. Required quantitative modelling studies undertaken. 9. Impact statements prepared for ground movement, water quantity and quality and land use options. 10. The simulation framework for the scenario modelling for the required studies agreed. 11. Comparison approaches for the different studies demonstrated. 12. Compatible presentation of results from the different studies demonstrated. 13. Timelines for completion of the individual tasks monitored and managed. 14. Data access agreements with data providers implemented. 15. Data management framework implemented. 16. Future Environmental Monitoring methods and requirements evaluated. 	<ol style="list-style-type: none"> 1. Priority Scenarios listed. 2a. Priority Receptors listed. 2b. Receptor metrics listed for each priority receptor. 3. Literature review completed and summary of methods and data recorded. 4. Water flow and water quality baseline data locations and sources recorded. 5. Tender specifications created. 6. Requests for quote distributed, proposals returned, approved and contracts let. 7. Scoping study reports presented. 8. Quantitative modelling studies reported. 9. Impact statements drafted. 10. Simulation framework report documented. 11. Approaches to comparison of conceptual and model outputs developed and documented. 12. Methods of data presentation developed. 13. Progress reporting. 14. Data access agreements. 15. Data management framework implemented and accessible. 16. Environmental monitoring for the different parts of the future landscape included in feasibility reports. 	<ol style="list-style-type: none"> 1. Completed (Scenario) report reviewed. 2a. Completed (Receptors) report reviewed. 2b. Completed (Receptor metrics) report(s) reviewed. 3/4/5. As for 1., 2a. and 2b. 6. Contract agreements confirmed through LVRRS progress reports. 7-12. As for activities 1-5. 13. Progress reports provided monthly, accompanied by a follow up discussion to address any issues identified by the LVRRS. Written communications covering issues of significance for project progress. 14. Access agreements sighted. 15. Data requests from the Data Store demonstrated for specific simulations on an as-needs basis. 16. Environmental monitoring proposals reviewed. 	<ol style="list-style-type: none"> 1. Data provision/collation is too slow and is incomplete 2. Data management does not deliver readily assessable traceability of model results. 3. Updating of quantitative models, including verification testing and reporting, takes longer than predicted so precluding completion of the quantitative studies. 4. Time available to respond to feedback is too short and important elements of the project are not adequately covered. 4. Consultants are not able to meet the required objectives of the studies 5. Delays in some streams have significant knock on effects on other streams that cannot be accommodated by the project timeline and the contractor agreements.

Licensees

The Licensees Monitoring and Evaluation Framework is presented in Table 2.

The Framework covers:

1. Rehabilitation and Closure plans
2. Closure criteria
3. Interim rehabilitation
4. Progressive Rehabilitation
5. 'No Regrets' Rehabilitation

The framework for the Licensees has the following purposes:

1. To ensure that the planning undertaken by the Licensees leads to rehabilitation and closure plans that are appropriate, commensurate with the stage of mining and projected mine life, and in line with the regional rehabilitation strategy.
2. To demonstrate that appropriate approaches and criteria are being implemented to permit the mine lease areas to be relinquished/sold to other landholders in due course and for the rehabilitation bonds to be released back to the licensees.
3. To confirm that the necessary evidence has been generated and recorded to support the rehabilitation and closure plans, including the completion of supporting research.
4. To confirm that the mine work plans through their earthworks and interim and progressive rehabilitation take proper account of the final landforms and indicative land uses post closure.
5. To examine whether the necessary steps and approvals are in place or being sought to allow the rehabilitation and closure plans to be completed.

The following points are worth noting when reading the framework.

1. The requirement for agreed closure criteria is an essential part of the planning for rehabilitation and agreement must include support for the criteria by relevant stakeholders including the regulators and the community.
2. While most of the framework relies on documented evidence provided by the licensees, there will be the need for regular update meetings with the licensees to ensure that actions with long lead times and few outputs are progressing and meeting the objectives for final rehabilitation and closure.
3. Each of the mine licensees is at a very different point in their mine's life-cycle. For this reason, the framework does not identify specific sequences for completion of individual actions but assesses the status of actions against the given work plans and the future risks to continuation of mining.
4. Development of mine rehabilitation and closure plans is being undertaken prior to the completion of the LVRRS project and the formulation of the regional rehabilitation strategy. Assessing the risks to the individual mine plans due to non-compliance with the proposed strategy forms a key part of the evaluation component of the framework.
5. Development of the rehabilitation and closure plan encapsulates many of the activities that are individually described in the log framework. The individual activities are defined to illustrate their significance for the preparation of the rehabilitation and closure plan.

Generally applicable closure criteria suitable for mine domain relinquishment are not well developed nationally or internationally with few instances of agreed closure criteria available for reference. Consequently, developing the basis for the formulation of specific mine closure criteria is likely to be relatively time consuming, requiring inputs from several stakeholders. Early commencement of this component of the mine's rehabilitation and closure plans is therefore desirable. Discussions with stakeholders around this issue will be needed to ensure appropriate implementation and progress.

Table 2

Licensee Monitoring and Evaluation Framework	Monitoring/Evaluation	Indicators	Means of Verification (Commissioner)	Risks/Assumptions
Goal	Completed Rehabilitation and Closure Plans			
Outcome	<ol style="list-style-type: none"> 1. Completion and Closure Criteria finalised. 2. Monitoring programs for completion assessments developed and submitted for regulatory approval. 3. Interim and Progressive rehabilitation programs on track and meeting closure criteria. 4. Research programs required for Rehabilitation and Closure Plans (RCP) identified, planned and/or completed. 5. RCP documentation prepared appropriate to the timeline for cessation of mining. 	<ol style="list-style-type: none"> 1. Completion and Closure Criteria developed and submitted for regulatory approval. 2. Monitoring programs developed and submitted for regulatory approval. 3. Interim and Progressive rehabilitation areas mapped and monitoring and maintenance records available for review. 4. RCP research program plan developed. 5. RCP submitted for regulatory approval. 	<ol style="list-style-type: none"> 1/2. Completion and closure criteria and monitoring programs reviewed. 3/4. Program activities and outputs observed and reviewed. 5. Submitted plans reviewed. 	<p>Regulatory approval process may require multiple iterations prior to finalisation of the criteria.</p> <p>Delays may affect stakeholder and community engagement.</p> <p>Public/stakeholder opinion may be at odds with best practice or technically preferred closure objectives.</p> <p>Preliminary and ongoing engagement is recommended to progressively inform stakeholders.</p> <p>Completion criteria may not be complete prior to interim and progressive rehabilitation programs and research commencing.</p> <p>Review of programs and results will be based upon the individual program aims and programs set out in the Rehabilitation and Closure Plan.</p> <p>Regulatory acceptance of suggested completion criteria may not be achieved if too many unknowns exist.</p>
Outputs	<ol style="list-style-type: none"> 1. Completion criteria for all rehabilitation domains documented. 2. Interim rehabilitation plans prepared and documented. 3. Progressive rehabilitation plans prepared and documented. 4. Annual Interim and Progressive Rehabilitation Programs implemented. 5. Rehabilitation and closure risks identified and documented. 6. Rehabilitation and closure research requirements to mitigate risks identified and documented. 7. Historical knowledge important for rehabilitation closure planning and design collated and curated for quality assurance and future reference purposes. 8. Monitoring methodologies for data acquisition and management evaluated and documented. 9. Rehabilitation and closure planning progressed and reported. 10. Community engagement undertaken on future rehabilitation and closure plans. 11. Final landform plans developed as part of the rehabilitation and closure planning. 12. Immediate post-closure land uses identified for rehabilitation and closure planning. 13. Water use agreements established. 	<ol style="list-style-type: none"> 1/2/3/5. Completed documents provided for review. 4. Progress plans prepared annually 6. Research requirements for Rehabilitation and Closure risk mitigation documented in IMRG research forward planning documents. 7. Knowledge database established and shared with relevant stakeholders. 8. Monitoring requirements and methodologies report(s). 9. RCP documents submitted to the regulator as part of a Work Plan Variation. 10. Community engagement activities logged and feedback recorded. 11. Final landform plans incorporated into the RCP documentation.. 12. Immediate Post Closure Land Use Plans incorporated into the RCP documentation. 13. Formal water use agreements in place with Government and/or Bulk Water Entitlement holders. 	<ol style="list-style-type: none"> 1 - 6. Document reviews, program meetings and field visits. 7. Periodic data reviews. 8. Monitoring program evaluations and documentation reviews. 9. RCP review. 10. Attendance at engagement activities and review of responses to community feedback. 11. RCP review. 12. RCP review. 13. Approved water use agreements incorporated into RCPs/published. 	<p>Planning scheme updates may be proposed, but not be passed within the timeframe of this monitoring program.</p> <p>Research findings may be required prior to development of final RCPs and closure criteria. In this instance, interim values/strategies (e.g. "no regrets" work) will likely need to be adopted.</p> <p>Licensee rehabilitation risk mitigation strategies, particularly interim and progressive rehabilitation works, could be at odds with LVRRS findings, thereby delaying finalisation of RCPs or closure criteria.</p> <p>Community expectations are at odds with desired, technically feasible rehabilitation strategies, delaying final landform agreements and rehabilitation processes.</p>

Table 2 (continued)

Licensee Monitoring and Evaluation Framework	Monitoring/Evaluation	Indicators	Means of Verification (Commissioner)	Risks/Assumptions
<p>Activities</p>	<ol style="list-style-type: none"> 1. Development of completion criteria for all rehabilitation domains. 2. Development of interim rehabilitation designs for all domains. 3. Implementation of interim and progressive rehabilitation programs. 4. Assessment of rehabilitation and closure risks for all domains. 5. Identification of rehabilitation and closure research needs, as a by-product of the risk assessments. 6. Identification of risk mitigation strategies and designs. 7. Development of progressive rehabilitation designs for all domains. 8. Historical knowledge collation and curation. 9. Monitoring requirements, methodologies and data acquisition and management, including evaluation and design works. 10. Rehabilitation and closure planning and RCP document preparation. 11. Community engagement on future rehabilitation and closure plans. 12. Engagement with the Government and community on final landforms. 13. Engagement with the Government and community on land use system responses. 14. Engagement with the Government and/or Bulk Water Entitlement holders on water use agreements. 	<ol style="list-style-type: none"> 1. Completion criteria listed. 2/4-7/9/10. Designs/plans/strategies/programs presented. 3. Presentation of interim and progressive rehabilitation program, results and progress. 8. Historical knowledge database presented. 11/12/13/14. Community/government stakeholder engagement programs implemented. 	<ol style="list-style-type: none"> 1/2/3/4/5/6/7/8/9/10. reviews. 5/6. Attendance at risk assessment workshops and outcome reviews. 11/12/13/14. Attendance at engagement events. Review of responses to feedback received on engagement documents and responses. 	<ol style="list-style-type: none"> 1. Engagement planning and processes do not reach a sufficiently wide audience. 2. Workshops are too structured and/or too short and/or fail to include appropriate expertise to provide meaningful risk evaluations. 3. Research results are inconclusive or not timely.



Integrated Mines Research Group

The Integrated Mines Research Group (IMRG) Monitoring and Evaluation Framework is presented in Table 3.

The framework covers:

1. Compilation and curation of historical and current research knowledge
2. Research needs assessment
3. Research management and progress
4. Research dissemination

The framework for the IMRG has the following purposes:

1. To ensure that the historical knowledge that may form part of the submission for approval of a rehabilitation and closure plan has been entered into an appropriate knowledge management system and can be readily accessed for the purposes of review and approval.
2. To examine the scope of the research program and to assist with the identification and programming of research needs.
3. To assess the quality of the research outputs and to provide feedback to the IMRG on the adequacy of the research.
4. To have oversight of the dissemination of research outputs.

The following points are worth noting when reading the framework.

1. A considerable body of work has been undertaken in the past at each of the mines that is relevant to rehabilitation and closure planning. It is essential to ensure that the outputs from this body of work and the knowledge that is embedded in the outputs are made accessible as part of the preparations for rehabilitation.
2. Research activities can require a considerable period to reach an answer to a specific question or hypothesis. Programming research for rehabilitation and closure planning therefore requires research to commence at an appropriate time to be useful. Early identification of research needs and programming of research are both essential components of the work of the IMRG.
3. Monitoring of research quality forms a necessary part of undertaking research.
4. Research dissemination and peer review provides the most effective means of assessing research quality.
5. The IMRG management committee operates a bimonthly meeting to assess research progress and needs.

The IMRG program has developed a 10-year forward program with a 3-year review cycle. As the different mines are at different stages in their rehabilitation and closure planning, research is being undertaken in different ways and through different strategies to support the needs of the individual mines. In the period through to 2021 a key concern is to ensure that all research needed for the purposes of developing a rehabilitation and closure plan for Hazelwood mine has been completed and has been audited.



Table 3

IMRG Monitoring and Evaluation Framework	Monitoring/Evaluation	Indicators	Means of Verification (Commissioner)	Risks/Assumptions
Goal	Rehabilitation research is progressing and research requirements are delivering useful outcomes for rehabilitation and closure planning.			
Outcome	<ol style="list-style-type: none"> 1. Historical research results and knowledge (i.e. prior to the establishment of the IMRG) have been collated and curated to underpin rehabilitation decisions. 2. Research needs have been identified. 3. Research objectives have been met through directed research programs and/or through literature reviews. 4. Research outcomes have been disseminated to all relevant stakeholders and the community. 5. A roadmap is available that links research outcomes to the research needs identified by the risk assessment and completion criteria activities of all three mines. 	<ol style="list-style-type: none"> 1. Historical research findings compiled and curated. 2. Research needs listed. 3. Research objectives compared to outcomes. 4. Research outcomes presented to relevant stakeholders and community. 5. Research roadmap compiled. 	<ol style="list-style-type: none"> 1. Historical research findings examined. 2/3. Research needs, objectives and outcomes undergone technical peer review. 4. Research outcomes tested for accessibility. 5. Research roadmap reviewed. 	Timeframe for undertaking the research may limit the collection of meaningful results.
Outputs	<ol style="list-style-type: none"> 1. A knowledge repository for historical research and development and ongoing work has been established and populated, either for each individual mine or collectively through the IMRG. 2. A register of research needs and the background to these (from the risk assessments and completion criteria development) is maintained and updated for the whole period up to relinquishment of the mines by the licensees. 3. A live document showing the progress of research activities initiated, completed and programmed, with the written outputs of the completed research identified. 4. Assessment of the quality of the research at appropriate stages of implementation and completion. 5. Final results of each individual research project, and a statement of significance of the research for final rehabilitation, acceptance of completion criteria, and mine closure published. 6. Interim research results prepared to guide the ongoing development of each research project. 	<ol style="list-style-type: none"> 1. Knowledge repository populated. 2. "Research needs" register generated. 3. Research progress documented and actively kept up to date. 4. Technical peer review process implemented. 5. Results and their implications published. 6. Interim results published per progress timeline. 	<ol style="list-style-type: none"> 1/2. Documents reviewed 3. Research progress reviewed and comments provided. 4. Technical peer review process evaluated during development. 5. Results and their implications provided and reviewed. 6. Documented interim results reviewed and dissemination pathways for interim results checked through evaluation meetings. 	<p>Historical records are incomplete or the storage of the records prevents recovery of the information.</p> <p>Research needs are identified too late for full implementation prior to application of outputs.</p> <p>Progress reports are inadequate for review purposes and project management.</p> <p>Research program is delayed so that the results are not available in time for practical implementation.</p>

Table 3 (continued)

IMRG Monitoring and Evaluation Framework	Monitoring/Evaluation	Indicators	Means of Verification (Commissioner)	Risks/Assumptions
<p>Activities</p>	<p>1. Development of a knowledge repository or repositories for historical and ongoing research. 2a. Collation and curation of historical knowledge (i.e. prior to the IMRG) and inclusion in a knowledge repository. 2b. Development of a register of completed research activities and the planned use/value of the research. 2c. Development of a register of research needs (derived from risk assessments and completion criteria development). 2d. IMRG research plan. 2e. IMRG research progress review meetings and ongoing research program management. 3. Individual research projects: 3a. Interim presentation of research results and updated delivery details for each research project. 3b. External assessment of interim and final research results.</p>	<p>1. Knowledge repository framework viewed. 2a. Compiled repository(ies) reviewed. 2b/2c. Completed Research register viewed. 2d. Research plan reviewed. 2e. LVMRC and regulator review of research progress schedule and management processes. 3a. LVMRC and regulator review of interim research results and progress. 3b. Research results submitted for third-party technical peer review.</p>	<p>1/2a/2b/2c/2d/2e/3a. Progress meetings and examination of research and research needs records. 3a. Attendance at and comments provided on research presentations.. 3b. Evaluation of research commentaries.</p>	<p>Historical knowledge (incl. anecdotal/ individual communications) poorly collated in the knowledge repository. Research project and quality is inadequately managed, including poor engagement resulting in invalid or untimely results. Research needs are not updated based on interim findings.</p>



Public Sector Bodies

The Public Sector Body Monitoring and Evaluation Framework is presented in Table 4.

The framework covers:

1. Legal and organisation frameworks for rehabilitation and closure
2. Land use Planning
3. Rehabilitation and Closure Guidance

The framework for the Public Sector Bodies has the following purposes:

1. To ensure that aspects of investigation, monitoring, evaluation and management are captured in the legal and organizational frameworks for regulating the rehabilitation and closure of the brown coal mines.
2. To assess how far the relevant guidance for rehabilitation and closure has been developed both nationally and internationally and is fit for purpose.
3. To confirm that Public Sector bodies are actively engaged in the planning for rehabilitation and closure of the Latrobe Valley coal mines and are working collaboratively towards achieving the desired outcomes.
4. To ensure that land use plans for the mining leases are developed objectively, meet the requirements of safe, sustainable and sustainable and are appropriately communicated to the wider community and have buy-in of the community, other stakeholders and the mine operators.

The following points are worth noting when reading the framework.

1. The achievement of good rehabilitation and closure outcomes is unlikely without collectively agreed guidelines for rehabilitation that are complete and practical.
2. Public sector bodies have to actively engage in the planning for rehabilitation and collaboratively work together to achieve the desired outcome.
3. Land use outcomes that are sustainable and acceptable economically, socially and culturally cannot be achieved without adequate appreciation of the physical constraints to land use planning and without a clear understanding of the community objectives that are required to underpin a future land use vision.

The current plans for regulating and overseeing the period of rehabilitation prior to closure and the post closure monitoring and maintenance activities are based around a continuation of Earth Resources Regulation for pre-closure regulation, a transfer of regulation to the Environment Protection Authority post-closure and an oversight and management and monitoring Authority linking across the total period, presently referred to as the Declared Mines Rehabilitation Authority. Monitoring and evaluation to be undertaken in the next two years (2019-2020) will be premised on this model for future regulation being implemented.

Engagement with the community for the purposes of land use planning is a complex issue because of the long time frames for rehabilitation and closure but also because of the number of planning groups that have an interest in steering the land use agenda towards different end points.



Table 4

Public Sector Monitoring and Evaluation	Monitoring/Evaluation	Indicators	Means of Verification (Commissioner)	Risks/Assumptions
Goal	Regulation: Guidance on and regulation of mine closure and rehabilitation activities. Planning: Long term land use visions appropriate to agreed land forms for each mine.			
Outcome	<p>Regulation: 1. Legal and organisational arrangements established that are fit for purpose. 2. Guidance is provided that is timely, complete and effective.</p> <p>Planning: 3. Land use visions are identified and visible to the community. 4. Land use visions are incorporated into land form design. 5. Land use visions are appropriate to the agreed final land forms for the mines.</p>	<p>Regulation: 1. Legal and organisational arrangements in operation and working effectively. 2. Guidance documents in use.</p> <p>Planning: 3. Land Use Visions are adopted in Strategic Plans. 4/5. Documented confirmation that land use visions are compatible with the final landforms and final land uses are safe, stable and sustainable as well as visually attractive and of benefit to the Victorian community</p>	<p>Regulation: 1. Documentation and statutory instruments received and public accessibility assessed. 2. Rehabilitation and Closure Plans reviewed and operational versions maintained on LVRC website.</p> <p>Planning: 3. Land use visions integrated into local strategic plans. Evaluation of strategic plans through a forum with the community, the local authorities and government planners. 4/5. Land use vision compatibility with land forms documented. Feedback given on the documents.</p>	<p>Regulation: Timetable for implementation allows for suitable transitions of the regulator operations. Adaptation of national and international best practise for rehabilitation meets the needs of the LV coal mines and environment.</p> <p>Planning: No applicable consensus on land use visions from the community. No agreement on the requirements for safe, stable and sustainable as a justified endpoint for rehabilitation. No agreement on completion criteria related to land use visions.</p>
Outputs	<p>Regulation: 1. Relevant aspects of investigation, research, monitoring, evaluation and management are captured in the legal and organisational frameworks for regulating the rehabilitation and closure of the mines and include coverage of post-closure activities, including approval of completion criteria and relinquishment. 2. Guidance material is scientifically sound, complete, and in the case of future activities of the mines, is completed in a timely manner to ensure effective use. 3. Public sector bodies are actively engaged in the assessment processes and have provided appropriate feedback on designs and plans to the key stakeholders. 4. Government and regulatory agencies actively identify internal knowledge gaps which are appropriately address through training, research or strategic hires. 5. Inter-agency arrangements have been formalised to provide transparency around responsibilities and avoid gaps in the management and coordination of responses.</p> <p>Planning: 6a. Land use visions are formulated in conjunction with community. 6b Land use visions are formulated that acknowledge and integrate with the wider planning environment and the planning strategies in place. 6c Land use visions are formulated that have respect for the stability of the rehabilitated land forms and the requirements for ongoing management costs. 6d. Land use visions are formulated that have been examined by the mine licensees and, where practicable, land form adjustments have been made to accommodate the visions. 7. Community engagement has taken place and the key community values have been recorded.</p>	<p>Regulation: 1. Legal instruments updated. 1a. Organisational framework reports completed and approved. 2. Final version of Guidelines for Rehabilitation and Closure reviewed and approved. Completion criteria objectives and approvals processes clearly articulated in the Guidelines. 3. Engagement meetings and responses. 4. Knowledge gaps actively identified with response plan communicated. 5. MOUs updated and approved.</p> <p>Planning: 6. Land use vision reports and maps prepared. 6a. Land use planning community meetings and advertising events. 6b. Relationships to land use planning presented clearly at public meetings and in publications. 6c. Planning provisions that address stability are addressed in public forums 6d. Mine operators provided with land use proposals prepared by public bodies. 7. Community engagements listed and community values recorded in reports.</p>	<p>Regulation: 1/1a. Legal instruments and organisation framework reports sighted. 2. Guidelines reviewed and uploaded to the Commissioner's website. 3. Access to meeting records. 4. Response plan and outcomes sighted. 5. Access to MOUs.</p> <p>Planning: 6. Reports and maps provided and reviewed. 6a. Attendance at meetings and meeting records received. 6b. See 6a. Publications reviewed. 6c. See 6a. Public forums attended. 6d. Acknowledgement in writing from operators of receipt of land use proposals from public bodies and community. 7. See 6a. Engagements and reports reviewed.</p>	<p>Regulation: Delays to preparation and completion of statutory processes. Non-agreement on completion criteria processes and approvals between operators, public bodies, and community delaying delivery of guidelines. Delays to the delivery of the LVRRS. Knowledge gaps not properly addressed or require extended times to close.</p> <p>Planning Stability responses in the planning system are not agreed. Operators not sufficiently receptive to public contributions. Community education on environmental constraints is not sufficiently developed to support meaningful agreements among stakeholders around future land uses.</p>

Table 4 (continued)

Public Sector Monitoring and Evaluation	Monitoring/Evaluation	Indicators	Means of Verification (Commissioner)	Risks/Assumptions
<p>Activities</p>	<p>Regulation: 1. Regulatory reform project. 2. Updates to the Guidelines for the Rehabilitation and Closure of Mines. 3. Rehabilitation design reviews and approvals. 3a. Public body monitoring of rehabilitation. 4. Interagency agreements w.r.t. Rehabilitation and Closure Planning.</p> <p>Planning: 5. Land Use Vision Studies. 6. Community engagement activities on land use options and plans. 7. Community proposals (e.g. Great Latrobe Park). 8. Latrobe City Council (LCC) plans/resolutions. 9. Infrastructure plans (e.g. Traralgon Bypass, Rail improvements). 10. Regional Catchment management plans. 11. Regional Water Management Master Plans. 12. Future mine expansion or new mines. 13. Aboriginal engagement and planning (GLaWAC). 14. Heritage Review, Evaluation and Planning.</p>	<p>Regulation: 1. Updates by the regulatory reform project team. 2. New versions of the Guideline issued and disseminated. 3. Design report reviews by the regulators. 3a. Organisational arrangements for monitoring. 4. MOUs developed.</p> <p>Planning: 5. Interim and final reports and maps. 6. Community engagement timetable and advertisements. 7. Community proposal presentations. 8. Latrobe City Council Strategic planning documents. 8a. Latrobe City Council Planning Briefs and Notices. 8b Latrobe City Council Planning Resolutions. 9. Updates from Infrastructure Planners on future activities. 9a Infrastructure plan reports. 10. Updates from water planners/managers. 10a Catchment management plan reports. 11. Updates form DELWP on State Water Master Plans. 11a. State Water Master Plan reports. 12. Mining licence requests. 12a. Mining Work Plan Variations. 12b. New innovations around brown coal use. 13. Aboriginal values examined by Aboriginal community and considered and accounted for in future rehabilitation plans. 14. Heritage values considered and accounted for in public body future plans.</p>	<p>Regulation: 1. Statute drafts and plans discussed with Policy officers. 2. Versions of guidance evaluated. 3. Design reviews available for comment. 3a. Staffing structures and specifications sighted. 4. MOUs sighted.</p> <p>Planning: 5. Land use vision reports and maps reviewed. 6. Attendance at community engagements. 7. Receipt of presentations for review and public dissemination monitored. 8,8a,8b. Evaluation of LCC outputs related to mine rehabilitation and closure. 9,9a. Evaluation of infrastructure plans and reports. 10. Meeting records. 10a. Reviews of catchment management plan reports relevant to rehabilitation. 11, 11a. See 10 and 10a. 12, 12a. Completion of reviews of documents provided through ERR. 12b. Meetings with Coal Resources Victoria and BCIA Staff. 13. Updates from Aboriginal Community and evaluation of all Public Sector and Operator plans in relation to Aboriginal values. 14. Attendance at meetings and review of outputs.</p>	<p>Regulation: New guidance required. Revised staffing structures for rehabilitation regulation planned and implemented. Interagency agreements required for rehabilitation.</p> <p>Planning: Coordination of planning and visioning among all public sector bodies. Integration of Mine rehabilitation water plans into State and regional water master plans.</p>

Strategic Audits

The framework is required to provide the approach to carrying out strategic audits of public sector bodies and Latrobe Valley licensees in relation to the implementation of rehabilitation planning activities.

A strategic audit is an in-depth review to determine whether an organisation is meeting its organisational objectives in the most efficient way. Additionally, it examines whether the organisation is utilizing its resources appropriately and fully for the specific issues being addressed. The primary goal of any audit would be to assist and encourage an organisation to improve processes.

To be useful for improving rehabilitation planning activities, any strategic audit undertaken by the Commissioner must be warranted and respectful of the other activities that the organisation is undertaking.

The steps to be undertaken to meet these two requirements requested by the Minister as per the Act are as follows:

1. Where an organisational concern is raised through the normal monitoring and evaluation framework in relation to one or more aspects of rehabilitation planning activities being undertaken by a public sector body or mine licensee, a letter detailing the concern will be sent to the organisation explaining the concern, explaining the significance of the concern for rehabilitation planning and identifying the potential shortcomings in the approach of the organisation that might be giving rise to the concern. Distribution of the letter would be by email and surface mail.
2. A response by the organisation to the concern raised in the letter from the Commissioner would be requested within three weeks of despatch of the letter.
3. If the response is deemed satisfactory then the issue would be closed, and the letter and response filed for future reference.
4. If residual concerns remained after receipt of response, then the second stage of the strategic audit would be implemented.
5. The second stage would entail five steps:
 - a. A request for a face to face meeting within 3 weeks of receiving the response with representatives of the organisation. The purpose of this meeting would be to examine interactively the approach of the organisation being used to address the concern, including to identify the staff involved and the planning steps that had previously been undertaken and plans for the future.
 - b. A request for relevant documentation identified during the meeting to be provided electronically to the Commissioner's office for review.
 - c. Meetings to be held individually and confidentially with each of the key staff members involved in the planning activities following review of the relevant documentation.
 - d. A second face to face meeting after examining the relevant documentation and interviews of the key staff with representatives of the organisation to

- examine the findings and to explore any identified issues arising from the review processes with a view to agreeing any necessary changes.
- e. Preparation of an audit report detailing steps of the audit procedure and the key findings with any recommendations to changes to practice and approach to be listed clearly for future implementation by the organisation. The audit report to be delivered to the organisation for their internal use.
6. A final follow up meeting with the organisation would be requested by the Commissioner no later than three months after the delivery of the audit report to establish the extent of changes made in response to the audit. The outcome of this review to be documented and made available to the Minister for any further action deemed necessary.



Monitoring and Evaluation Outputs

Monitoring and evaluation outputs will be prepared in writing. The form of the outputs will be commensurate with the monitoring activity.

For monitoring meetings with individuals or groups, a file note will be prepared summarising only those elements that are of special interest for follow up at a later date.

For interim, draft and final reports relating to any activity, a review report in the form of a letter comprising the key comments arising from the review and an annotated copy of the reports will be prepared.

Outputs will be provided to the originating individual or group for their use in furthering their work. Stakeholder responses to the provided reviews will be monitored to determine if and how the responses have been addressed.

Outputs will be stored for future audit purposes, as appropriate.

Where monitoring and evaluation outputs lead to unresolved and significant concerns about the planning for rehabilitation of an organisation, a strategic audit process will be implemented as described in the preceding section.

Monitoring and evaluation outputs will be deemed to be confidential to the Commissioner, his office staff and the organisation involved. However, if the Minister requests access to the outputs or the outputs have led to a strategic audit, the Ministers office will be provided with all relevant outputs.

Wider dissemination of outputs will be by agreement between the Commissioner and the organisation involved.

End.

