THE EFFECT OF THE INTRODUCTION OF THE MINING REHABILITATION FUND IN WESTERN AUSTRALIA – AN EMPIRICAL ANALYSIS

JIA-ZHEN PEARL CHONG

Bachelor of Laws
Murdoch University

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I, Pearl Chong, declare this thesis is my own account of my research and contains as its main content, work which has not been previously submitted for a degree at any tertiary education institution.
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Degree: Bachelor of Laws

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Author: Jia-Zhen Pearl Chong

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ABSTRACT

Mining is a key driver of Australian economic development, particularly in resource-rich Western Australia. Ensuring adequate rehabilitation of mine sites after the completion of mining has been an ongoing challenge for Australia’s states and territories. Mining securities and financial assurance frameworks have sought to achieve compliance in this area through a combination of the use of performance bonds, inspection and monitoring, and societal pressure.

Outcomes have been mixed at best, and Western Australia has a significant legacy of abandoned mine sites, which represent a substantial potential liability for the State. To address these issues, the Western Australian state government introduced a new mining securities system, the Mining Rehabilitation Fund, which commenced in 2013.

This thesis analyses the objectives and the impacts of the Mining Rehabilitation Fund in Western Australia. It does so using an empirical approach based on interviews with lawyers with experience in the application of the Mining Rehabilitation Fund, and aims to advance understanding of the Mining Rehabilitation Fund by comparing their experiences against theoretical analyses on mining securities to date. It also considers concerns raised by interviewees about mining securities within the wider framework.

This thesis suggests that, while in its early stages, the Mining Rehabilitation Fund has been successful in establishing a pooled fund to address the issues of abandoned mine sites and legacy mine rehabilitation. It has achieved this without placing an unreasonable financial or administrative burden on the industry.

However, the Mining Rehabilitation Fund’s effectiveness is reduced by the ongoing exclusion of State Agreement mines. The Mining Rehabilitation Fund also provides little incentive to undertake progressive rehabilitation for mine operators. The risks to the State in instances of operator insolvency appear to have increased, and therefore the State may have acted too rapidly in returning most of the performance bonds, at least before completion of a transitional period.

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### Abbreviations and Defined Terms

<p>| <strong>2014 Report</strong> | The Western Australian Auditor General’s follow up report, <em>Ensuring Compliance with Conditions on Mining – Follow up</em> released in 2014 |
| <strong>AASB</strong> | Australian Accounting Standards Board |
| <strong>AER</strong> | Annual Environmental Report |
| <strong>Auditor General</strong> | Western Australian Auditor General |
| <strong>Chain of Responsibility Act</strong> | <em>Environmental Protection (Chain of Responsibility) Amendment Act 2016</em> (Qld) |
| <strong>Contaminated Sites Act</strong> | <em>Contaminated Sites Act 2003</em> (WA) |
| <strong>Corporations Act</strong> | <em>Corporations Act 2001</em> (Cth) |
| <strong>DMP</strong> | Department of Mines and Petroleum |
| <strong>D&amp;O Insurance</strong> | Directors and Officers Insurance |
| <strong>EARS2</strong> | Environmental Assessment and Regulatory System |
| <strong>Ellendale</strong> | Ellendale Diamond Mine |
| <strong>EP Act</strong> | <em>Environmental Protection Act 1986</em> (WA) |
| <strong>FCR</strong> | Fund Contribution Rate |
| <strong>Financial Management Act</strong> | <em>Financial Management Act 2006</em> (WA) |
| <strong>Fund</strong> | Mining Rehabilitation Fund |
| <strong>Legacy sites</strong> | Historically abandoned sites |
| <strong>Mining Act</strong> | <em>Mining Act 1978</em> (WA) |
| <strong>Minister</strong> | The Minister of Mines and Petroleum |
| <strong>MRAP</strong> | Mining Rehabilitation Advisory Panel |</p>
<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tr>
<td>MRF</td>
<td>Mining Rehabilitation Fund</td>
</tr>
<tr>
<td>MRF Regulations</td>
<td><em>Mining Rehabilitation Fund Regulations 2013 (WA)</em></td>
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<tr>
<td>NSW</td>
<td>New South Wales</td>
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<tr>
<td>NT</td>
<td>Northern Territory</td>
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<tr>
<td>Option Paper</td>
<td>Western Australia’s Mining Security System Preferred Option Paper</td>
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<tr>
<td>Preliminary Paper</td>
<td>Preliminary Discussion Paper on Policy Options for Mining Securities in Western Australia</td>
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<tr>
<td>RLE</td>
<td>Rehabilitation Liability Estimate</td>
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<tr>
<td>UPB</td>
<td>Unconditional Performance Bond</td>
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<td>Western Australia</td>
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I Introduction

A Mining in Western Australia

Western Australia (‘WA’) has immense natural resources, including world-class mineral deposits. The rapid growth of the mining industry has contributed to the economic development and prosperity of the State, and the financial health of the State government. The industry’s contribution is recognised in State policy promoting and attracting mining investment in the State.2

Whilst the financial and economic benefits of mining are apparent, poorly conducted or regulated mining can result in risk to State finances or the environment,3 which may compromise the industry’s sustainability.4 Shifting community expectations on environmental matters, the growing recognition of the abandoned mine problem,5 and the resulting potential financial liability for the State,6 have led to increased media and public scrutiny.7

Therefore, a tension exists between the need to promote mining, and the need to achieve positive environmental outcomes for the State and community. This has caused increased policy focus on these competing objectives throughout Australia in the form of state parliamentary hearings,8 government reports on the adequacy

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1 The WA State government received royalty income of $4.6 billion representing approximately 20 per cent of total WA State revenue in 2016-17: Department of Treasury (WA), 2016-17 Annual Report on State Finances (2017) 28.
2 Department of Premier and Cabinet, ‘New mining legislation to cut costs’ (Media Statement, 30 October 2013).
3 Auditor General Western Australia, Ensuring Compliance with Conditions on Mining, Report 8 (2011) 5.
4 Martin Brueckner et al, ‘The mining boom and Western Australia’s changing landscape: Towards sustainability or business as usual?’ (2013) 22(2) Rural Society 111, 114.
6 Auditor General Western Australia, above n 3, 5.
of financial assurance and compliance monitoring,\textsuperscript{9} and a Senate Inquiry into the rehabilitation of Australia’s abandoned mines.\textsuperscript{10}

B Mine Rehabilitation

In recent years, following a decade of unprecedented mining industry growth, declining investment and fluctuating commodity prices have occasioned a slowdown in the WA economy.\textsuperscript{11} This period saw declining state revenue,\textsuperscript{12} an upsurge in mine closures,\textsuperscript{13} and companies entering administration or liquidation, with subsequent mine abandonments,\textsuperscript{14} leading to increased scrutiny on the adequacy of the State’s financial assurance regime.\textsuperscript{15}

WA’s extensive history of mining development has left a legacy of widespread un-rehabilitated abandoned mine sites, and represent a ‘social, environmental and financial challenge’\textsuperscript{16} for the State. There has been increased concern about

\begin{itemize}
\item[15] Emma McLeod, ‘Who is going to be left with the cleaning bill? Mine site rehabilitation and regulatory responses to abandoned sites’ (Paper presented at the Fortieth Annual Conference of AMPLA Limited, 12-14 October 2016).
\item[16] Angus Morrison-Saunders and Jenny Pope, ‘Mine closure planning and social responsibility in Western Australia: Recent policy innovations’ (Paper presented at the SRMining 2013: 2\textsuperscript{nd} International Conference on Social Responsibility in Mining, Santiago, Chile 7 November 2013) 212.
\end{itemize}
instances of operators engaging in strategies to avoid or postpone their rehabilitation obligations, resulting in their eventual reversion to the State. Concerns about the level of financial risk to the State, and the inadequacy of Unconditional Performance Bonds (‘UPBs’) as a financial assurance mechanism have led to major reform of the WA mining securities system.

The introduction of the Mining Rehabilitation Fund (‘MRF’ or ‘Fund’), which became effective from 1 July 2013, and mandatory from 1 July 2014, was an outcome of an extensive public consultation with industry stakeholders. Established by the Mining Rehabilitation Fund Act 2012 (WA), the MRF largely replaced UPBs as the State’s key mechanism to achieve financial assurance over rehabilitation obligations. It established a ‘government-administered, pooled fund’, to provide the State with improved financial assurance in relation to mine abandonments, and to address the issue of historical abandoned mines (‘legacy sites’).

C Purpose of Research

Since the MRF has now been in operation for over three years, it appears appropriate to evaluate its perceived effects. This thesis examines the effects of the implementation of the MRF, from the perspective of mining or environmental lawyers in WA, who have direct experience of the MRF, and will utilise their observations to assess whether it has met its objectives as a mining security system.

Mining securities are an issue which state and territory governments have been grappling to resolve. Academics and governments have widely examined the

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17 Department of Mines and Petroleum (WA), Policy Options for Mining Securities in Western Australia, Preliminary Discussion Paper (2010) III.
18 Western Australia, Western Australian Government Gazette, No 96, 21 June 2013, 2445.
19 Department of Mines and Petroleum (WA), above n 17.
20 Department of Mines and Petroleum (WA), Mining Rehabilitation Fund – Guidance (2017) 2.
21 Department of Premier and Cabinet (WA), ‘State’s mine bonds system gets overhaul’ (Media Statement, 15 August 2012).
22 See below Chapter II(A)(4) and Appendix A for a discussion of these objectives.
23 Queensland Audit Office, Environmental regulation of the resources and waste industries, Report No 15 (2013); Audit Office of New South Wales, Mining Rehabilitation Security Deposits: Department of Planning and Environment (2017); Nicole Asher, ‘Hazelwood coal mine rehabilitation will face significant and unprecedented challenges’, ABC (online).
effectiveness of various financial assurance regimes, with previous research focusing on a theoretical analysis of the MRF, or comparative analysis with similar pooled funds, relative to UPB requirements in other jurisdictions.

The MRF has been acclaimed as an innovative policy, and has been examined as a possible mining securities system in other jurisdictions, including Africa. While supporting the purpose for the introduction of the MRF, others have criticised the immediate release of bonds, preferring a hybrid mining securities system.

Instead of a further theoretical analysis, this thesis utilises an empirical research approach to consider the practical implications of the MRF from the perspective of senior lawyers who have experience with its implementation, either in practice, government, or working in the industry. In doing so, this thesis aims to provide insight into the practical benefits and challenges that lawyers, and their clients have experienced following the introduction of the MRF.


26 Emma McLeod, ‘Who is going to be left with the cleaning bill? Mine site rehabilitation and regulatory responses to abandoned sites’ (Paper presented at the Fortieth Annual Conference of AMPLA Limited, 12-14 October 2016).


29 Sommer and Gardner, above n 25, 252.

30 See below Chapter III.
D Results

The interviewees identified the primary objective of the MRF as the establishment of a fund to address abandoned and legacy mine sites, without imposing an unreasonable burden on the mining industry, consistent with the legislative and policy objectives. The results indicate that interviewees perceived the MRF as successful in meeting this objective, although it was recognised that it would take some years for the full benefit of the MRF to be experienced.

While the level of financial assurance held by the State was considered to have been improved, there was a widespread view amongst interviewees that the State would have benefited from requiring a greater ongoing use of UPBs. Further, the exclusion of State Agreement mines from the MRF was identified as a significant gap in existing policy.

There were divergent views about whether the MRF was intended to encourage compliance or progressive rehabilitation, or whether that was the responsibility of the State’s wider mine closure and environmental framework. This was the topic where interviewees suggested the most need for regulatory or legislative change, although there were differing views as to what this should entail.

E Thesis Structure

In this thesis, following the above introductory context, I describe the mining securities system, and the development and implementation of the MRF Act. In Chapter III, I explain the approach to this research, including how and why the empirical method was applied.

Chapter IV describes and analyses the results of this research, including interviewees’ discussion of the objectives of the MRF, their experiences to date, and suggested improvements to the framework.

The final chapter concludes on whether the MRF has been successful in meeting its objectives, based on interviews and the associated literature.
This chapter considers the mining securities system in Western Australia (‘WA’) prior to the introduction of the Mining Rehabilitation Fund (‘MRF’). It sets out the issues with abandoned and legacy mine sites, policy concerns which resulted in the reform of the mining securities system, the consultation process in developing the legislation, and approaches other jurisdictions have taken. Finally, it describes the legislative requirements of the MRF, and the operation of the MRF to date.

A  Mining Securities – The Need for Change

1  Financial Assurance Requirements

The principal objective of mining securities is to provide financial assurance for the State government by ensuring that sufficient funds are available for the government to rehabilitate mine sites, if a tenement holder failed to satisfy their mine rehabilitation and closure obligations. As such, they are an important regulatory mechanism that provides assurance to the government and community that appropriate mine rehabilitation and closure will be attained.

The mining securities system applies to all mining operations and higher risk prospecting and exploration activities granted pursuant to the Mining Act 1978 (WA) (‘Mining Act’). The Department of Mines and Petroleum (‘DMP’), later to be renamed the Department of Mines, Industry Regulation and Safety, was responsible for regulating subsequent mining activities under the Mining Act, as well as promoting investment in resource exploration and development in WA.

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31 Several factors were identified as reasons for an operator’s failure to rehabilitate, including financial difficulties, low commodity prices, uneconomic operations or poorer than expected mineralisation. Other potential causes were environmental or technical issues, due to geological conditions or natural disasters, or the influence of the local community: Department of Mines and Petroleum (WA), Western Australia’s Mining Security System, Preferred Option Paper (2011) 4.

32 Ibid.

33 Although this represents the vast majority of mine sites in WA, the mining securities provisions of the Mining Act do not apply to mining operations where the State does not own the mineral rights or to State Agreement Act projects which are not subject to the Mining Act 1978 (WA): Department of Mines and Petroleum (WA), above n 17.

34 As of 1 July 2017, the Department of Mines and Petroleum (DMP) was amalgamated with the Department of Commerce to create the Department of Mines, Industry Regulation and Safety (DMIRS). Since the DMP was the responsible department at the time when interviews were conducted, it will be referred to as the DMP throughout this thesis.
Under the Mining Act, the Minister may require a tenement holder to lodge security for compliance with conditions imposed to prevent or reduce injury to the tenement land.\textsuperscript{35} Prior to the MRF, this was in the form of Unconditional Performance Bonds (‘UPBs’),\textsuperscript{36} which the MRF has now replaced.\textsuperscript{37} UPBs, calculated based on the total surface area disturbed on the operations (the footprint),\textsuperscript{38} continued to be held until formally discharged upon completion of rehabilitation.\textsuperscript{39}

2 \textit{The Inadequacy of Bonds}

Although the initial aim of UPBs was to make the financial risk to the State negligible,\textsuperscript{40} they were not increased in line with rising rehabilitation standards and costs.\textsuperscript{41} Accordingly, they were often substantially less than the actual rehabilitation cost if an operator failed to meet rehabilitation obligations, and by 2008, it was estimated that UPBs represented just 25 per cent of the total rehabilitation cost that they were providing security against.\textsuperscript{42}

The key perceived advantage of UPBs was that the bond remained available to support site rehabilitation, even in the event of an operator’s insolvency or other failure to rehabilitate.\textsuperscript{43} However, due to the inadequacy of the bonds to fund rehabilitation, this seldom occurred.\textsuperscript{44} This issue was further compounded by the

\textsuperscript{35} \textit{Mining Act 1978} (WA) ss 52, 60, 70F, 84A, 90, 92.

\textsuperscript{36} A UPB is a contract between the Minister, on behalf of the State and a tenement holder, which must be approved by the DMP and guaranteed by a financial institution. It guarantees payment to the state a fixed sum, should the tenement holder fail to meet the environmental conditions of the tenement: Department of Mines, Industry Regulation and Safety (WA), \textit{Unconditional Performance Bonds (UPBs)} <http://www.dmp.wa.gov.au/Minerals/Unconditional-Performance-Bonds-5703.aspx>.

\textsuperscript{37} Department of Mines and Petroleum (WA), above n 20, 1.

\textsuperscript{38} These were outlined in the approved mining proposal. Higher risk areas such as tailings, pit disposal and waste dumps were subject to a greater rate per hectare than less damaging activities, such as roads, camp sites, or strip mining: Department of Mines and Petroleum (WA), above n 17, 4.

\textsuperscript{39} Department of Mines, Industry Regulation and Safety (WA), above n 36.

\textsuperscript{40} Phil Gorey et al, ‘Critical elements in implementing fundamental change in public environmental policy: Western Australia’s mine closure and rehabilitation securities reform’ (2016) 23(4) \textit{Australasian Journal of Environmental Management} 370, 375.

\textsuperscript{41} Department of Mines and Petroleum (WA), n 17, 4.

\textsuperscript{42} Ibid.

\textsuperscript{43} Sommer and Gardner, above n 25, 253-255.

\textsuperscript{44} Department of Mines and Petroleum (WA), above n 17, 4.
system’s inflexibility, whereby UPBs could only be spent on rehabilitating the tenement for which they were lodged.\textsuperscript{45} There was, and remains, significant additional rehabilitation requirements at historic or pre-bonding abandoned mine sites,\textsuperscript{46} for which no pool of funding was available to address rehabilitation.

Following a review of the mining securities system in 2008, the Department of Industry and Resources\textsuperscript{47} concluded that a UPB system remained the most effective approach, with no alternative offering a comparable level of financial assurance.\textsuperscript{48} This resulted in a recommendation to the State government that bond rates should be gradually increased over six years to approximate the full cost of rehabilitation and mine closure.\textsuperscript{49} However, in light of the global financial crisis, the Minister placed a moratorium on bond rates until 2010 and the increase was not implemented.\textsuperscript{50}

In the interim, the Minister requested the DMP to investigate alternative options for mining securities, and the DMP initiated a further review of the mining securities system in 2009 (‘DMP Review’).\textsuperscript{51} Acknowledging the significant financial impact of a full cost bond system on the industry, and resultant effect on the State and community,\textsuperscript{52} the DMP pursued suitable alternatives that would provide a comparable, or better outcome for the State while not overly restricting industry development.\textsuperscript{53} Mine sites that are not subject to the mining security provisions of the Mining Act were not included in the review.\textsuperscript{54}

\begin{itemize}
\item \textsuperscript{45} Ibid.
\item \textsuperscript{46} Department of Mines and Petroleum (WA), \textit{Abandoned Mines Policy} (January 2016). The policy states that the DMP’s database, which is itself not a complete record, records over 190 000 abandoned mine features in WA.
\item \textsuperscript{47} The current Department of Mines, Industry Regulation and Safety was the Department of Industry and Resources in 2008.
\item \textsuperscript{48} Department of Mines and Petroleum (WA), above n 17.
\item \textsuperscript{49} Ibid 8-9.
\item \textsuperscript{50} Department of Premier and Cabinet (WA), ‘Environmental bond freeze offers relief to miners’ (Media Statement, 19 December 2008).
\item \textsuperscript{51} Gorey et al, above n 40, 376.
\item \textsuperscript{52} Department of Mines and Petroleum (WA), above n 31, 4.
\item \textsuperscript{53} Department of Mines and Petroleum (WA), above n 17, 2.
\item \textsuperscript{54} Department of Mines and Petroleum (WA), above n 31, 6.
\end{itemize}
3 Reform of the Mining Security System

As part of the DMP review, the DMP undertook a consultation process with industry stakeholders, releasing a Preliminary Discussion Paper on Policy Options for Mining Securities in Western Australia (‘Preliminary Paper’) for public comment in December 2010.\(^{55}\)

The DMP stated that WA’s system of mining securities based on UPBs ‘exposed the government to an unacceptable level of risk’.\(^{56}\) The rapid expansion of the mining industry had resulted in an increase in the scale and number of projects and the area under mining. The DMP also noted concern about the increasing number of mines held under care and maintenance, and suggested that, effectively, some may have been abandoned. It also identified heightened risk with sale transactions of operations approaching their end-of-life, with significant environmental liabilities, to smaller, less financially secure operators.\(^{57}\)

The Preliminary Paper proposed three mining securities options: a reform of the existing system of UPBs to the full cost of rehabilitation, the introduction of a government-administered fidelity fund, and an insurance-based system.\(^{58}\)

The option of reforming the previous UPB mining securities system, by increasing bonds to reflect the full cost of rehabilitation was initially considered to be the default option, as it was familiar and well understood. It also ensured that any breach of their obligations by an individual operator was borne solely by that operator, and not by the entire industry or taxpayer.\(^{59}\) It could be implemented within the current legislative framework, so would not require the passage of significant new legislation.\(^{60}\)

However, the mining industry was not in favour of the UPB system due to the high set up and maintenance costs, with the annual cost of bank guarantees potentially as high as three per cent of the bond.\(^{61}\) The DMP recognised the UPB

\(^{55}\) Department of Mines and Petroleum (WA), above n 17.

\(^{56}\) Department of Mines and Petroleum (WA), above n 31, 8.

\(^{57}\) Ibid 7.

\(^{58}\) Department of Mines and Petroleum (WA), above n 17.

\(^{59}\) Ibid 10-12.

\(^{60}\) Ibid.

\(^{61}\) Ibid 11.
system to be burdensome and inequitable, particularly on smaller operators with limited access to capital. The industry perceived the UPB system to be burdensome due to the administrative burden in maintaining and discharging bonds due to the difficulty in demonstrating the completion of rehabilitation activities, which was compounded by each tenement assessed and bonded separately, rather than as an entire project.

In a detailed analysis of the mining securities system across international and Australian jurisdictions, the DMP noted that while the predominant financial assurance method was bank-guaranteed performance bonds, there were often issues with the adequacy of the bonds. This was subsequently confirmed by the WA Auditor General (‘Auditor General’) in 2011 (‘2011 Report’), who found that UPBs covered less than 25 per cent of the predicted rehabilitation cost of mine sites across the State.

While the low level of UPBs exposed the State to potentially significant environmental and financial risks, the likelihood of this risk materialising in full was relatively low. In instances of operator insolvency, usually another operator would seek to take over the site, and accept responsibility for rehabilitation.

The second option, was a fidelity fund model whereby all tenement holders paid a levy into a fund to be held against the State’s exposure to operators’ failure to meet rehabilitation obligations. This model created a pool of funds not allocated to any specific tenement, which the State could use to rehabilitate any existing abandoned mine sites. It was also more appealing to smaller mine operators, as it alleviated the higher capital costs of funding UPBs. However, such a model was

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62 The DMP described the full bond option as ‘inequitable and onerous’, Department of Mines and Petroleum (WA), above n 31, 17.
63 Department of Mines and Petroleum (WA), above n 17, 6.
64 Ibid 22-24.
65 Auditor General Western Australia, above n 3, 12-15.
66 Ibid 32; Department of Mines and Petroleum (WA), above n 31, 9.
67 By November 2010, the DMP noted that only $2.5 million of bonds, of a total of over $800 million, had been called in due to a tenement holder’s insolvency or failure to rehabilitate: Department of Mines and Petroleum (WA), above n 17, 4.
68 Department of Mines and Petroleum (WA), above n 31, 7.
69 Department of Mines and Petroleum (WA), above n 17, 12.
70 Ibid.
unproven internationally, and would incur administrative costs in establishing systems for the DMP to calculate and monitor the payment of levies.\textsuperscript{71}

The final option, an insurance-based system, was considered the least attractive. Not only was the cost to industry similar to that of UPBs, but it was also subject to the significant risk that the operators most at risk of failing to meet their rehabilitation obligations would be unable to obtain appropriate insurance cover.\textsuperscript{72}

4 Objectives of the Mining Securities System

The DMP evaluated the suitability of the proposed mining security options based on the principal objective of ensuring that adequate funds are ‘immediately accessible to government to rehabilitate mine sites in the event of operators not fulfilling their mine rehabilitation and closure obligations’ (‘DMP Evaluation’).\textsuperscript{73}

In addition to the principal objective, the DMP Evaluation also considered six principles (‘Evaluation Principles’).\textsuperscript{74}

The DMP recognised the need to balance these principles against each other, accepting that that no one mining securities system would excel in all areas.\textsuperscript{75} The Evaluation Principles identified the need to avoid an unreasonable financial burden or adverse effect on investment in the industry (‘Evaluation Principle 1’). It should also promote good environmental outcomes, including progressive rehabilitation, and encourage compliance with legal obligations (‘Evaluation Principle 2’). The system should be readily accessible and administratively cost-effective (‘Evaluation Principle 3’), and it should also be clear and effective, and supported by robust monitoring and enforcement, resulting in good compliance outcomes (‘Evaluation Principle 4’). It should allow a flexible cost calculation while reflecting the level of environmental risk (‘Evaluation Principle 5’).

In this thesis, these Evaluation Principles have been used, in conjunction with interviewee responses to evaluate the effectiveness of the MRF. An excerpt of these principles can be found in Appendix A.

\textsuperscript{71} Ibid 12-15.
\textsuperscript{72} Ibid 15-17.
\textsuperscript{73} Ibid 7.
\textsuperscript{74} Department of Mines and Petroleum (WA), above n 31, 12.
\textsuperscript{75} Ibid 9.
The DMP determined that the fund-based model was the most appropriate for the State, and sought additional comments from stakeholders in a Preferred Option Paper (‘Option Paper’), prior to making a final recommendation to the State government. Following this, the MRF was introduced in WA.

5 Mine Closure in Western Australia

In addition to the Mining Act, mining operations in WA are subject to a range of environmental legislation. Mining rehabilitation commitments are sourced from mining proposals, which are required to gain approval to mine. All mining operations under the Mining Act must submit a mine closure plan in the prescribed manner, which incorporates rehabilitation commitments.

The purpose of the mine closure plan is to ensure that the eventual closure and rehabilitation of a mine site is addressed at each stage of the mining process, rather than only after mining has been completed. Mine closure plans are intended, in conjunction with financial assurance measures, to reduce closure liability and environmental risk to the State and community.

The Auditor General’s 2011 Report identified significant weaknesses in the existing system of securing compliance with environmental protection conditions for the mining industry. It noted that the DMP had focused on project approvals, and had undertaken ‘the minimum action required to obtain industry cooperation and compliance’.

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76 Department of Mines and Petroleum (WA), above n 31.
77 Western Australia, Western Australian Government Gazette, No 96, 21 June 2013, 2445.
78 See Appendix B.
79 Mining Act 1978 (WA) s 70O, 74(1)(ca)(i).
80 Mining Act 1978 (WA) s 84AA; Department of Mines and Petroleum (WA) and Environmental Protection Authority (WA), Guidelines for Preparing Mine Closure Plans (2015) 4, 39; Department of Mines and Petroleum (WA), Guidelines for Mining Proposals in Western Australia (2016).
81 Department of Mines and Petroleum (WA) and Environmental Protection Authority (WA), Guidelines for Preparing Mine Closure Plans (2015).
82 Department of Mines and Petroleum (WA), above n 31, 5; Sommer and Gardner, above n 25, 243.
83 Auditor General Western Australia, above n 3.
84 Ibid 17.
85 Ibid 8.
Relevantly, the Auditor General was critical of the State’s management of environmental compliance, and the resultant exposure to potentially high financial risk. Information submitted by miners was not adequately reviewed by the DMP, and there was no oversight to ensure that all miners lodged necessary documents, resulting in poor monitoring of the industry. The 2011 Report emphasised the need for improved reporting by miners about their environmental management, and the need for the DMP to improve its records management. This was intended to be supplemented by a more rigorous inspection process, to improve identification of non-compliance or inaccurate reporting.

B The Mining Rehabilitation Fund

The MRF, established by the Mining Rehabilitation Fund Act 2012 (WA) (‘MRF Act’), requires all holders of mining authorisations to pay a non-refundable levy into the Fund. The MRF became compulsory from 1 July 2014, with an optional period from 1 July 2013.

The purpose of the MRF is ‘to provide a source of funding for the rehabilitation of abandoned mine sites and other land affected by mining operations carried out in, on or under those sites’. As an agency special purpose account under the Financial Management Act 2006 (WA), the principal of funds paid into the MRF are restricted to rehabilitation work on abandoned mine sites for which contributions were made. The interest generated may be used to rehabilitate legacy abandoned mine sites, as well as to cover administration costs of the Fund and the MRF Act. The MRF therefore represented a mechanism not just to gain financial assurance from existing tenement holders, thereby reducing the State’s

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86 Ibid 32.
87 Ibid 19.
88 Ibid 25.
89 Mining authorisations include Mining Act 1978 (WA) mining leases and prescribed State Agreement tenements: Mining Rehabilitation Fund Act 2012 (WA) s 4.
90 Mining Rehabilitation Fund Act 2012 (WA) s 11.
91 Department of Mines and Petroleum (WA), Mining Rehabilitation Fact Sheet (2015) 2.
92 Mining Rehabilitation Fund Act 2012 (WA) s 6.
93 Financial Management Act 2006 (WA) s 16.
94 Mining Rehabilitation Fund Act 2012 (WA) s 8(1)-(2); Department of Mines and Petroleum (WA), above n 20; Department of Mines and Petroleum (WA), Abandoned Mines Policy (2016).
exposure but also to address legacy issues caused by previous deficiencies in the State’s environmental framework.\textsuperscript{95}

The MRF does not relieve a tenement holders’ obligation to perform mine closure and rehabilitation as stipulated in the approved mining plans and mine closure plans.\textsuperscript{96} It will only be used to undertake rehabilitation in the event of a premature mine closure. It is used as a last resort for abandoned sites only ‘after every effort has been made to trace responsible parties and recover funds’.\textsuperscript{97} The chief executive of the DMP may declare land to be an abandoned mine site and authorise rehabilitation work to be undertaken.\textsuperscript{98}

A Mining Rehabilitation Advisory Panel,\textsuperscript{99} established under the MRF Act provides advice to the Director General of DMP on the administration and implementation of the MRF Act.\textsuperscript{100}

1 **MRF Levy Calculation and Reporting**

The basis of calculation of the levy is specified in the *Mining Rehabilitation Fund Regulations 2013* (WA) (‘MRF Regulations’).\textsuperscript{101} The MRF levy, payable annually is one per cent of the rehabilitation liability estimate (‘RLE’).\textsuperscript{102}

A tenement’s RLE is calculated by multiplying the total area of land in a category by a unit rate,\textsuperscript{103} and the type of disturbance, based an operator’s self-assessment of the area of land disturbed, other than for rehabilitated land which is assessed by the DMP, in accordance with Table 1.\textsuperscript{104}

\textsuperscript{95} Western Australia, Legislative Assembly, 15 August 2012, 5011 (Colin Barnett).

\textsuperscript{96} *Mining Rehabilitation Fund Act 2012* (WA) s 9A.

\textsuperscript{97} Department of Mines and Petroleum (WA), n 20, 2.

\textsuperscript{98} *Mining Rehabilitation Fund Act 2012* (WA) s 9, 10.


\textsuperscript{100} *Mining Rehabilitation Fund Act 2012* (WA) s 33.

\textsuperscript{101} Ibid s 13.

\textsuperscript{102} *Mining Rehabilitation Fund Regulations 2013* (WA) reg 4(1).

\textsuperscript{103} Ibid reg 4(2).

\textsuperscript{104} Table excerpt from Department of Mines and Petroleum (WA), *Mining Rehabilitation Fund – Guidance* (2017) 6. See Appendix C for the rehabilitation liability categories and unit rates.
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disturbed Land</td>
<td>Land under Rehabilitation</td>
<td>Rehabilitated Land</td>
</tr>
<tr>
<td>Exploration/prospecting operations</td>
<td>Category D</td>
<td>Self-assessed</td>
</tr>
<tr>
<td></td>
<td>$2,000 per hectare</td>
<td>No levy applicable</td>
</tr>
<tr>
<td>All disturbances other than exploration operations</td>
<td>Self-assessed as categorised by Unit rates list $18,000-$50,000 per hectare Categories A, B, C</td>
<td>Self-assessed $2,000 per hectare Category E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DMP sign-off</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No levy payable</td>
</tr>
</tbody>
</table>

Table 1 MRF Categories for prospecting/exploration activities and other disturbances

The rehabilitation liability categories and unit rates are set out in Schedule 1 to the MRF Regulations. While operators with a RLE under $50,000 are exempt from the levy, all tenement holders are required to provide the DMP with data on their level of ground disturbance.

The level of ground disturbance used to calculate the MRF is reported through the Environmental Assessment and Regulatory System (‘EARS2’). The disturbance data reported online through EARS2 in the form of a tenement’s Annual Environmental Report (‘AER’), is used to calculate the MRF levy, following which levy assessment notices are sent to operators.

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105 The DMP’s Mining Rehabilitation Fund – Guidance states ‘For mining disturbances to be reported as ‘Land Under Rehabilitation’ (Category E), the completion criteria within the relevant Mine Closure Plan (or the closure obligations within the relevant Mining Proposal) must have been fully met and monitoring of rehabilitation must have commenced as per mine closure plans, and the entity has commenced monitoring.’: Department of Mines and Petroleum (WA), above n 20, 7.

106 Mining Rehabilitation Fund Regulations 2013 (WA) s 4(3).

107 The EARS2 reporting system allows online lodgement and tracking of the submission of compliance reports, principally the Annual Environmental Report (‘AER’).

108 Submitting an AER is a mandatory condition for most mines regulated under the Mining Act 1978 (WA) and provides the DMP with information about mine performance, and non-compliance with the approval conditions: Department of Mines and Petroleum (WA), Guidelines for the Preparation of an Annual Environmental Report (2015).

109 The MRF levy is paid via Electronic Funds Transfer (EFT) using the details found on the levy assessment notice: Department of Mines and Petroleum (WA), above n 20, 4.
2 \textit{Retention of Performance Bonds}

In most cases, the annual contribution of the MRF levy acts as a replacement for UPBs, which were released back to the tenement holders.\textsuperscript{110} However, the Minister for Mines and Petroleum (‘Minister’) retains the discretion to require that a tenement holder lodges a UPB under the Mining Act, in addition to the MRF contribution.\textsuperscript{111}

The DMP has indicated that the requirements for UPBs will be imposed only on tenements deemed to have an increased risk of the rehabilitation liability falling upon the State.\textsuperscript{112} This includes tenement holders that have entered administration or liquidation, entered a deed of company arrangement or are the subject of an order for winding-up or de-registration.\textsuperscript{113} It also includes tenements where there has been previous failure to comply with the rehabilitation obligations of the Mining Act, to report or make levy contributions under the MRF Act, or make payment of royalties.\textsuperscript{114}

3 \textit{Reforming Environmental Regulation}

Prior to the introduction of the MRF, the DMP implemented a wider set of reforms addressing the perceived regulatory deficiencies.\textsuperscript{115} As part of these reforms, the DMP made improvements to its systems to share information across the various departments where there might be non-compliance, tracking issues such as failure to pay rent, submit required forms, or meet expenditure requirements.\textsuperscript{116}

The intention of the reform was not only to improve compliance, but also to allow the public release of environmental data, and to improve environmental approval

\begin{itemize}
\item \textsuperscript{110} Ibid 2.
\item \textsuperscript{111} The methodology for determining UPBs is set out in the \textit{Mining Rehabilitation Fund Regulations 2013} (WA), and is substantially increased over previous levels, with rates of up to $50,000 per hectare are in place for those areas deemed to have the highest level of disturbance. Department of Mines and Petroleum (WA), \textit{The Administration of mining securities for mine sites regulated by the Department of Mines and Petroleum} (2014).
\item \textsuperscript{112} Ibid.
\item \textsuperscript{113} Department of Mines and Petroleum (WA), above n 20, 3.
\item \textsuperscript{114} Department of Mines and Petroleum (WA), above n 111.
\item \textsuperscript{115} Department of Mines and Petroleum (WA), \textit{Reforming Environmental Regulation} (2012).
\item \textsuperscript{116} Ibid 2.
\end{itemize}
processes, thereby reducing administrative overhead on the mining industry, and encouraging foreign investment in the industry.\footnote{117}  

4 State Agreements  
Land granted in WA may operate under a multiplicity of tenure.\footnote{118} State Agreements are generally used for major long-term resource projects, particularly those that require significant infrastructure to be developed, where their needs cannot be met by the existing system. Some of the most significant resource projects are developed under a legal contract specifying the agreement with the WA government for the development of that resource.\footnote{119}  
These State Agreements are ratified by individual Acts of Parliament, although they do not have force of law, so are not binding on anyone but the parties to the contract, and they are bound by the \textit{Environmental Protection Act 1986} (WA) (‘EP Act’).\footnote{120} Each State Agreement details the specific rights, obligations, terms and conditions for development of an individual project.\footnote{121}  
While they are not equivalent to an Act of Parliament,\footnote{122} they take effect despite other laws unless expressly stated in the State Agreement,\footnote{123} and are excluded from the scope of the Mining Act, unless the State Agreement specifies otherwise.\footnote{124} Therefore, State Agreements are excluded from the MRF Act.\footnote{125} However, they may fall within it if they are a mining authorisation under the MRF Act.\footnote{126}  

\begin{footnotes}
\footnote{117} Explanatory Memorandum, Mining Legislation Amendment Bill 2013 (WA).
\footnote{118} Systems of tenure include land granted under the \textit{Land Administration Act 1997} (WA), \textit{Petroleum Pipelines Act 1969} (WA), \textit{Petroleum and Geothermal Energy Resources Act 1967} (WA) and the various State Agreements granted under the relevant State Agreement Acts.
\footnote{120} Richard Hillman, ‘The Future of State Agreements in Western Australia’ (2006) 25(3) \textit{Australian Resources and Energy Law Journal} 293.
\footnote{121} Ibid.
\footnote{122} Hunt, Kavenagh and Hunt, above n 119, 15.
\footnote{123} \textit{Government Agreements Act 1979} (WA) s 3.
\footnote{124} \textit{Mining Act 1978} (WA) s 5(1).
\footnote{125} Department of Mines and Petroleum (WA), \textit{Mining Rehabilitation Fund (MRF) Frequently Asked Questions} (2017) 5.
\footnote{126} \textit{Mining Rehabilitation Fund Act 2012} (WA) s 4.
\end{footnotes}
While the State retains discretionary powers to impose UPBs over State Agreement mines, these are not commonly used.\(^{127}\) This means that WA effectively retains two different regimes for mining rehabilitation. State Agreements have been a long-standing element of mining development in WA, and continue to retain the support of successive governments.

5  **The Initial Operation of the MRF**

As of 30 June 2017, the MRF had assets of $92.4 million.\(^ {128}\) During the year ending 30 June 2017, it received $28.3 million of industry contributions, and earned $1.6 million in interest.\(^ {129}\) The Fund spent $832,000 on rehabilitation and other operational expenditure, the highest profile event being the partial rehabilitation of Ellendale Diamond Mine (‘Ellendale’).\(^ {130}\)

6  **Ellendale Diamond Mine**

The first major application of the MRF was in July 2015, when the operator of Ellendale, Kimberley Diamond Company Pty Ltd (‘KDC’) was placed into administration by its parent company, the ASX-listed Kimberley Diamonds Limited (‘KDL’).\(^ {131}\) KDC opted in to the MRF in the voluntary period, and the DMP returned $12.1 million of UPBs to KDC.\(^ {132}\) Between 2013-2014, KDC contributed $818,826.40 to the MRF.

Liquidators were appointed to KDC, and lodged a ‘Notice of Disclaimer of Onerous Property’ \(^ {133}\) with the Australian Securities and Investments Commission.\(^ {134}\) The liquidator disclaimed any interest held by KDC in the two

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\(^ {129}\) Ibid.

\(^ {130}\) Ibid.


\(^ {132}\) Western Australia, *Parliamentary Debates*, Legislative Council, 11 August 2015, 3290 (Robin Chapple).

\(^ {133}\) The Notice of Disclaimer of Onerous Property was lodged under section 568A(1)(b) of the *Corporations Act 2001* (Cth).

tenements on which Ellendale was located. Ownership, together with the associated rehabilitation obligations, reverted to the State. It was the first time that section 568A(1)(b) of the Corporations Act 2001 (Cth) (‘Corporations Act’) was used to disclaim mining rehabilitation liabilities on liquidation of an entity. The extent of the rehabilitation liability was estimated at $24.5 million on the date of transfer by KDL, although media coverage suggested a liability of $40 million based on DMP estimates.

Ellendale was gazetted and declared an abandoned site pursuant to section 9(1) of the MRF Act, with the State’s immediate priority being to ensure the area was ‘safe, stable, and non-polluting’. The DMP accessed MRF funds to undertake work necessary to address immediate safety or environmental risks, at a cost of approximately $80 000 by April 2016.

The abandonment of Ellendale attracted significant publicity and debate. The MRF was used to meet immediate safety requirements meaning that such costs were not borne by the taxpayer. However, it raised the question of whether the MRF was sufficient to fund the rehabilitation of abandoned mines such as Ellendale, particularly if there were multiple similar abandonments within a short period, an issue noted by Sommer and Gardner.

The DMP announced that the site will not be fully rehabilitated or closed, as their intention was to ensure that it remains viable for responsible future development under a new operator, to avoid the State incurring the full rehabilitation

136 Department of Mines and Petroleum (WA), above n 134.
137 Western Australia, Western Australian Government Gazette, No 181, 4 December 2015, 4854.
139 Department of Mines and Petroleum (WA), Ellendale Information Sheet 2 (2016).
141 Sommer and Gardner, above n 25, 252.
142 Department of Mines and Petroleum (WA), above n 134.
liability. There has been no sale to date, and the State continues to monitor the site.\(^{143}\)

### C Other Australian Frameworks

The importance of establishing an effective mining securities or financial assurance framework is common to all jurisdictions in which mines operate. New South Wales (‘NSW’), Northern Territory (‘NT’), Queensland, Victoria and South Australia all require bonds, usually at 100 per cent of the rehabilitation liability,\(^{144}\) although in reality the inadequacy of financial assurance remains a common issue,\(^{145}\) with deficiencies noted in New South Wales\(^^{146}\) and Queensland.\(^{147}\) Three jurisdictions with significant resource sectors are discussed further below as examples.

#### 1 Queensland

Queensland has experienced similar issues to WA in respect of exposure to rehabilitation obligations, with the Yabulu nickel refinery (‘Yabulu’),\(^{148}\) and Linc Energy\(^^{149}\) both achieving recent media prominence, in addition to reports of a $3 billion unfunded liability for the Queensland coal industry.\(^{150}\)

In response, the Queensland Government introduced the *Environmental Protection (Chain of Responsibility) Amendment Act 2016* (Qld), which amended

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\(^{143}\) Department of Mines and Petroleum (WA), above n 139.

\(^{144}\) Sommer and Gardner, above n 25, 255.

\(^{145}\) McLeod, above n 26.


\(^{147}\) The Queensland Audit Office’s recent analysis suggests that Queensland has made progress in reducing this disparity in recent years through increasing bonds. As a result, the Queensland government holds $6.8 billion of bonds against an estimated environmental liability of $8.7 billion. See Queensland Audit Office, *Follow-up of Report 15: 2013-2014 Environmental regulation of the resources and waste industries*, Report No 1 (2017) 16.

\(^{148}\) Dominique Schwartz and Mark Solomons, ‘Clive Palmer’s Yabulu refinery under environmental scrutiny as $93m clean-up bill revealed’, *ABC* (online), 21 April 2016.

\(^{149}\) Sarah Vogler and Rhian Deutrom, ‘Linc Energy could leave taxpayers with a $25 million bill for cleaning up Dalby plant’, *The Sunday Mail* (Qld), 17 April 2016.

the Environmental Protection Act 1994 (Qld) (‘Chain of Responsibility’).151 This increased the State’s ability to enforce compliance with environmental obligations, by authorising the State to issue environmental protection orders to ‘related persons’ of companies that do not comply with their obligations, enabling the State to extend responsibility to group companies, directors, or other associated entities.152

Queensland is currently undertaking a review of its financial assurance framework,153 which currently relies on UPBs. The review recommended a ‘tailored solution’ consisting of three categories of security, recognising that a ‘one size fits all’ approach does not work, and the need for flexibility and optionality for various resources operators within the State.154 For lower risk miners, there would be rehabilitation fund. Larger or financially riskier operators would continue to be subject to a bond-based model. The very largest and most creditworthy operators would be subject to Selected Partner Agreements which would involve paying an annual charge, but no UPB.155 This remains subject to public consultation in Queensland.

2 Northern Territory

The NT retains the use of UPBs for the full cost of the rehabilitation liability. In addition, it requires operators to contribute an annual levy set at one per cent of their bond balance,156 which is used to address historic disturbance.157 The NT has therefore adopted a hybrid approach which replicates the pooled fund model of the MRF, while retaining the individual assurance of UPBs.


152 Explanatory Notes, Environmental Protection (Chain of Responsibility) Amendment Bill 2016 (Qld) 1; Environmental Protection (Chain of Responsibility) Amendment Act 2016 (Qld).


154 Ibid 64.

155 Ibid 48.

156 Mining Management Act 2001 (NT) pts 4, 4A.

157 Mining Management Amendment Act 2013 (NT).
3 **New South Wales**

NSW also retains the requirement for security deposits which cover the full cost of rehabilitation. However, a recent New South Wales Audit Office review of their mining securities framework by the has highlighted both the lack of contingency, and the risk of environmental degradation after the deposit has been returned. The review also identified the need for a clear limit on the length of time that mines may be placed in care and maintenance.

**D Concluding Remarks**

The approach WA has adopted in reforming the State’s mining securities system and financial assurance mechanism is unique, and has attracted international attention. The MRF has been analysed and acclaimed as a policy innovation by some commentators, describing it as ‘a positive example for other regions of the world struggling with how to manage both expected and unintended mine closures into the future’.

However, there has been little research on the effect of the MRF, and how effectively it has operated in practice. This paper aims to expand knowledge in this area, by gaining insight through interviewing lawyers who have experienced the effects of the MRF. The empirical research approach used to achieve this will be discussed in the following Chapter.

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162 Angus Morrison-Saunders and Jenny Pope, ‘Mine closure planning and social responsibility in Western Australia: Recent policy innovations’ (Paper presented at SRMining 2013: 2nd International Conference on Social Responsibility in Mining, Santiago, Chile 7 November 2013).
III RESEARCH METHODOLOGY

This Chapter begins with a discussion of the empirical research method, and the reasons why interviewing lawyers with direct experience of the MRF was considered suitable for this research. It then outlines the process involved in applying the empirical method, including data collection, data storage, and data analysis.

A Empirical Research Method

The empirical research method utilises observable real-world data to make inferences about a research question.\textsuperscript{163} It was considered suitable for this thesis due to the lack of any similar empirical research in this area.

Mining securities system has been well-studied, including detailed theoretical assessments on the various financial assurance systems.\textsuperscript{164} While academic literature such as McLeod has compared mining securities systems,\textsuperscript{165} and others have made theoretical critiques of the MRF,\textsuperscript{166} or compared it to other mining securities frameworks,\textsuperscript{167} there has been no research to date on the practical effects of the MRF.

Furthermore, while the MRF was developed following a detailed consultative process with industry stakeholders, there has been relatively little effort to link the theoretical assessments of the MRF to the experience of lawyers working in the industry,\textsuperscript{168} who are expected to have both their clients’ interests, as well as their obligations and duties under the MRF regime in mind.

This thesis will identify some of the gaps between the ‘formal law’ of the MRF legislation, and the ‘practical reality’ of how the MRF operates,\textsuperscript{169} by examining the effect of the MRF as perceived by interviewees with significant experience in

\textsuperscript{163} Felicity Bell, ‘Empirical Research in Law’ (2016) 25 (2) Griffith Law Review 262, 263.
\textsuperscript{165} McLeod, above n 26.
\textsuperscript{166} Morrison-Saunders and Pope, above n 162; Sommer and Gardner, above n 25.
\textsuperscript{167} McLeod, above n 26.
\textsuperscript{169} Bell, above n 163, 275.
its implementation. Using interviewee responses, this thesis will identify the perceived effects and impacts of the introduction of the MRF on the mining industry, the State and the environment, and consider whether the intention of the MRF has matched expectations, thereby providing a ‘reality check’.\textsuperscript{170} It will also identify areas where law may be incomplete, or not operating as intended,\textsuperscript{171} and will consider interviewees’ recommendations on how the mining securities system might be made more effective.\textsuperscript{172}

\section*{B Data Collection}

The interviews focused on gaining insight into interviewees’ views on the effectiveness of the MRF, formed through their experience, or that of their clients. The interviewees were in key positions to understand the MRF, and contribute to a discussion of its impact and effectiveness. All had experienced the effects of the MRF in WA, either firsthand, or following exposure through their client work. Their experience is drawn from a variety of different roles, including mining or environmental law partners in practice, senior legal counsel for mining companies, and senior government department officials.

Interviewees were initially selected from professional contacts via a variety of sources, including employment and networking events. Candidates were initially selected with a focus on lawyers with extensive mining or environmental law expertise,\textsuperscript{173} who could provide valuable insight into the implementation of the MRF since its inception.

Further interviewees were then identified and selected using the snowball sampling method, whereby the initial contacts were asked to recommend other potential interviewees who had the potential to generate a range of useful insights and understanding. Potential interviewees were screened through law firm websites. Due to the limited scope of this research, the sample size was limited to 10 interviewees.

\textsuperscript{170} Leeuw and Schmeets, above n 168, 226.

\textsuperscript{171} Bell, above n 163, 277.


\textsuperscript{173} Suitable interviewees were senior lawyers with between 7 to 15 years’ experience in mining or environmental law, or within the mining industry as in-house lawyers.
Interviews were undertaken between April 2017 and June 2017, and were semi-structured with a list of open-ended questions, adapted to each interviewee. Each interview developed spontaneously from the initial responses provided, and interviewees were encouraged to provide further detail about responses, or to raise additional matters they considered relevant. Interviews ran for around 45 minutes. All interviews were recorded and transcribed, and notes were made for reference.

All interviewees were provided with information about the purpose and nature of the project and a consent form which detailed expectations around confidentiality, and permission to record the interview. All interviewees provided informed consent to participate in the interview and agreed to the recording of the interview.

C Data Storage

This research project was approved by the Murdoch University Human Research Ethics Committee. It was conducted in compliance with Murdoch University and National research standards.

Data storage for interview data such as interview recording, and transcripts were carried out in accordance with Murdoch University Data Protection Guidelines. Interviewees’ responses have been kept anonymous, to encourage unrestricted discussion, with each interviewee assigned ‘MX’, and some responses not attributed to any interviewee.

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174 See Appendix D for a list of interview questions.


176 See Appendix E for Project Information Sheet.

177 Project No. 2017/034.


179 ‘X’ denotes the number of the interviews, which have been classified as M1 to M10.

180 In instances where it may otherwise allow the reader to infer the interviewee’s identity or organisation where the interviewee is referring to, it has been denoted ‘Anonymous’ in the footnotes.
D Data Processing and Analysis

Prior to each interview, interviewees were provided with a list of questions, to assist in preparing responses.\textsuperscript{181} After each interview, important points were noted, allowing the formulation of improved questions for the next interview. Following the completion of the interview process, interviews were transcribed verbatim and analysed to identify recurring themes and common issues raised by interviewees.\textsuperscript{182}

The presentation of results in Chapter IV reflects the overall nature of the discussion, first grouped by the stakeholders affected, and then further divided into specific themes raised by interviewees, including any consensus or disagreement among interviewees. This approach has resulted in interview data from which conclusions on the effect of the MRF can be made, and which will supplement the existing theoretical work.\textsuperscript{183}

\textsuperscript{181} See Appendix D Interview Questions.

\textsuperscript{182} Leeuw and Schmeets, above n 168, 131.

\textsuperscript{183} Landry, above n 172, 170.
IV INTERVIEW RESULTS

A Introduction to the Interviews

This Chapter considers the effects of the Mining Rehabilitation Fund (‘MRF’) from interviewees’ perspectives, compared against the objectives of the MRF, leading to an analysis of whether those objectives were satisfied. Interviewees’ discussion on the effects of the MRF was sorted into the effect on the mining industry, State and environment. For reasons of clarity and brevity, interviewees’ discussion of each issue has been analysed together with comparison to the relevant academic literature.

The purpose of examining the objectives of the MRF was to determine whether interviewees’ perceptions were aligned with that of the State and the Department of Mines and Petroleum (‘DMP’). Interviewees were clear that the principal objective of the MRF was to provide the State with funding for abandoned mine rehabilitation.185

The discussion below focuses on the range of views held by interviewees on the merits of the other objectives stated by the DMP. These were not universally accepted as legitimate purposes of the MRF, with some interviewees likening the MRF to a tax, with no objective other than to raise funds for the State.187

Discussion on the effects of the MRF highlighted both expected and unexpected consequences of the MRF regime. Therefore, while the effects are considered against the objectives of the MRF, matters raised by interviewees have been included even when they do not relate directly to any objective, because they are still considered important to a complete understanding of the impact of the MRF in WA.

B Objectives of the MRF

Interviewees were clear and unanimous about the primary intention of the MRF, in respect of abandoned mine sites, but had diverse views about the extent to

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184 Interviewees are identified throughout Chapter IV as M1 to M10, with some responses referred to as ‘Anonymous’ in order to maintain confidentiality.

185 Mining Rehabilitation Fund Act 2012 (WA) s 6.

186 Department of Mines and Petroleum (WA), above n 31, 12.

187 ‘There's no environmental benefit per se. I think it's a real fiscal benefit for the State’: M3.
which there were other objectives. This is consistent with Gorey et al’s view that identifying the policy problem was not straightforward, and clarifying the principal objective of the mining securities framework exposed wide-rangiing views from the State government and other stakeholders.188

The key aim of the MRF, reflected in the Mining Rehabilitation Fund Act 2012 (WA) (‘MRF Act’) and the principal objective (‘Principal Objective’) in the Preferred Option Paper (‘Option Paper’),189 was to manage the State’s contingent liability in respect of abandoned mines by creating a shared fund available to the State in remediating abandoned mines and ‘other land affected by mining operations carried out in, on or under those sites’,190 achieved by requiring tenement holders to pay an annual levy.191

Interviewees perceived the MRF as a legal mechanism primarily to address the State’s potential liability for abandoned mines. They emphasised that the MRF does not address all the current problems with the wider mine rehabilitation and environmental framework, and that it should be considered within the context of the wider legislative framework and other mechanisms available to the State to address these issues,192 particularly mine closure plans.193

1 Financial Assurance for Abandoned Mines and Legacy Sites

To all interviewees, the MRF was seen primarily as an initiative to address the issue of the State’s abandoned mines and legacy sites. They also recognised the inadequacies of the previous mining securities system of Unconditional Performance Bonds (‘UPBs’) to manage the State’s contingent liability for rehabilitation. It was also acknowledged that, prior to the MRF, no mechanism existed to rehabilitate legacy sites, other than general state revenue. The main objective was therefore to create a fund to address abandoned and legacy sites, by

188 Gorey et al, above n 40, 379.
189 Department of Mines and Petroleum (WA), above n 31, 12. See Appendix A for an excerpt of the Evaluation Principles, including the Principal Objective.
190 Mining Rehabilitation Fund Act 2012 (WA) s 6.
191 Explanatory Memorandum, Mining Rehabilitation Fund Bill 2012 (WA) 1.
192 M2, M4, M5, M7.
193 M3, M5, M6, M7, M9.
attempting to shift the cost from the general taxpayer onto the mining industry.\textsuperscript{194} As such, the MRF was likened to an insurance policy for the State.\textsuperscript{195}

Others considered the intention for the entire industry to take responsibility for non-compliant operators and legacy sites, without reducing each operator’s own rehabilitation responsibilities.\textsuperscript{196} The industry’s responsibility for satisfactory mine closure and rehabilitation outcomes is generally considered to be part of its ‘social licence to operate’,\textsuperscript{197} and remains an integral part of business for mining companies.\textsuperscript{198}

Two distinct aspects to the Principal Objective were noted by interviewees. Firstly, the State should have prompt access to funds to perform necessary work if an existing mine became abandoned. Secondly, the Fund should enable the State to commence addressing rehabilitation issues on legacy sites. For several interviewees,\textsuperscript{199} it was imperative that the fund was pooled, so as to enable the State to manage the risks more effectively than the previous system, where each bond could only be used against a specific site.\textsuperscript{200}

2 \textit{Economic Efficiency}

While managing the potential liability for abandoned sites was identified as the primary objective, several interviewees also emphasised the impact on the industry as a key factor in the government’s decision to adopt the fund model.\textsuperscript{201} They noted that the MRF was introduced to reduce the financial burden on the industry by freeing up capital held in performance bonds or bank guarantees,

\textsuperscript{194} M2, M3, M6, M10. One interviewee, however, expressed a contrary view, ‘I am concerned about what that means for rehabilitation in the long term, and whether it really is a cost shifting from a miner to the State’: M9.
\textsuperscript{195} ‘It’s there to give the state that insurance policy, but also to enable the state to have some funds there to get on and do some of the rehab that’s needed for those abandoned mines so that they’re not posing a safety risk or a health risk for the community’: M2
\textsuperscript{196} M3, M5, M8.
\textsuperscript{197} Department of Mines and Petroleum (WA), above n 17, 1.
\textsuperscript{198} Ernst and Young, \textit{Business risks facing mining and metals 2017-2018} (2017) 8; Martin Brueckner et al, ‘The mining boom and Western Australia’s changing landscape: Towards sustainability or business as usual?’ (2013) 22(2) \textit{Rural Society} 111, 121.
\textsuperscript{199} M1, M2, M3, M7, M8.
\textsuperscript{200} This was reflected in Evaluation Principle 3.
\textsuperscript{201} M3, M4, M6, M8. This was reflected in Evaluation Principle 1.
reducing the pressure on miners’ balance sheets and cash flow.\textsuperscript{202} Instead, there would just be a single annual expense,\textsuperscript{203} which would reduce the initial upfront costs of developing mines, and encourage the development of mining in WA.

Some interviewees commented that the MRF was designed with an expectation that the capital freed up from bonds would be reinvested back into the industry.\textsuperscript{204} Others discerned an intention to send a positive political message about the State’s support of the mining industry.\textsuperscript{205} The effect of reduced capital requirements would be particularly beneficial on smaller and medium-sized mining companies,\textsuperscript{206} who would have less access to capital than the larger multinationals.

3 Administrative Efficiency

To some interviewees, improving the ease and efficiency of administering mining securities was another secondary, but important, objective of the MRF.\textsuperscript{207} Interviewees reiterated that the Fund’s pooled nature, designed to enable the State to take immediate action to address problems,\textsuperscript{208} compared favourably to the previous challenges of dealing with a myriad of bank guarantees,\textsuperscript{209} each allocated to a specific tenement. Furthermore, interviewees noted that in the previous system there was no robust methodology for calculating the size of bonds. However, with the introduction of the MRF, there was the intention to create a clear and simple system to calculate the amount payable for each tenement.\textsuperscript{210}

\footnotesize
\begin{itemize}
  \item \textsuperscript{202} M1, M2, M3, M4, M6, M10.
  \item \textsuperscript{203} M7, M10.
  \item \textsuperscript{204} M6, M8.
  \item \textsuperscript{205} M1, M3, M4, M7, M10. For example, ‘… it dovetails quite nicely for the positive political message’: M10.
  \item \textsuperscript{206} M4, M7.
  \item \textsuperscript{207} M1, M2, M6, M7, M8.
  \item \textsuperscript{208} This was reflected as Evaluation Principle 3.
  \item \textsuperscript{209} M1, M2, M5, M6, M8.
  \item \textsuperscript{210} M4, M10. This was reflected as Evaluation Principles 4 and 5.
\end{itemize}
4 Environmental Compliance, Progressive Rehabilitation

A significant point of divergence among interviewees was the extent to which encouragement of good environmental practices, such as progressive rehabilitation was an objective of the MRF. Some interviewees either did not perceive it as an objective, or downplayed any role the MRF might have in encouraging miners to undertake rehabilitation throughout the life of a mine, highlighting the impracticality of progressive rehabilitation on an operating mine. Instead, interviewees emphasised the use of the broader legislative framework for mine closure and environmental compliance. Others noted the potential of the MRF to incentivise progressive rehabilitation, albeit to a limited extent.

However, a minority maintained that promoting progressive rehabilitation was an intention of the MRF because the MRF calculation connected the size of the disturbed area, and the category of land, to the amount paid. To a few interviewees, this demonstrated an incentive to manage or reduce environmental impact, although this was secondary to other objectives.

5 Concluding Remarks

Despite some divergent views on the relative importance of the secondary objectives of the MRF, interviewees agreed that the creation of a centralised, industry-contributed fund for rehabilitation of abandoned mines and legacy sites was the paramount objective.

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211 This was reflected as Evaluation Principle 2.
212 ‘It's allowed performance funds to be retired which has injected some cash into the junior miners probably when they needed it the most. That's about all I'd say it's done for industry’: M4.
213 M1, M5, M9, M10. For example, ‘There's no environmental benefit per se. I think it's a real fiscal benefit for the State’: M1, and ‘… to the extent that it is a positive for the environment, it's really sold as a positive for the State's liability in relation to the environment’: M10.
214 M2, M3, M6, M7, M8. ‘The MRF does not exist on its own. It is just one tool and its primary purpose is there to provide a safety net for the [S]tate’: M2. This was reflected as Evaluation Principle 4.
215 M2, M3, M4, M5, M6, M9.
216 M6, M8.
217 M3, M6, M8
Broadly, interviewees views on the MRF’s objectives were consistent with the six evaluation principles identified in the Option Paper (‘Evaluation Principles’).\textsuperscript{218} As such, the Evaluation Principles represent an appropriate benchmark against which to evaluate the effect of the MRF.

The discussion of interviewees’ responses and observations in the following Chapter will be divided broken down by the effect on the mining industry, State, and environment. However, the Evaluation Principles will be referred to throughout the discussion to evaluate whether interviewee’s responses demonstrate the success or failure of MRF in meeting its objectives.

\textsuperscript{218} Department of Mines and Petroleum (WA), above n 31, 12. See above Chapter (II)(A)(4).
C  Effects and Impacts of the MRF

In their consideration of the effects of the MRF, interviewees considered the impact of the legislation on various stakeholders. Although there was a reasonably consistent acceptance of the overall positive impact on the industry, there was some divergence in views among interviewees on the effect on the State and environment.

The view of the State government was that the MRF ‘achieves a number of economic and environmental goals’, and was consistent with the objective of decreasing financial risk to the State without adversely impacting the industry.\(^{219}\) Interviewees reflected on the requirement for the MRF to achieve a balance between competing stakeholders’ interests, which McLeod noted as challenging, particularly given increasing community expectations in respect of closure and rehabilitation.\(^{220}\)

To interviewees, it was imperative that the MRF was regarded as a component within the wider legislative framework covering a miner’s environmental obligations,\(^{221}\) and thus, by itself, could not be expected to address every issue identified with the previous mining securities system of UPBs.\(^{222}\)

1  Effect on the Mining Industry

There was nearly universal agreement among interviewees that the significant reduction in the obligation to provide bonds was advantageous to the industry, and greatly outweighed the cost of the levy, including the additional administrative burden, if any.

(a) Financial Impact of the MRF

To all interviewees, the MRF was less costly to operate from a banking and operations perspective,\(^{223}\) and more efficient than the previous UPB system. It

\(^{219}\) Western Australia, Legislative Assembly, 15 August 2012, 5011 (Colin Barnett, Premier).

\(^{220}\) McLeod, above n 26.

\(^{221}\) M2, M3, M4, M5.

\(^{222}\) See above Chapter II(A)(2).

\(^{223}\) The MRF was described by one interviewee as a ‘pay as you go’ system: M1.
was a better approach than locking funds into UPBs, which withheld capital that would otherwise have been available to miners.

The MRF was perceived as having levelled the playing field for miners. Since UPBs were usually provided in the form of bank guarantees, the requirement to negotiate these arrangements was easier and less burdensome for larger operators, while junior explorers and smaller operators would encounter higher charges.

Without the risk of price fluctuations in obtaining bank guarantee contracts, some interviewees regarded the MRF to be less risky. Additionally, interviewees found the MRF to be simpler than the UPB system, with the amount payable perceived as less arbitrary than bonds.

Some interviewees identified the ease of tenement sales under the MRF. The predictability was attractive from a cash perspective. Since the MRF levy represented an annual known cost that could be easily calculated, there would be no liability to be transferred with the sale. For most transactions, this eliminated doubts around the status of security bonds, and the requirement to draft Sale Agreement terms to factor in the return or replacement of UPBs. Instead, the annual MRF levy for the tenement could simply be pro-rated between the two parties at the time of sale.

Several interviewees noted the improved ease with which finance could be obtained for projects. The payment into the Fund annually made it simpler, not

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224 ‘Even though you ultimately get back your performance bond, you don’t get back what you put in because the cost of money increases’: M3.

225 As one interviewee explained, ‘Either the money had to be set aside in the bank, or the company can’t borrow extra money that they could otherwise borrow for the project because it had to give a guarantee to the bank’: M2.

226 As one interviewee explained, ‘… the way that the bonds were negotiated with the banks really depended on that individual company… there wasn't necessarily an equal system. [I]f you were a large multinational, you could asset-back your bonds and not necessarily have the same amount of cost as somebody who was a smaller operator has to cash-back those bonds and has money tied up that they can't use’: M6.

227 M7, M10.

228 M4, M6, M7, M8, M10.

229 M3, M5, M7, M10.

230 ‘[I]t would ultimately impact on prices because people wouldn't necessarily take the risk. But if they did take the risk, it be accompanied with a price reduction’: M10.

231 M7, M10.
only for miners, but also financiers, to understand the extent of the risk, which in turn made it easier for proponents to obtain financing for projects.

Reduced financing costs were seen as enabling the acceleration of project development. Furthermore, the return of bonds may have assisted some miners to remain in business, and would have been particularly welcome in a global industry where ‘debt burdens have spiralled out of control’, with the industry’s cost of finance rising and multiple credit downgrades.

To most miners, the MRF levy payable was a significant reduction on the previous cost of UPBs. The introduction of the MRF, in allowing over $1 billion of performance bonds to be retired, resulted in a reduction of costs, and released capital back to the majority of miners, which was particularly welcomed by interviewees’ junior miner clients.

In addition to the charges paid directly to the bank, some interviewees noted the higher administrative costs associated with managing UPBs in the previous mining securities system. Interviewees with firsthand experience in the return of bonds described a lengthy process following completion of rehabilitation work, where it could take months for the bond to be discharged due to the DMP’s inspection program. This delay often attracted senior management’s attention, particularly when banks were vigilant about issuing or renewing guarantee facilities.

‘[B]ecause some of our clients are foreign, [it was] sometimes difficult for them to get security bonds that were sufficient for the State's processes. Clients would want to use their existing facility providers from international banks… that just makes things more challenging… at least the new MRF process where it is just payment into a fund calculated annually is just clearer and easier to understand, but easier for financiers to understand the extent of the risk, so it is easier to get financing for projects’: M10.

M1, M2, M7, M10.

Deloitte, The top 10 issues mining companies will face in the coming year (2016) 31.


An interviewee described a small number of miners reporting a sudden increase in cost because of the MRF, but this was unusual, and perhaps indicative that the previous bond had been inadequate: M3.


M4, M5, M7, M9.

Anonymous.

‘It was not an easy process – at points we had to go to different banks’: Anonymous.
(b) Administration and Ease of Implementation of the MRF

In addition to the financial levy, the introduction of the MRF also imposed further reporting requirements on tenement holders over the extent of ground disturbance. Interviewees acknowledged that companies would inevitably be cautious about the potential for increased administrative process and costs, and conceded that there would always be issues in implementing any new system. Despite some reported initial implementation issues, interviewees agreed that the MRF system overall was administratively attractive.

Interviewees noted that they did not receive many inquiries from clients on the MRF reporting requirements, a reflection on the relative simplicity of meeting the MRF reporting obligations. To interviewees involved in the reporting requirements under the MRF Act, the reporting system itself was seen as reasonably straightforward.

However, clients of large operations reported an administrative burden, since the introduction of the MRF had added to the existing multiplicity in reporting requirements, which required clients to establish internal systems to carry out the required reporting under the MRF. Despite the challenges interviewees mentioned, the compliance with the MRF reporting requirements was 98.8 per cent for 2015-16, indicating that miners are providing data without excessive difficulty.

Interviewees attributed the main source of complexity to be the volume of reporting, partly due to the requirement for each tenement to be reported

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241 See above Chapter II(B)(2) which details this reporting process.

242 Most private lawyers had limited experience in the implementation of the MRF. Many of these insights were provided with those who did, or in-house lawyers.

243 M1, M4, M5, M7, M9.

244 In comparison, an in-house lawyer of a small to mid-sized operation found implementation to be relatively straightforward: Anonymous.

245 M4, M7, M9. For example, ‘What categories they should be... how they should be classified and just actually going out and doing all the analysis to make to submit the reports and their required. I think that caused quite a bit... a lot of concern’: M7, and another, ‘Some companies may have 15 mining lease tenements they’re operating on, all contiguous. So, for each tenement, they’re submitting MRF data, AER, Part 4 Environmental Conditions Report, Part 5 Prescribed Premises Licences...’: M4.

246 M1, M7, M9.

247 The compliance rate in the previous year, 2014-15 was 98.1 per cent: Department of Mines and Petroleum (WA), above n 237, 2.
separately, and partly due to the multiplicity of reporting required for each tenement.\textsuperscript{248} As one interviewee explained, because the MRF was based solely on disturbances to land granted under the Mining Act, where there were multiple disturbances in the same project on different types of leases, or where part of the project did not fall under the Mining Act, there was substantial complexity in completing the necessary reporting.\textsuperscript{249} This problem was evident for large operations with multiple tenements and overlapping land tenure,\textsuperscript{250} which made assigning specific disturbance to the corresponding authority problematic.\textsuperscript{251}

Some interviewees had encountered a possible unforeseen consequence of the operation of the MRF, being the difficulty of completing reporting obligations in respect of sites with historic disturbances which are currently tenements for other purposes.\textsuperscript{252} An interviewee noted this frequently occurred in mature mining regions such as the WA Goldfields, particularly where minerals co-exist.\textsuperscript{253}

Under these circumstances, the nature of previous works and the chain of title and tenure may be poorly documented, and it may not always be evident whether a current tenement owner has a rehabilitation liability for a disturbance caused, since the disturbance may be the result of a previous owner’s activity. Therefore, interviewees had found that some clients have had to examine the historic chain of ownership of the tenement to determine whether such liability existed, or whether there was a break in the chain, which would result in liability for historic disturbances reverting to the State.\textsuperscript{254}

\textsuperscript{248} M1, M3, M4, M6, M7.

\textsuperscript{249} ‘The difficulty we had was the tenure system... we would operate under multiple forms of land tenure. And because the way the mining tenure system works, you can have a mining tenement that sits over the top of a Land Administration Act tenure... and other companies operating in the area. There could be pastoral tenure as well, so actually calculating what piece of disturbance was done under what authority was difficult.’: Anonymous.

\textsuperscript{250} In addition to the Mining Act 1978 (WA), land may be granted under the Land Administration Act 1997 (WA), Petroleum and Geothermal Energy Resources Act 1967 (WA) or Petroleum Pipelines Act 1969 (WA).

\textsuperscript{251} Anonymous.

\textsuperscript{252} M5, M7.

\textsuperscript{253} M7.

\textsuperscript{254} ‘Some companies have had to look through the historic chain to see whether they might have accepted liability for that through the sale process... whether there was a break in the tenement’: M7.
Although the MRF Regulations indicate that land disturbed under a previous mining authorisation is usually exempt from the MRF in respect of those disturbances,\(^\text{255}\) and therefore tenement holders were not liable for historical disturbances,\(^\text{256}\) the confusion remains,\(^\text{257}\) despite the DMP’s efforts to clarify this.\(^\text{258}\)

As the minerals extracted change over time,\(^\text{259}\) technology advancement will allow for better processing of lower grade ore, and extraction of multiple minerals from a single orebody. Therefore, increasing challenges will emerge as WA progresses to a mature mining state. As one interviewee identified, it may not always be clear which disturbance was a result of which activity, an issue which interviewees noted required further clarification.\(^\text{260}\)

Following the introduction of the MRF, the majority of UPBs were released. While this was supposedly based on a risk assessment by the DMP, in accordance the DMP guidelines,\(^\text{261}\) some interviewees perceived a lack of clarity and transparency surrounding the criteria for the release of bonds,\(^\text{262}\) with one who considered the release of bonds to be arbitrary.\(^\text{263}\) However, the latest MRF Annual Report shows release of approximately 97 per cent of bonds,\(^\text{264}\) which

\(^{255}\) *Mining Rehabilitation Fund Regulations 2013* (WA) sch 1 cl 2.

\(^{256}\) Hunt, Kavenagh and Hunt, above n 119, 368.

\(^{257}\) M5, M7.

\(^{258}\) Department of Mines and Petroleum (WA), above n 125, 7.

\(^{259}\) For example, the mineral lithium is currently in high demand: David Stringer, ‘Ground zero for lithium: Electric cars spark a new boom for Australian miners’, *Sydney Morning Herald* (online), 26 October 2017 <http://www.smh.com.au/business/mining-and-resources/ground-zero-for-lithium-electric-cars-spark-a-new-boom-for-australian-miners-20171025-gz8dgy.html>.

\(^{260}\) M5, M7.

\(^{261}\) Department of Mines and Petroleum (WA), above n 111.

\(^{262}\) For an in-house lawyer in the process of purchasing a mine during the MRF’s optional period, uncertainty around the return of bonds meant that the purchaser preferred to conduct the sale under the bond system, where they had more confidence of getting their replacement bonds released: Anonymous.

\(^{263}\) ‘Our bonds were released on a tenement by tenement basis, and in no particular order… it was trickle-fed so it was a bit odd.’: Anonymous.

\(^{264}\) The DMP noted that for tenements subject to the MRF, over $1 billion of bonds had been released, whereas only $35 million had been retained: Department of Mines and Petroleum (WA), above n 237, 5.
suggests that this was a transitory concern, and any remaining issue is relatively small and isolated in nature.

(c) Concluding Remarks

Overall, interviewee responses about the effect of the MRF on the industry were overwhelmingly positive, with the return of bonds perceived as a significant financial benefit, and the MRF being lower cost for industry compared to the UPB system. The MRF was also perceived as both financially and administratively efficient. To some, the MRF was also a fairer system to make the entire industry take responsibility for those operators who failed to meet their obligations.265

While some increase in the compliance and reporting burden was detected, interviewees did not raise any critical issues or concerns which would adversely affect the industry, or result in a reduction of mining activity within the State. This signifies that from the industry perspective, Evaluation Principle 1, being the avoidance of unnecessary harm to the industry, had been achieved.266

Given the overwhelmingly positive response, it raises the issue of whether the State had gone further than necessary, and the MRF as a mining securities system was weighted too heavily in industry’s favour at the expense of the State and other stakeholders, to whom the other Evaluation Principles would have greater relevance.

2  Effect on the State

The effect of the MRF on the State was the subject of a wider range of views. Most interviewees commented on the media attention the MRF received because of Ellendale,267 which had highlighted the potential for a significant unfunded liability to revert to the State following an operator’s entry into administration.268

265 M3, M4. ‘There should be an industry wide burden… [Where] everybody contributes to the pot. Because as an industry, you have to take responsibility. You have to take responsibility for the recalcitrant. I think it’s a much fairer system’: M3.

266 Department of Mines and Petroleum (WA), above n 31, 12. See Appendix A for an excerpt of the Evaluation Principles, including the Principal Objective.

267 M2, M3, M4, M5, M9, M10. One stated, ‘they totally stuffed up Ellendale’: M3.

The State government appears to have a largely positive view of the operation of the MRF to date, with the MRF receiving the Premier's Award. However, some interviewees raised concerns, particularly around the MRF’s sufficiency to reduce the State’s financial exposure for rehabilitation obligations.

(a) Funds

The primary purpose of the MRF as a mining securities system was to secure adequate funds to provide the State with greater assurance to meet the State’s unfunded liability for abandoned mine rehabilitation. Thus, key elements to its success or failure are the adequacy of the quantum of funds held, and also whether the funds can be accessed in a timely manner to be used appropriately. The State government anticipates that the MRF will eventually eliminate all taxpayer exposure to the risk of unfunded rehabilitation liabilities.

(i) Access to Funds

Rehabilitation work carried out under the MRF for abandoned sites is paid directly by the fund itself, and not out of general State revenue, which would be subject to State budget requirements and reviews. Some interviewees valued highly this separation of the MRF from state finances, as it enabled the development of long-term work programs to rehabilitate abandoned mines and legacy sites.

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270 M2, M3, M4, M5, M9, M10. ‘I am concerned about what that means for rehabilitation in the long term, and whether it really is a cost shifting from a miner to the State.’: M9.

271 Western Australia, Legislative Assembly, 15 August 2012, 5011 (Colin Barnett, Premier).

272 ‘This Bill achieves a number of economic and environmental goals. It will reduce, and over time, eliminate the state’s exposure to financial risk relating to the rehabilitation of abandoned mines. It will diminish the annual financial operating burden on resource industry participants, which strengthens Western Australia’s attractiveness as an investment location. It will secure adequate funding to deal appropriately with the environmental and safety risks caused by business failure and default in the mining industry, and the State’s legacy of historical abandoned mines.’: Western Australia, Legislative Assembly, 15 August 2012, 5011 (Colin Barnett, Premier).

273 The MRF is a special purpose account under the Financial Management Act 2006 (WA) administered by the DMP with the dedicated purpose of rehabilitating abandoned mine sites: Explanatory Memorandum, Mining Rehabilitation Fund Bill 2012 (WA) 1.

274 M1, M3.
Although the MRF’s principal is restricted to mine sites held by tenement holders that have contributed to the Fund, in the event of a mine site abandonment, the State is not limited to that tenement holder’s levy contributions.\textsuperscript{275} The State’s access to the full value of the MRF pool was identified as a significant advantage over the previous mining securities system,\textsuperscript{276} where the State could only claim against the specific UPB allocated to that tenement.\textsuperscript{277}

One interviewee encountered issues with the UPB system during the purchase of tenements, when the opposing party went into administration, reasoning ‘[the] bond is never assigned, and you just end up with this mess. At least with the MRF, the State seems to have more involvement and will have easier access to funds if required’.\textsuperscript{278}

The MRF’s pooled nature allows the interest earned by the Fund to be expended on legacy mines, meaning that the capital held provides significant additional value to the State.\textsuperscript{279} This was a key advantage noted by White et al,\textsuperscript{280} who acknowledged the inability of a bond system to generate a comparable funding pool for legacy sites.\textsuperscript{281}

Several interviewees identified that the dedicated source of ongoing revenue through the interest earned on the MRF has enabled the DMP to achieve positive outcomes in respect of the State’s legacy of abandoned mine sites.\textsuperscript{282} One of these outcomes was the Abandoned Mines Policy,\textsuperscript{283} which is enabling the State to

\textsuperscript{275} ‘... [the State has] the value of the pool. And that was never the case before. [The State] would have had to only use how much [the] bond was. And then the State would have had to contribute the rest.’: M8.

\textsuperscript{276} M2, M5, M6, M8.

\textsuperscript{277} ‘The State would be left in a difficult position, with no means to rehabilitate’: M6.

\textsuperscript{278} M5.

\textsuperscript{279} ‘[The] capacity to aggregate all of the money into a fund that can be expended on abandoned mines or historical abandoned mines in general leverages the value of the money in terms of its usefulness.’: M8.

\textsuperscript{280} Although referred to as a ‘Damaged Land Tax’ in a theoretical analysis of the relative efficiency between a bond and fund model, the substance of the arrangement was the same as the Fund system: White et al, above n 164, 297.

\textsuperscript{281} Ibid.

\textsuperscript{282} M1, M2, M4, M6, M8.

\textsuperscript{283} Department of Mines and Petroleum (WA), above n 94.
begin addressing some of the liabilities and public safety issues that have been created by legacy sites through undertaking site clean-up works.\textsuperscript{284}

All interviewees agreed that the MRF worked as expected on Ellendale by providing the DMP with immediate access to funds to ‘undertake any necessary works at the site to ensure the area is safe, stable and non-polluting’.\textsuperscript{285} One interviewee rationalised, ‘the MRF is built to cover circumstances such as Ellendale where the company does not fully comply with their rehabilitation obligations… [the site] has been made safe and is ready to go again in the right economic circumstances’,\textsuperscript{286} reflecting the DMP’s position.\textsuperscript{287} As interviewees articulated, under the previous mining securities system, it would have been difficult to gain rapid access to funds from a company in administration, and without the MRF, Ellendale would have resulted in public risk.

\textit{(ii) Financial Assurance for the State}

Parliamentary debates and media commentary have raised concerns that discharging security bonds would mean that the State would not be able to hold miners to their environmental obligations.\textsuperscript{288} Despite acknowledgement that the MRF applied to Ellendale led to an overall better outcome for the State than the previous UPB system might have, several interviewees expressed reservations about the adequacy of the MRF to fully cover the State’s liability,\textsuperscript{289} which was also reflected in media commentary.\textsuperscript{290}

\textsuperscript{284} The DMP has selected four historical abandoned mine sites (‘legacy sites’) as pilot projects for rehabilitation using the interest generated by the MRF: Black Diamond Pit Lake in the South West, Bulong Nickel Tailings Storage Facility in the Goldfields, Pro-Force Plant Site in Coolgardie, and Elverdton Dump near Ravensthorpe: Department of Mines, Industry Regulation and Safety (WA), \textit{Abandoned mines program} <http://www.dmp.wa.gov.au/Environment/Abandoned-mines-projects-18193.aspx>.


\textsuperscript{286} M2.

\textsuperscript{287} Department of Mines and Petroleum (WA), above n 139.


\textsuperscript{289} M4, M5, M8, M9, M10.

To several interviewees, the introduction of the MRF resulted in a decrease in financial assurance for the State, following the release of bonds to miners that complied with the MRF. The concern was that since the State no longer holds substantial bonds, taxpayers are left to assume an increased level of risk, particularly in cases of operator insolvency, with the potential for a future increase in the tax burden.

This concern was exemplified by the State’s release of bonds to a ‘risky proposition’ such as Ellendale, with interviewees commenting the release of bonds comprehensively across the industry as premature, or a ‘mistake’. The concern was that the State may have gone too far and fast in releasing performance bonds, and would be left without adequate funds if situations similar to Ellendale reoccurred. This concern was also raised by Sommer and Gardner, and White et al, who identified a ‘significant risk’ to the State in the event of multiple operator insolvencies or mine abandonments.

Without a bond at risk, there was a reduction in any disincentive for miners to abandon their environmental obligations, once a site was no longer profitable. Ward also identified this risk, noting that without any UPB, there was no commercial imperative for the operator to retain the tenement. This risk appears significant, given that around 75 per cent of all mines closing in Australia

291 M4, M5, M8, M9, M10.
292 Department of Mines and Petroleum (WA), Mining Rehabilitation Fact Sheet (2014) 2.
293 ‘[I]f we consider society to be taxpayers, I think taxpayers are now taking more of a risk than they were before because the state does not hold bonds. They just have 64 million dollars cash.’: M4.
294 M4, M8.
295 M4, M8, M9. An interviewee reflected, ‘It's really unfortunate that the bonds were retired and I don't think that should have been because I think Ellendale was a risky proposition’: M4.
296 M4, M9. ‘I think it’s a mistake to have wholesale allowed the release of bonds’: M9.
297 Sommer and Gardner, above n 25, 252.
298 White et al, above n 164, 288. As White described, ‘where the expected life of a mine is relatively short, and the probability of bankruptcy is high’.
299 M4.
do so before the end of their planned operating life. An interviewee identified the challenge in these circumstances is the inability for the State to require a private company to set aside money for environmental rehabilitation.

The MRF places the risk of unfunded rehabilitation onto the whole mining industry, but, as Ward suggests, it does not prevent an individual operator from avoiding rehabilitation liabilities in cases of insolvency, dissolution, or other failures to meet rehabilitation obligations. The State has made amendments to the MRF Act to allow the State to recover costs from operators to minimise the potential for mine operators to avoid bearing the costs of rehabilitation. However, such cost recovery attempt would likely be futile in a situation of operator insolvency, as there may be no assets remaining to recover.

Some interviewees did not believe that the MRF struck the right balance between the industry and the environment, and supported the use of bonds, either in full, or limited extent, for operators deemed to be at increased risk. While one advocated the retention of the UPB system to cover the full rehabilitation liability, another suggested combining the MRF with an increase in bonds as a mine approaches closure, a modification of the hybrid model Sommer and Gardner proposed.

One interviewee believed the absence of a general requirement for UPBs was inappropriate, making comparison to the Queensland mining securities system,

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302 M5.

303 Ward, above n 300, 475.

304 Explanatory Memorandum, Mining Legislation Amendment Bill 2013, 1.

305 M4, M9. ‘I’d say the benefits to society are relatively limited. In fact, I’d say they’re a detriment to society’: M4.

306 M4. This was the DMP’s default option: Department of Mines and Petroleum (WA), above n 17, 10-12.

307 ‘There should still be significant bonding with increasing bonding as one approaches mine closure. [For example] have an MRF in the first five years of a 10-year mine operation where you’re probably not getting anywhere near mine closure. As you get to closure, closure minus five, you should start having an incremental payment obligation to bond which will effectively be a requirement to set aside – a mandatory provisioning scheme’: M9.

308 Sommer and Gardner, above n 25, 242.

309 ‘It is extraordinary that you have a state like WA that allows mining to occur without a financial assurance for most’: M4.
which currently requires bonds. The Queensland Treasury Corporation also recently recommended against emulating the MRF, preferring the option of partial retention of bonds. The same interviewee suggested that industry should contribute to the MRF, in addition to bonds (and royalties), in recognition of the ‘historical bad practice’ in respect of abandoned mine sites, although others viewed this as effectively imposing an obligation on the entire industry to take responsibility for recalcitrant miners. However, as the DMP identified in its 2008 review of bond rates, with rehabilitation costs increasing, to be effective, the bonds would have had to be not just retained, but significantly increased over previous levels.

Ward also observed that the structure of the MRF did not incentivize any rehabilitation beyond the legal minimum, since it was based on the rehabilitation obligation at the point the levy becomes payable, unlike a potential bond refund. However, White et al emphasised that both bonds and a fund, alone had inherent limitations, and neither sufficiently incentivised rehabilitation, and like Sommer and Gardner, supported a combination of both bonds and a fund.

Some interviewees suggested the concern over the DMP’s release of bonds was exacerbated by the economic downturn, and the resulting increased potential for smaller operations to shut down and abandon their liabilities, mirroring media reports and concerns from environmental groups.

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310 Queensland’s financial assurance approach is outlined in section II(C)(1) of this thesis.

311 In a recent review of Queensland’s framework, the Queensland Treasury Corporation advised that a universal fund was not a viable solution due to the lack of homogeneity among the mining industry, and that a ‘tailored solution’ with both a fund and bonds was more appropriate: Queensland Treasury Corporation, above n 153, 46.

312 M4.

313 M3, M9.

314 Department of Mines and Petroleum (WA), above n 153, 4.

315 Ward, above n 300, 483.

316 White et al, above n 164, 252.

317 ‘It would only take one major mine to go belly up and the MRF funds would be wiped out’: M5.

318 Lock the Gate Alliance, Submission No 9 to Senate Standing Committees on Environment and Communications, Inquiry into Rehabilitation of mining and resources projects as it relates to Commonwealth responsibilities, 10 April 2017, 7; Nick Evans, ‘Fund may foot Ellendale bill’, The West (online), 3 July 2015 <https://thewest.com.au/news/wa/fund-may-foot-ellendale-bill-ling-ya-124762>; Ben Collins, ‘Minister moves to reopen Ellendale diamond mine and avoid
To some interviewees, there was an unrealistic media or public expectation surrounding Ellendale, that the entire site would be rehabilitated, and that the MRF would be required to provide the full Rehabilitation Liability Estimate (‘RLE’) of $40 million, perhaps reflecting a poor understanding of the intention of the MRF as a mining securities system. While Ellendale’s RLE was set at $40 million, this was not the amount that would be expended. Interviewees reasoned that, since Ellendale remained a viable resource to develop, requiring complete rehabilitation to its final landform would be futile.

Other interviewees remained sceptical. One remarked that while a new purchaser may acquire the site, this may only defer the issue. ‘There comes a finite point that the resource will be exhausted… they’re going to be stuck with a very big hole to rehabilitate and no money to do it… and just walk away’. The rehabilitation liability would then again revert to the State.

The Minster retained the existing right under the Mining Act to impose bonds. There were divergent views among interviewees about the extent to which this should be done, reflecting the tension between the various objectives of the MRF, seeking to obtain adequate financial assurance for the State, whilst also not unnecessarily restricting mining development.

To some, a benefit of the MRF was to enable industry to take accountability of rehabilitation outcomes. Others were opposed to a wider requirement for UPBs. Reflecting upon the potential widespread use of bonds, one interviewee

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319 M2, M3, M6, M8.
320 M2, M3, M6. ‘[T]o require rehabilitation now would be a waste of money that is not going to achieve an environmental outcome’: M2.
321 M5.
322 Mining Act 1978 (WA) ss 84, 84A(2), 126. Bonds can also be imposed on other types of mining tenements: see Mining Act 1978 (WA) ss 70F, 63AA, 46A.
323 See Appendix A.
324 M4, M8.
325 M6, M9.
commented that a more stringent UPB requirement was likely to make miners less self-reliant in complying with their environmental obligations.\textsuperscript{326}

For several interviewees, the application of bonds should be limited to situations where a miner demonstrates a pattern of non-compliance,\textsuperscript{327} or as the DMP states, a ‘high risk of the rehabilitation liability reverting to the State’.\textsuperscript{328} One interviewee cautioned that the Minister’s discretion to apply bonds should be applied sparingly, to avoid diluting a significant benefit of the MRF, which to this interviewee was the release of capital to miners.\textsuperscript{329}

Some interviewees emphasised that the MRF was designed as a ‘long-term proposition’ rather than a quick fix, and would require time to accumulate sufficient funds.\textsuperscript{330} Another noted that the MRF was designed to manage, not eliminate abandonment risk,\textsuperscript{331} with the pooling of funds spreading the risk. This was also acknowledged by the DMP, who observed that while any amount less than the total closure costs of all mines would inevitably result in outstanding risk, ‘it was not reasonable to assume that all mine sites in WA would fail, and fail simultaneously’.\textsuperscript{332}

The Auditor General, in a follow-up review (‘2014 Review’), concluded that the State’s potential exposure to liability if miners failed to meet their rehabilitation obligations had decreased because of the implementation of the MRF.\textsuperscript{333} The 2014 Review emphasised that this was due to the creation of a special purpose account that can be applied to any abandoned site, rather than being allocated to a

\textsuperscript{326} ‘[T]he more you bond or provision, the less miners will say it’s their responsibility. The more you impose obligations on companies, the less that they’ll be self-compliant in relation to their obligations.’: M9.

\textsuperscript{327} M2, M3, M5, M6, M8.

\textsuperscript{328} Department of Mines and Petroleum (WA), above n 111.

\textsuperscript{329} ‘I don’t think the Minister should be requiring performance bonds in every, or even the majority cases because if the Minister were to do so, that would take away one of the main benefits of the MRF – to free up capital that mining companies had to have tied up at the bank.’: M2.

\textsuperscript{330} M2, M3, M7. ‘The fund is still in building mode, so one knows how much we might need’: M3.

\textsuperscript{331} M2.

\textsuperscript{332} Department of Mines and Petroleum (WA), above n 31, 11.

\textsuperscript{333} Office of the Auditor General Western Australia, above n 127, 6.
specific tenement. It further noted that the retirement of bonds was occurring appropriately in line with DMP policies.

However, revenue from the levy had been lower than forecast. The $28.3 million income for the year to 2017 compares to $58 million forecast in the 2014-15 State Budget papers. The Auditor General therefore raised the possibility that the current rate of one per cent may require review and increase in future years. The DMP is currently undertaking a review of the MRF contribution rates.

If multiple mine abandonments resulted in greater than anticipated expenditure from the MRF, and the fund was not adequate to meet them, the contribution rate could be increased, or the method of calculation changed, to increase the funds available. Since the rate and calculation methodology are set out in the MRF Regulations rather than the MRF Act, the State is able to do this easily.

To some interviewees, this ability to adjust rates not only enables the government to account for fluctuations in risks, but also to address behaviours and ensure that the industry is ‘self-regulating or self-managing risk’. This was the State government’s intention to move towards a ‘risk-based’ regulatory framework.

However, interviewees raised the difficulty of raising the levy without discouraging mining activity, noting the potential effect on the industry and the unavailability of suitable tenements.

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335 Ibid 15.
338 Office of the Auditor General Western Australia, above n 127, 14.
339 Ibid.
340 Mining Rehabilitation Fund Regulations 2013 (WA).
341 M3, M6, M8.
342 ‘… not only adjusting rates to account for fluctuations in risk but also changing rates to deal with behaviours and to ensure that the industry is self-regulating to some extent or self-managing risk to some extent.’: M8.
343 ‘[R]isk based regulation enables government to set strict environmental standards and clear expectations of industry and allows companies to manage and mitigate any risks to achieving these standards’: Department of Premier and Cabinet (WA), ‘New mining legislation to cut costs’ (Media Statement, 30 October 2013); Department of Mines and Petroleum (WA), above n 115.
resultant effect on the State and community. As such, increasing the MRF levy significantly may not be a viable option. Further, as Sommer and Gardner cautioned, a substantial increase without any apparent correlation between the levy and the benefit to the tenement holder may risk the levy being perceived as a tax.

Sommer and Gardner observed that while the Fund is building up, the State remains exposed to significant risk, and suggested that this risk could have been mitigated by adopting a hybrid model, retaining partial bonds, at least as an interim measure. While the 2014 Report also noted the risks in the transition period, the Auditor General concluded that overall, the MRF had already reduced the risk to the State.

While a flat levy of one per cent was a simpler mechanism than initially proposed in the DMP Review, it was considered to provide an appropriate balance between ensuring the equality of the fund, and achieving administrative simplicity.

The government appears satisfied with the current rate at which the MRF is increasing. During the year to 30 June 2017, the Fund received levies of $28.3 million, and had a balance of $92.4 million, suggesting it had funds sufficient to handle several Ellendale-sized rehabilitation projects. While admitting the possibility of further mine abandonments, some interviewees were confident of the risk decreasing as the Fund balance increases.

(ii) State Agreement Mines

Operators may hold land under various systems of land tenure, among which State Agreements were the area of most relevance to the MRF. The MRF may apply to tenure held pursuant to State Agreements if the tenure is prescribed as a

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344 M2, M3, M4, M5, M6, M8. ‘The government has tried to make the MRF levy accessible to ensure everyone is able to pay it. If you make the levy too onerous, you stymie development… [resulting in a] flow on effect on royalties for the State’: M5
345 Sommer and Gardner, above n 25, 252-253.
346 Ibid 262.
347 Office of the Auditor General Western Australia, above n 127, 5.
348 Department of Mines and Petroleum (WA), above n 31, 11.
349 Department of Mines and Petroleum (WA), above n 128, 136.
350 M2, M3, M10.
351 See above Chapter II(B)(4).
‘mining authorisation’.\textsuperscript{352} However, since 2012 there has been no tenure held pursuant to a State Agreement that has been prescribed as a mining authorisation.\textsuperscript{353} Further, while State Agreement mines can participate in the MRF voluntarily, none have done so.\textsuperscript{354} Therefore, none of the State Agreement mines have contributed to the MRF.

Although bonds can be retained for high-risk projects and projects not subject to the MRF Act, including State Agreement mines,\textsuperscript{355} the Auditor General noted that this seldom occurred.\textsuperscript{356} Ward perceived this as a significant source of inequality among operators, and suggested Parliament reconsider.\textsuperscript{357}

Despite most State Agreement mines having no UPB, they do not make payments to the MRF, representing a significant loss of potential funding.\textsuperscript{358} While the Auditor General noted no change in the level of risk to the State since 2011,\textsuperscript{359} the 2014 Report was published before Ellendale’s abandonment and the insolvency of Yabulu in Queensland.

Interviewees perceived the effect of the MRF on State Agreement operations to be minor, and the fact that they were not required to contribute to the MRF concerned several interviewees, who perceived it as ‘unfair’.\textsuperscript{360} They commented that State Agreement operations, although relatively few, were often the largest projects, and therefore represented the State’s greatest risk of large-scale unfunded rehabilitation,\textsuperscript{361} with no mechanism to provide the State with financial assurance against unfunded rehabilitation obligations.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{352} Mining Rehabilitation Fund Act 2012 (WA) s 4.
\item \textsuperscript{353} Western Australia, Legislative Council, 16 February 2016, 2498 (Peter Collier).
\item \textsuperscript{354} Office of the Auditor General Western Australia, above n 127, 19.
\item \textsuperscript{355} Western Australia, Parliamentory Debates, Legislative Assembly, 14 August 2012, 4856 (Norman Moore).
\item \textsuperscript{356} The Auditor General noted that as of 2011, UPBs had been applied to only four of the 26 State Agreements: above n 127, 33.
\item \textsuperscript{357} Ward, above n 300, 482.
\item \textsuperscript{358} M1, M5, M10. It was acknowledged that in some instances, the State might be collecting more money from royalties.
\item \textsuperscript{359} Office of the Auditor General Western Australia, above n 127, 19.
\item \textsuperscript{360} M1, M4, M5, M7, M9, M10.
\item \textsuperscript{361} The Auditor General also made a similar comment in the 2014 Report: above n 127, 18-19.
\end{itemize}
\end{footnotesize}
While State Agreement operations may have ancillary tenements\(^{362}\) outside the State Agreement area which may have been Mining Act tenure,\(^{363}\) in these limited occurrences, the level of disturbance, and the resulting contribution the MRF is likely to be insignificant.\(^{364}\) An in-house lawyer of a State Agreement mine described that, contrary to initial expectations, the charge incurred for the MRF was small relative to the size of their project.\(^{365}\) The interviewee noted that as a State Agreement mine, they were calculating and paying the MRF only on small disturbances to neighbouring tenements, while the nearby mine itself, which had far greater rehabilitation obligations, was unaffected.

State Agreements are a central tool of current State mineral policy,\(^{366}\) and represent a legal agreement between the government and the operator. Therefore, the MRF could not be unilaterally imposed on the State Agreement holder unless they agreed to renegotiate the terms of their agreement, which was unlikely to be commercially attractive to them. Although Ward asserted that ‘there would be value in creating a model of liability that all miners are subject to’, she also noted that any attempt to amend State Agreements could be perceived as a threat to the security of tenure that they are designed to safeguard.\(^{367}\)

While the State has indicated that they have no intention to renegotiate State Agreements as part of the implementation of the MRF,\(^{368}\) some interviewees maintained that the potential to do so at a later date existed. Indeed, Parliament has left open the possibility of their future inclusion, through the identification in the MRF Regulations,\(^{369}\) and the MRF Act.\(^{370}\) section 4 of the MRF Act. Gorey et

\(^{362}\) For example, for a pipeline or an accommodation camp.

\(^{363}\) Which have been granted pursuant to the *Mining Act 1978* (WA).

\(^{364}\) M1, M4, M5, M7, M9, M10.

\(^{365}\) ‘For a company like mine, it was really small the amount we paid into the MRF even though our footprint was huge.’: Anonymous.

\(^{366}\) Hillman, above n 121, 295.

\(^{367}\) Ward, above n 300, 482.

\(^{368}\) Western Australia, *Parliamentary Debates*, Legislative Assembly, 26 September 2012, 6547 (Colin Barnett, Premier).


\(^{370}\) *Mining Rehabilitation Fund Act 2012* (WA) s 4.
al also observed that the drafting of the MRF Act allowed the deferral of the issue for future consideration.371

Interestingly, interviewees revealed that the State has been requesting State Agreement tenement holders to report under the MRF without paying the levy.372 Although it has been met with some cooperation from clients, interviewees noted that there has also been some resistance.373

Other interviewees noted State Agreement mines as subject to a broad and all-encompassing regulatory regime through their State Agreement and stringent environmental approvals,374 and were therefore highly regulated and not requiring further mining security.375 These rigorous requirements, which went beyond what the MRF would impose, are designed to reduce the risks posed by the operation of State Agreement mines.376

One interviewee contended that the size of State Agreement operators, which includes the likes of BHP and Rio Tinto means that there is generally a lower risk of insolvency of the operator compared to smaller operators.377 However, Griffin Coal,378 a mine under the Collie State Agreements and therefore not prescribed

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371 Gorey et al, above n 40, 379.
372 M4, M7, M10. Interviewees noted that the State was requesting data with reference to the MRF reporting categories relating to the level of disturbance, and what rehabilitation activities are being undertaken, so that the DMP has access to a complete data set for the entire State of the level of disturbance and rehabilitation.
373 M4, M7.
374 M1, M2, M7.
375 ‘You can’t just make the simple solution [to] require them to contribute because they’re having an impact too… they’re subject to other regulatory requirements, in particular they often have requirements imposed under Part 4 of the EP Act [Part IV of the Environmental Protection Act 1986 (WA) relates to “Proposals with significant impact on the environment”] that some of the other mining companies don’t have… and they’re subject to various other rigorous requirements… That’s why they might not be included in the MRF.’: M2.
376 M2.
377 ‘…BHP, Rio… the main ones. You know, is the State at as big a risk from that sort of companies than it is from some of the smaller operators? So the legal tool is there to manage the State’s liability’: M2.
378 Collie Coal (Griffin) Agreement Act 1979 (WA).
tenements under the MRF Regulations, entered into administration earlier this year for the second time, suggesting that some risk remains.

State Agreements generally do not cover mine closure or rehabilitation. One interviewee revealed that, ‘although the majority of the State Agreement mines will provide mine closure plans, they are provided voluntarily rather than necessarily because that requirement is under the Mining Act’. Another interviewee observed that, as State Agreement mines reach the end of their mine life, ‘there will be a high level of reliance on the companies that operate them to undertake appropriate rehabilitation’. In these instances, the reliance may be primarily on their reputation, and desire for an amicable continuing relationship with the State government, rather than the legislation.

Some interviewees conceded that the majority of mining operations under State Agreements are owned mostly by large corporations such as BHP and Rio Tinto with a publicly stated commitment to corporate and social responsibility, and a desire to avoid reputational risk. However, they are ultimately still primarily driven by commercial factors, with some interviewees asserting the need for legislative change to ensure appropriate action.

(b) State Operational Capacity

Some interviewees viewed the MRF as instrumental in developing the State’s operational capacity to undertake rehabilitation. They noted that with the previous UPB system, even if the funds were sufficient for rehabilitation work, the DMP lacked the personnel, equipment, and project and management skills

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379 Only prescribed tenements are liable to pay the levy: Mining Rehabilitation Fund Act 2012 (WA) s 4.


381 M7.

382 M7.

383 M3, M5, M10.

384 M5.

385 M1, M5.

386 M2, M6, M8.
necessary to undertake the work. They noted that as a result of the MRF, the DMP now retains some specialist knowledge in this area within its workforce.\textsuperscript{387}

An interviewee explained that since the scale of the abandoned mines problem is still unknown, it is difficult for the State to assess where to spend the available funds. The interviewee noted that since the implementation of the MRF, the State has now been able to develop the capability to undertake the rehabilitation work, and, in doing so, is gaining experience in assessing the activity cost of mine rehabilitation or closure, against the available funds in the MRF.\textsuperscript{388} This firsthand experience will assist the State in understanding what they are requiring from mining companies in performing rehabilitation, which interviewees saw as potentially resulting in better outcomes across the mine closure framework, and increasing the State’s ability to monitor and enforce compliance.\textsuperscript{389}

However, one interviewee cautioned that this increased operational capacity to undertake rehabilitation resulted in increased exposure to risk for the State, and believed that it was essential that the DMP considers the desire to carry out required rehabilitation work against the need to avoid inadvertently increasing the State’s potential liability in a responsible and transparent way.\textsuperscript{390} There appears to have been relatively little consideration of this issue prior to the implementation of the MRF Act, although it could be reasoned that the purpose of the MRF Advisory Panel,\textsuperscript{391} is to manage such issues.

\textit{(c) Disturbance Data}

To several interviewees, the MRF has created more transparency around rehabilitation and environmental obligations, through the additional reporting requirements.\textsuperscript{392} This was also noted by the Auditor General, who indicated that

\textsuperscript{387} M2, M6.
\textsuperscript{388} M2.
\textsuperscript{389} M2, M6, M8.
\textsuperscript{390} ‘Since the State now has operational capacity to go in to an abandoned mine to rehabilitate or undertake works, there is a liability risk in relation doing those works for the State. The State needs to consider what liability they might be picking up and ensuring that they are managed carefully’: M2.
\textsuperscript{391} The MRF Advisory Panel is established by \textit{Mining Rehabilitation Fund Act 2012 (WA) s 33.}
\textsuperscript{392} M2, M4, M6, M7, M10.
the quantity and quality of information available to the DMP had vastly improved
due to the reporting processes implemented with the MRF.\textsuperscript{393}

In having a system for all tenement holders to report their disturbance data
annually,\textsuperscript{394} the MRF provided a clear system for determining the potential
rehabilitation liabilities of a site, and therefore the residual liability to the State
should the tenement holder fail to meet their rehabilitation obligations.\textsuperscript{395}

The disturbance data for all tenements is published by the DMP annually,\textsuperscript{396} and
shows trends across the State, including the extent of progressive rehabilitation.
Since the disturbance data reported is audited by the DMP, the DMP can be
assured of its accuracy. One interviewee pointed out that amount of land
disturbance across the State was information that the State did not have
previously.\textsuperscript{397} Given the Auditor General’s previous criticism of the DMP’s poor
records management and resulting lack of information available,\textsuperscript{398} this represents
a significant benefit to the State.

In an effect perhaps not anticipated at the inception of the MRF, interviewees
found the increased reporting data beneficial for sale transactions of tenements or
mining operations.\textsuperscript{399} The data for a tenement on ground disturbance,
rehabilitation, and the levy that has been paid in relation to that disturbance had
been useful in carrying out the due-diligence process for clients acquiring
tenement packages.\textsuperscript{400} To some interviewees, the data was valuable, since
knowledge of legislative non-compliance was essential for clients to factor in to

\textsuperscript{393} Office of the Auditor General Western Australia, above n 127, 6-7.
\textsuperscript{394} Tenement holders are required to submit disturbance data in the Annual Environmental Report
(AER) for the MRF levy to be generated. See above Chapter II(B)(1).
\textsuperscript{395} M2, M6, M7, M8, M10. While this may be considered an unintended effect of the MRF, it
remains consistent with Evaluation Principle 5.
\textsuperscript{396} Department of Mines and Petroleum (WA), above n 237, 4.
\textsuperscript{397} M6.
\textsuperscript{398} Auditor General Western Australia, above n 127, 19.
\textsuperscript{399} M3, M7, M10.
\textsuperscript{400} This information is available in the form of an Excel spreadsheet or an online ‘MRF
Calculator’: Department of Mines and Petroleum (WA), \textit{New calculator estimates MRF levy}
4272.aspx>. 
price risk in transactions. While perhaps not initially intended, this is something the DMP now recognises.

(d) Administration of the MRF

To facilitate reporting under the MRF Act, the DMP introduced a new reporting system, Environmental Assessment and Regulatory System (‘EARS2’). Interviewees noted the MRF’s reliance on accurate licensing and titles information to operate effectively, meaning that an unsuccessful system implementation could jeopardise the entire MRF.

While recognising the challenges around the implementation of a new system, including the sheer volume of tenements and data that DMP had to process, one interviewee was surprised at how easy it was to get their bond back, commenting, ‘I thought it would be a lot harder – there were no checks or balances’.

From another interviewee’s perspective, the fact that miners could get their bonds returned was a major selling point that generally attracted industry support, which assisted in a smoother transition to the new system and legislation.

(e) Concluding Remarks

The impact on the State included both intended and unintended effects. Interviewees emphasised that the State cannot rely solely on the MRF for financial assurance, and should also be monitoring operators for indicators of financial difficulty to minimise the State’s potential liability. The MRF exists as an ‘insurance policy’ for where this does not occur successfully. Over time, the

401 M3, M7, M10. One interviewee explained that the data assists potential buyers to understand their potential exposure to the levy, since the levy is limited to the current year, and the buyer can adjust for in values. This increased transparency allows buyers to deal with the risks identified through the contract, or adjust the price accordingly: M10.

402 Department of Mines and Petroleum (WA), above n 400.

403 See above Chapter II.

404 M1, M5, M6, M8. The existing system which interviewees were referring to, was the Tengraph system, a spatial enquiry and mapping system displaying the position of WA mining tenements and petroleum titles in relation to other land information. It gives a current and accurate picture of land under mining activity and is used to determine ground that is available for mineral exploration: Department of Mines, Industry Regulation and Safety (WA), TENGRA <http://www.dmp.wa.gov.au/Tengraph_online.aspx>.

405 Anonymous.

406 M8.
State is likely to improve in assessing potential problems, thereby minimising further occasions such as Ellendale.

The creation of pooled funds to address legacy mines addressed an issue that the previous UPB mine securities system had neglected. However, the MRF’s design meant that it will take many years before the fund grew sufficiently to reach maximum effectiveness. As such, the MRF appears to be in the process of meeting its Principal Objective, although it remains too soon to determine whether this will be fully met. Furthermore, the pooled and accessible nature of the Fund meant it was also the best available approach to meet Evaluation Principle 3.

The positives of the policy were commended by the Fraser Institute,407 which stated that the MRF was an innovative system compared to other mining jurisdictions, noting that in combination with WA’s mineral resources, the policy was attractive to investors, and that the reduction in ‘red tape’ resulted in the shortest gap between discovery and production among comparable jurisdictions,408 consistent with Evaluation Principle 1.

State Agreement mines were noted as a gap in the mining securities system which remained unaddressed, as most were covered by neither bonds nor the MRF, and therefore perhaps represent the greatest obstacle to the Principal Objective being achieved. This was identified as an area requiring further reform, although the political appetite for this appears modest.

Although the MRF was generally considered an improvement over the UPB mining security system, this may be largely a result of the inadequacies of the previous system, both administratively, and the fact that the bonds held were never sufficient to adequately undertake any modern rehabilitation.409 However, the experience of Ellendale suggests that there may still be a role for UPBs, and the MRF alone as a mining security system may not achieve the ideal balance between benefit to the industry, and mitigating risk to the State.

407 Fraser Institute, Fraser Institute Annual Survey of Mining Companies: 2015 (2015).
408 Department of Premier and Cabinet, ‘WA rated the world’s top investment destination’ (Media Statement, 2 March 2016).
409 Auditor General Western Australia, above n 127, 32.
3 Effect on the Environment
Interviewees had mixed views on whether the MRF could, or should have any positive environmental effect, through encouraging progressive rehabilitation or other best practice. However, they noted that this was not necessarily its role, as the MRF acts as a safeguard for the wider environmental framework for mining operations. This framework includes a range of protections to ensure that directors meet their environmental obligations, although interviewees acknowledged that their effectiveness was limited, and improvement to the framework appeared necessary.

(a) Environmental Practices
To interviewees, the MRF levy, calculated based on the amount and type of ground disturbance has the effect of directing miners’ attention to their disturbance footprint. The potential incentive to reduce the footprint, and thereby reduce their annual charge, was widely acknowledged by interviewees, who noted that it could encourage miners to reconsider whether they needed to clear new land, or minimise the size of the land they cleared, or to rehabilitate areas they no longer required.

However, interviewee opinions varied as to the extent that the MRF could achieve this. Several interviewees did not perceive the MRF as effective in encouraging better environmental practices, including progressive rehabilitation, and had not observed clients, or their mining operations modifying operational behaviour.

Some interviewees noted the potential value of the MRF to impact management behaviour, and the importance of the role of the Board of Directors as key decisionmakers. Despite a company’s stated commitment to rehabilitation, a few interviewees stated that it was often a ‘challenge’ to prioritise and have

410 M2, M3.
411 This was reflected in Evaluation Principle 2, which included achieving good environmental practice, including greater use of progressive rehabilitation.
412 M1, M4, M5, M9.
413 M1, M4, M5, M6, M8. ‘The board [and] the directors of a company need to have some skin when it comes to progressive rehabilitation because they’re the ones that make the decision that whether there’s going to be finance or not.’: M4.
budget allocated to environmental activities such as progressive rehabilitation on site,\textsuperscript{414} which might be postponed in difficult economic times.

Since the MRF levy is an expense item affecting a mine’s profitability, the levy has attracted wider management’s attention, rather than restricted to the environmental department.\textsuperscript{415} Management may start focusing on what can be done to reduce expenditure, and directors will be incentivised to allocate resources and finance to ensure that environmental practices achieve this, including progressive rehabilitation.\textsuperscript{416}

Whilst most interviewees questioned the ability of the MRF at the current levy rate to have any significant effect, one interviewee reported a shift in attitudes, observing that site environmental scientists have reported budget being allocated to progressive rehabilitation. However, in-house lawyers indicated that the money has been reinvested back into keeping operations going, performing further exploration and other works on site, rather than on progressive rehabilitation activity.\textsuperscript{417}

The practicality of progressive rehabilitation was cited as the most common limiting factor, particularly on an operating mine.\textsuperscript{418} Although the MRF theoretically encourages progressive rehabilitation by incentivising miners to change the category or reduce the number of hectares under a disturbance category, the extent to which a mining operation can change its category meaningfully is limited by the commercial reality of mining and operational needs.\textsuperscript{419} The limiting factors interviewees broadly identified included the mineral type, mineral deposit, orebody and mining method.

\textsuperscript{414} M6, M8.

\textsuperscript{415} M1, M5, M6.

\textsuperscript{416} M1, M6. ‘[B]ecause the MRF is an annual levy and it’s coming across the Financial Controllers’ desk every year, there’s now been those conversations about how do we reduce this cost. Well the best way to reduce the cost is undertake progressive rehabilitation’: M6.

\textsuperscript{417} Anonymous.

\textsuperscript{418} M1, M2, M3, M7, M9.

\textsuperscript{419} ‘There are technical barriers to progressive rehabilitation, that far exceed any barriers or incentives that the MRF propose’: M4.
Operators’ greatest focus would invariably be on finding new orebodies, and extracting them profitably. Production would always be a priority, to maximise returns to shareholders. This is reflected in recent research which suggested that rehabilitation obligations were not an area of focus or concern to senior mining executives, who were instead focused on production outcomes, resource availability, and tax matters.

Opportunities for progressive rehabilitation without compromising current or future production were perceived as limited and relatively insignificant, such as minor clearing for infrastructure or re-vegetation. The decision to progressive rehabilitate could adversely impact future operations, that often relied on pre-existing infrastructure in mined areas.

Furthermore, while clearly delineated and homogenous orebodies were accepted as easier to rehabilitate progressively, for most mines, such as hard rock open pits, the nature of the deposit often made progressive rehabilitation unrealistic. Since different orebody concentration or mineralization could be profitable at different stages, it was essential to operators that rehabilitation work did not interfere with the ability to mine lower grade ore, or co-existing minerals. This effect was compounded by the cyclical nature of the industry, where commodity price fluctuations or improvements in technology could render areas such as tailings or waste rock, which were previously considered unprofitable as

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420 M1, M2, M4, M9.
422 M1, M3, M5, M9.
423 One interview noted that the mine planning team did not include any mine closure specialists, which suggests that planning for rehabilitation and closure was seen as relatively unimportant: M1.
424 ‘[W]ell we need to keep using this infrastructure... So the cost of building new infrastructure... you might say well, we don't want to rehab[ilitate] all this area because we've got infrastructure there we want to use and there's a pit nearby’: M1.
425 M4, M7, M9.
426 Lower grade ore can include mined and unmined ore. Mined ore are often located in waste rock or tailings, while unmined ore in situ.
427 M7, M9.
viable opportunities. Therefore, an overenthusiastic focus on progressive rehabilitation could prevent an operator from reopening or acquiring and exploiting a previously mined resource in the appropriate economic situation.

These limitations were consistent with the findings of the Queensland Audit Office, which noted that very little progressive rehabilitation was occurring. Similarly, Lamb noted widespread concern that managers delay rehabilitation rather than progressively undertaking it as mining progresses.

The MRF’s Yearly Report indicated an average of four per cent increase in ‘land under rehabilitation’ annually. There were opposing views about the reasons for this. While some suggested that the decrease reflected better environmental practices such as progressive rehabilitation, or minimising the disturbance footprint, others indicated that disturbance figures could decrease, not because of rehabilitation activity, but through better reporting, including attributing disturbance to historical mining, allowing miners to reduce the sum paid, or legal advice on how to minimise their levy.

Several interviewees believed that the MRF contribution at its current rate of one per cent, being far lower than the cost of the capital needed to rehabilitate, was insufficient financial incentive to motivate behavioural change, and a greater incentive was required for operators to progressively rehabilitate.

428 M5, M7, M9.
431 Data as at 21 September 2016: Department of Mines and Petroleum (WA), above n 237, 4.
432 M6, M8.
433 M5, M9.
434 An interviewee revealed that they ‘… were probably too honest to begin with’, and may have initially over-reported the area disturbed, adding, ‘you pay attention a little bit more detail as the screws come down in tighter economic times to make sure that those numbers are accurate,’ which resulted in reduced disturbance even though no rehabilitation work had been done.’: Anonymous.
435 ‘[I]t’s not a big enough number to motivate someone unless they’re quite small’: M5.
436 ‘There’s no drive[r] from an operator to do it. There just needs to be something more creative done to try and encourage rehab[ilitation]’: M5.
The most rudimentary method to achieve this would be an increase in the MRF levy. While a minority were in favour of this, interviewees were mindful of the need to avoid deterring mining activity, or jeopardising the industry, particularly given the State’s reliance on royalties, and likely opposition from industry lobbyists. They considered other possible incentives, such as extending licenses, or allowing operators to who have paid in for some years to use a percentage of their accumulated payments to fund their site rehabilitation.

Other interviewees believed that providing a disincentive to clear land at the outset would be more effective than encouraging rehabilitation, particularly in conjunction with mine closure plans to encourage better mine planning practices. As interviewees noted, attributing a cost to having land cleared throughout the mine’s operating life could encourage mine management to plan the project within as small a footprint as possible, particularly given the differential rates attached to different types of disturbance. Again, a higher MRF rate might be necessary to significantly incentivise this.

However, one interviewee stressed that the link between the level of disturbance and the MRF charge was not necessarily a deliberate attempt to incentivise rehabilitation, stating, ‘it may work like that a little, but it is not intended to be the main objective’. The primary incentive to rehabilitate was intended to come from other compliance requirements, which operate in combination with the MRF. Others noted that the MRF should not force companies to undertake

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437 M2, M5. This was reflected in Evaluation Principle 1.
438 M1, M2, M5, M6, M8.
439 ‘If they can link the MRF to allow miners to keep assets for longer so long as they can be shown to be actively doing rehabilitation, rather than just reporting the same numbers every year… that might be good.’: M5.
440 M4, M5.
441 M1, M6.
442 ‘It encourages better mine planning in the first place… don’t disturb something until you need it…and the MRF also encourages that because… if you disturb it, you’ll have to pay the levy on it.’: M6.
443 M1, M6, M8.
444 See Appendix C.
445 M2.
446 M2, M3, M7.
progressive rehabilitation, as it was important that they retained the flexibility to operate their mines commercially.\textsuperscript{447}

Despite the commercial necessity to retain operational flexibility, some interviewees believed that it was feasible to manage disturbance on an ongoing basis to effectively reduce the amount of land for which the highest levy is paid,\textsuperscript{448} with the desirable effect of managing the rehabilitation throughout the life of the mine.

One interviewee detected greater resource allocation to progressive rehabilitation on some mining operations.\textsuperscript{449} Others acknowledged the potential to encourage behavioural change,\textsuperscript{450} but one interviewee’s experience was that because there was no incentive overall, the mine planning process remained unchanged.\textsuperscript{451}

There was a common view that the dominant perception of the MRF as ‘just a levy’ within the industry, and an annual cost of doing business to be paid annually, prompted miners to do the ‘bare minimum’,\textsuperscript{452} which Ward also noted.\textsuperscript{453} Some interviewees suggested that an model with indirect financial incentives could encourage miners to view the MRF more constructively, and encourage better rehabilitation, particularly if there was an opportunity to use the MRF to fund research on innovative rehabilitation techniques.\textsuperscript{454}

One interviewee pointed out that the binary nature of the categorisation of land under rehabilitation,\textsuperscript{455} where it was either disturbed or not, was a disincentive, and that a sliding scale of levy associated with the level of disturbance could be more effective.\textsuperscript{456} However, the interviewee acknowledged that assessing between

\begin{itemize}
  \item \textsuperscript{447} M1, M5.
  \item \textsuperscript{448} M1, M4, M5, M6, M8, M9.
  \item \textsuperscript{449} M6.
  \item \textsuperscript{450} M1, M4, M5, M9.
  \item \textsuperscript{451} M1.
  \item \textsuperscript{452} M1, M3, M5, M7, M9.
  \item \textsuperscript{453} Ward, above n 300, 483.
  \item \textsuperscript{454} M5, M6, M7, M9. ‘If there was a way of doing that, I think that might encourage people to maybe view it a bit more positively and even come up with some more interesting rehabilitation techniques’: M7.
  \item \textsuperscript{455} ‘I doubt you’d get a change in category unless you progressed to effective mine closure’: M9.
  \item \textsuperscript{456} If, for example land being transferred to a ‘semi-rehabilitated’ category attracted lower payments: M9.
\end{itemize}
different categories would raise the question of how the assessment of categories would be monitored, thereby adding administrative complexity and cost.\textsuperscript{457}

One interviewee indicated that such incentive scheme would have to be linked to specific objectives in the mine closure plan,\textsuperscript{458} analogous to Ward’s proposition of ‘post-production licences’ under which mines approaching the end of their producing life would pay a reduced MRF or receive a refund if rehabilitation is performed.\textsuperscript{459}

Interviewees had vastly different views about whether it was necessary or desirable to encourage progressive rehabilitation. Some others believed that, while the MRF legislation does not mandate progressive rehabilitation, it was intended to encourage it.\textsuperscript{460} Others, however did not believe it was the intent of the MRF to encourage mine rehabilitation, and that it was not an effective tool for doing so.\textsuperscript{461} Instead, the MRF existed to provide a ‘safety net’ for the State where rehabilitation does not occur.\textsuperscript{462} Another noted that requiring immediate and complete rehabilitation would adversely affect the industry’s commercial viability.\textsuperscript{463}

One interviewee asserted that the environmental impacts of mining should be dealt with through penalizing operators through the Mining Act for breaches of conditions, not through paying more into the Fund, as the MRF was ‘not the tool to ensure companies do the right thing’.\textsuperscript{464} This was consistent with the DMP’s view, which emphasised that the mining securities system existed to allow ready

\textsuperscript{457} This would be contrary to Evaluation Principle 3.

\textsuperscript{458} M7.


\textsuperscript{460} This is consistent with Evaluation Principle 2.

\textsuperscript{461} M2, M3, M5, M9. ‘… the MRF is not a significant impost - it’s not intended to be a significant impost. So I don't see it as effective for encouraging rehabilitation’: M9. ‘There needs to be a bigger motivator to do rehab… but I don’t think the MRF is it.’: M5

\textsuperscript{462} M3, M4, M7.

\textsuperscript{463} M2. This would be contrary to Evaluation Principle 1.

\textsuperscript{464} M3.
access to funds, rather than as a tool to enforce compliance with other legislation.\footnote{Department of Mines and Petroleum (WA), above n 17, 2.}

Progressive rehabilitation was included as good environmental practice in the DMP’s Evaluation Criteria,\footnote{Evaluation Principle 2.} and the incentive for progressive rehabilitation was highlighted in various other DMP literature.\footnote{For example, the DMP’s webpage, Department of Mines and Petroleum (WA), \textit{New calculator estimates MRF levy} (12 May 2015) \url{<http://www.dmp.wa.gov.au/News/New-calculator-estimates-MRF-4272.aspx>} states ‘As the MRF levy is only calculated on disturbed areas of a tenement, the best way to reduce your future levy payments is through progressive rehabilitation’.} However, some interviewees did not think the overall objective was to require or encourage rehabilitation to an extent that would meaningfully benefit the State or environment.\footnote{‘[E]ncouraging rehabilitation is not about doing small piecemeal rehabilitation around the edges’: M9.} For them, encouraging rehabilitation was part of the wider mine closure framework.\footnote{M2, M4, M6, M9.}

Specifically, it was part of the approvals process, which included the requirement to prepare mine closure plans.

An interviewee cautioned that progressive rehabilitation does not prevent problems if a site is abandoned.\footnote{‘Progressive rehabilitation is different from abandonment and care and maintenance issues. You can have a site that has been progressively rehabbed. Somebody abandons it, and it’s still got all the problems associated with an abandoned bad mine site in terms of who is going to rehabilitate the pits or TSFs [tailings storage facilities].’: M4.} A progressively rehabilitated abandoned site would still leave the State exposed to a rehabilitation liability for the rehabilitation of open pits or tailings storage facilities.

One interviewee maintained that UPBs were the appropriate mechanism to prevent these issues, reasoning that their use would encourage progressive rehabilitation if it was subject to best practice methodology, and annual reviews of operations.\footnote{‘… the greater incentive to encourage rehabilitation, if one is needed is to stick bonds on these mining companies. And with those bonds representing full cost of rehab[ilitation].’: M4.} The interviewee also noted that Queensland had such a system, under which operators could reduce their bond by putting land under rehabilitation.\footnote{M4.}
Like Ward,473 some interviewees perceived the MRF as weaker than UPBs in encouraging compliance with rehabilitation obligations, although equally, bonding was far from being a complete solution, particularly given the inadequate level of bonds previously held, and the negative impact that requiring full financial assurance through bonds would have on the industry.474

To Morrison et al, due to the large number of operational mines in WA under the Mining Act, the MRF could develop into a fund of sufficient size to meet the primary objective without putting an excessive financial burden on individual mining companies, a reflection of the State’s well-established industry.475

The DMP assessed UPBs as more effective than the MRF in achieving progressive rehabilitation, as bond amounts were able to be amended in accordance with new mining development and rehabilitation performance following completion of annual reports by the company and inspection by the department.476 However, the DMP had considered full UPBs to be overly onerous for the industry.477 Meanwhile, the Queensland Audit Office noted that, despite Queensland’s move towards full bonds, there was still a $1.9 billion shortfall between liabilities and funds held,478 suggesting that a UPB system should not be seen as a panacea.

(b) Environmental Compliance

The MRF does not eliminate operators’ obligations in relation to mine rehabilitation and closure. Accordingly, interviewees reported that neither they nor their clients experienced any drastic change in decision making on rehabilitation issues.479 The DMP stated that the MRF was intended to form part of an improved system for compliance under the Mining Act, with the Option Paper highlighting that a priority for the State was ensuring that operators do not

473 Ward, above n 300, 468.
474 Therefore, a system of full bonds would not be consistent with Evaluation Principle 1.
475 Morrison-Saunders et al, above n 28, 125.
476 Department of Mines and Petroleum (WA), above n 31, 4, 12.
478 Queensland Audit Office, above n 147, 4.
479 ‘I don’t think anyone’s changed the way they operate because of the MRF’: M5.
evade their mine closure obligations.\textsuperscript{480} An interviewee observed that, while in recent years, the State’s focus had been on approval of new projects, the industry’s increasing maturity should require a greater emphasis on enforcing compliance from existing operators.\textsuperscript{481}

While interviewees generally believed the MRF was designed primarily as a ‘safety-net’ for when rehabilitation obligations are not met,\textsuperscript{482} there was recognition of some indirect consequences in respect of compliance with the wider environmental and mine closure framework.

To some interviewees, the MRF was more than a levy,\textsuperscript{483} because it increased the DMP’s ability to secure compliance and manage miners’ conduct.\textsuperscript{484} An interviewee explained that, as tenement holders are now required to report on disturbance under the MRF Act, the tenement holder and the DMP would be expected to reconcile this against the disturbance figure in their environmental approvals to ensure they remain compliant.\textsuperscript{485}

Interviewees described the previous UPB system, and the ability to withhold retirement of the bonds, as an effective tool to ensure compliance with rehabilitation obligations.\textsuperscript{486} UPBs become far less widespread under the MRF, but the Minister retains the discretion to impose UPBs in addition to the operator’s MRF obligation. Further, with rehabilitation no longer dependent on the release of UPBs, it is no longer entirely within the DMP’s responsibility and influence to determine an appropriate rehabilitation outcome for a mine site.\textsuperscript{487}

\textsuperscript{480} Department of Mines and Petroleum (WA), above n 31, 13. See Appendix A for an excerpt of the Evaluation Principles.

\textsuperscript{481} M3.

\textsuperscript{482} M2, M10.

\textsuperscript{483} M6, M8. ‘It’s not a compliance tool per se, but I think it’s a mistake to say that it’s not a compliance tool. It wouldn’t be right to say that Mining Act securities are not compliance tools, because that’s what they were used for, and the MRF is one as well. It’s more than just a levy that goes into a government bank account that can be used to fund projects that are mining rehabilitation projects… it’s more complex and nuanced than that.’: M8.

\textsuperscript{484} M6, M8.

\textsuperscript{485} M8.

\textsuperscript{486} M3, M6, M8. One interviewee described UPBs as a ‘blunt yet effective’ tool: M8.

\textsuperscript{487} M3, M6, M8.
Operators now have responsibility for determining and implementing an appropriate environmental outcome, which means that greater responsibility has been placed on the industry, as intended by the government in their move towards risk-based regulation.\textsuperscript{488} This is consistent with the DMP’s ability to spread obligations across the entire industry by increasing levy rates or payments.

The data gathered through reporting under the MRF was perceived by interviewees as a useful tool to assist DMP inspectors in developing their monitoring and inspection program.\textsuperscript{489} The Auditor General’s 2014 Report found that the data captured because of the MRF had resulted in ‘greater clarity and better recording of the inspection process’, which in turn contributed to the DMP’s ability to address the previously recognised issues with inspection and compliance monitoring.\textsuperscript{490} Furthermore, the automated nature of the EARS2 reporting system means that instances of non-lodgement are flagged immediately.

The RLE for each tenement assists the DMP in identifying and targeting features with increased risk,\textsuperscript{491} which will have the most critical impact on the rehabilitation liability if a site is abandoned. This assisted the State with its move from a prescriptive towards a risk-based regulatory framework, where operators manage their own risks.\textsuperscript{492}

Overall, the DMP’s ability to track compliance with the conditions it places on mine sites has been greatly improved, and has resulted in a greater capacity to assess whether conditions placed on mines are being met.

(i) \textit{Enforcing Rehabilitation Obligations}

Interviewees discussed the various methods by which operators might avoid their environmental obligations, particularly considering the Ellendale scenario, which suggested that this could be done relatively easily. They emphasised that while

\textsuperscript{488} Explanatory Memorandum, Mining Legislation Amendment Bill 2013 (WA).

\textsuperscript{489} M4, M6, M8.

\textsuperscript{490} Office of the Auditor General Western Australia, above n 127, 17.

\textsuperscript{491} One interviewee suggested that if a mine with a large RLE is approaching closure, and the AER and MRF data are both indicating that no progressive rehabilitation has been performed, the mine may be considered higher risk. The DMP may use their powers under the Mining Act to require more frequent inspections and mine closure plans than the usual three years, with sites determined to have higher risk being inspected annually: M6.

\textsuperscript{492} Explanatory Memorandum, Mining Legislation Amendment Bill 2013 (WA).
the MRF exists to assist where unplanned mine closure occurs, it is not designed to prevent such instances.\(^{493}\)

Areas of concern included the use of care and maintenance, tenement sales, and the restructuring or administration of companies. Interviewees then discussed potential remedies. These were broadly split between better enforcement of existing legislation, and the need for legislative change, with the latter including the role of directors, and the Queensland’s Chain of Responsibility model.\(^{494}\)

For mines under the Mining Act, in instances of unexpected closure, there is a requirement for a decommissioning plan to be drafted, and a review of the mine closure plan within three months of abandonment.\(^{495}\) Significantly, an operator may be bound by rehabilitation obligations even after they relinquish the tenement,\(^{496}\) although no new obligations can be added by the regulator.\(^{497}\)

(ii) Care and Maintenance

In recent years, falls in commodity prices and the economic downturn have seen a large number of mines being placed into care and maintenance.\(^{498}\) As of March 2016, this included 64 mining projects which have entered the MRF, had their bonds returned, and have subsequently been put into care and maintenance.\(^{499}\) Care and maintenance occurs when a change in circumstances makes production

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\(^{493}\) M2, M8. ‘It certainly shouldn’t be a solution of first resort – but it was good to have it then’: M8.

\(^{494}\) See above Chapter II(C)(1).

\(^{495}\) Mines Safety and Inspection Act (WA) ss 24, 88.

\(^{496}\) Mining Act 1978 (WA) s 114B.


\(^{499}\) Western Australia, Legislative Council, 22 March 2016, 1534-1535 (Ken Baston).
no longer economically viable,\textsuperscript{500} and is usually chosen over mine closure because it retains the potential to mine if conditions improve in future.

Interviewees identified the use of long-term care and maintenance as a tactic that some operators could use to delay or avoid rehabilitation obligations, a finding replicated by the Queensland Audit Office,\textsuperscript{501} and Lamb suggests,\textsuperscript{502} sites on care and maintenance may ‘present a higher risk’ to the State.\textsuperscript{503}

The rehabilitation obligations and licence requirements for a mine on care and maintenance are no different to an operating mine, and include continued contributions to the MRF. Sites on which operations have been suspended must submit a Care and Maintenance Plan,\textsuperscript{504} and the ongoing environmental management whilst a site is on care and maintenance needs to be reported in the AER.\textsuperscript{505}

To interviewees, the MRF did not deter use of care and maintenance.\textsuperscript{506} The requirement to pay the MRF would be perceived as just another cost of putting a mine on care and maintenance, and the impost was too low to affect behaviour.\textsuperscript{507}

This was particularly the case as future technology improvements or sale might mean that a site could returns to economic viability, or where different minerals co-exist, and restarting from a position of unrehabilitated care and maintenance would be less costly.\textsuperscript{508}

\textsuperscript{500} Care and maintenance is defined by the Department of Mines and Petroleum (WA) and Environmental Protection Authority (WA) as ‘The phase following temporary cessation of mining operations where infrastructure remains intact and the site continues to be managed. All mining operations are suspended, and the site is maintained and monitored: Department of Mines and Petroleum (WA) and Environmental Protection Authority (WA), above n 81, 45.

\textsuperscript{501} Queensland Audit Office, above n 429, 45.

\textsuperscript{502} Lamb, Erskine and Fletcher, above n 430, 191.

\textsuperscript{503} The increased risk was identified as a result of ‘fewer operator personnel on site to maintain vital infrastructure and monitor performance,’ and the resulting decrease in the visibility of the site to the Department of Environment and Heritage Protection and the Department of Natural Resources and Mines: Queensland Audit Office, above n 147, 30.

\textsuperscript{504} Mine Safety and Inspection Act 1994 (WA) s 88.

\textsuperscript{505} Department of Mines and Petroleum (WA) and Environmental Protection Authority (WA), above n 81, 10.

\textsuperscript{506} M1, M3.

\textsuperscript{507} ‘[Y]ou spend more money pumping water out of an underground operation than you would on [the] MRF… even caretakers’ costs would be greater.’: Anonymous.

\textsuperscript{508} M5, M7.
One interviewee proposed policy change to motivate rehabilitation of these mines, such as a gradual increase in the MRF levy, the longer a site is on care and maintenance, or limiting the period a site can be in care and maintenance. Such a policy was also suggested by the New South Wales Audit Office.

(iii) Tenement Sales

Tenement sales was identified as the prevalent way of operators avoiding their rehabilitation obligations, often following a period of care and maintenance. A common scenario identified was the sale of end-of-life assets, often for minimal consideration, to smaller operators, who would extract any remaining resource, but lacked the capacity to rehabilitate, referred to by an interviewee as ‘closure by stealth’. This trend has been widely noticed by the media and academics alike.

In such cases, due to the possibility of future mining, minimal rehabilitation would occur prior to the sale, with one interviewee admitting: ‘[M]ine closure plans were done from a compliance perspective and to know what our liability is. We’re never going to do what is in the mine closure plan, because we’re going to sell it’.

Interviewees noted that the MRF was not intended to impact such behaviour. Instead, they emphasised the importance of other mechanisms available to the State, principally the enforcement of mine closure plans, or enforcing additional requirements as a condition of transfer.

509 Lamb, Erskine and Fletcher, above n 430, 191.
511 ‘Care and maintenance is just someone sitting on an asset until the price improves for themselves, or they can flip it at the right time. A mine that is put onto care and maintenance will normally be up for sale not long afterwards. Because ultimately if it’s not economic to mine, then the big cost is ultimate closure. So they’re trying to pass that on to someone else.’ M5.
512 ‘… closure by stealth where mine go to care and maintenance… they change hands a few times and ultimately whoever is left holding it holds all the environmental responsibilities despite the fact they didn’t actually do the mining’: M4.
513 Lamb, Erskine and Fletcher, above n 430, 191.
514 Anonymous.
One raised the recent example of Blair Athol, a coal mine in Queensland, which Rio Tinto sold for a dollar,\textsuperscript{515} amid media reports that the rehabilitation liability was substantially understated.\textsuperscript{516} However, the Queensland government refused to allow the transfer without Rio Tinto providing substantial guarantees over the rehabilitation liability. The sale allowed Rio Tinto to remove the liability from their balance sheet, and instead disclose it as a contingent liability,\textsuperscript{517} while ensuring the Queensland government retained adequate financial assurance. This is possible in WA as the transfer of a mining lease requires Ministerial approval under the Mining Act.\textsuperscript{518}

(i) Restructuring or Administration

(iii) Company Restructuring or Administration

Interviewees associated the most serious occasions of avoidance of rehabilitation obligations with the use of the company restructuring or administration options under the \textit{Corporations Act 2001} (Cth) (‘Corporations Act’). They highlighted the possibility to put companies holding significant unfunded rehabilitation obligations into administration, thereby allowing those liabilities to revert to the State.

Specifically, a parent company could place its rehabilitation obligations into a subsidiary company, and place that in administration, while the parent company continued trading, which was what occurred at Ellendale. While UPBs had provided an incentive to companies not to place subsidiaries into administration, there was no similar incentive under the MRF. As of 2016, four companies to


\textsuperscript{517} This accounting treatment is determined by AASB 137 \textit{Provisions, Contingent Liabilities and Contingent Assets}, which requires a provision to be recognised for future obligations that are ‘probable’. However, those that are only ‘possible’ are not treated as liabilities, but are disclosed as contingent liabilities. They are therefore ‘off-balance’ sheet and are not recognised as a liability Australian Accounting Standards Board (August 2015), AASB 137 \textit{Provisions, Contingent Liabilities and Contingent Assets}.

\textsuperscript{518} \textit{Mining Act 1978} (WA) s 82(1)(d).
whom the DMP had returned UPBs had entered administration.\textsuperscript{519} In such circumstances, rehabilitation often needs to be performed rapidly, and in financially constrained circumstances.\textsuperscript{520}

As the first mine declared an abandoned mine under the MRF Act, Ellendale raised the profile of mining securities and mine rehabilitation issues, and generated public and media debate. Although the necessary rehabilitation was carried out on Ellendale, it highlighted that premature mine closure is likely to result in rapidly implemented remedial rehabilitation, rather than a considered approach as part of a long-term closure plan.\textsuperscript{521} Interviewees suggested a range of potential solutions to address the matter, discussed below.

\textbf{(iv) Enforcement of Environmental Liabilities}

In discussing potential solutions for issues noted above, some interviewees were dismissive about the need for reforms. In their perspective, significant progress could be made through better monitoring and enforcement of the existing mine closure framework.\textsuperscript{522}

Interviewees observed that since the Minister retains the authority under the Mining Act to require UPBs, the State could improve and extend its assessment of when bonds are required, through monitoring for warning signs that an operator might not meet its obligations.\textsuperscript{523} These included operators in potential financial difficulty, for example, those with unpaid royalties, unpaid rent or MRF levies. It could also include missed or poor environmental management because of aggressive cost reduction.\textsuperscript{524}

\textsuperscript{519} Western Australia, Legislative Council, 22 March 2016, 1534-1535 (Ken Baston).

\textsuperscript{520} Laurence, above n 301.

\textsuperscript{521} Lamb, Erskine and Fletcher, above n 430, 191.

\textsuperscript{522} M3, M10. ‘To encourage the right behaviour, it’s audit, compliance and prosecution’: M3.

\textsuperscript{523} ‘The State can’t just rely on MRF. The State also needs to be looking out for other warning signs of financial difficulty which it can then use to minimize the liability that it might be left with’: M3.

\textsuperscript{524} ‘… when companies are in a bit of financial difficulty, one of the first things they’ll do is look for cost savings and cost savings are often in areas that are not core to the key production… [their] priority is not going to be stopping production. It’s going to be some of the things alongside or around stopping production which usually gives rise to more environmental or safety risk. And they’re the sorts of compliance things that can be some early warning signs that a company is in financial difficulty.’: M3.
A second area of focus interviewees identified in relation to the DMP was compliance monitoring for environmental approvals, including inspections, audits, and follow-ups. Interviewees identified the need for a change in focus by both industry and the State, as the industry transitions from rapid expansion to long-term operations, from initial approvals to ongoing compliance. Despite an existing DMP Enforcement Policy, interviewees noted that enforcement action on environmental issues was rare and limited.

While interviewees considered the introduction of the requirements for mine closure plans as a positive action, they agreed that there was a need for greater review, enforcement, and monitoring. Interviewees suggested that this would consist of both an increase in DMP resources dedicated to inspection and auditing, followed by greater use of enforcement notices and prosecutions for non-compliance.

These interviewees criticised the way that approval conditions and mine closure plans were written. To them, the approval conditions and mine closure plans were often vague and open to interpretation, without any specific requirement for specific activities to be completed by certain dates. As such, it was difficult to determine when the rehabilitation responsibility crystallised, or to prove that

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525 ‘There needs to be more money and focus on enforcement and compliance through auditors and compliance officers, going to companies saying why aren’t you doing this.’: M3.

526 M1, M3, M8. ‘As we are coming out of a rapid approvals phase where all the money and focus has been on approvals, the focus for companies has shifted to managing the approvals, and for government enforcing the conditions within the approvals.’: M3.


528 M1, M3, M4, M5.

529 M1, M3, M4, M5.

530 M1, M3, M4, M5.

531 ‘How do you write the conditions on the approvals. Rather than just saying, “the company shall rehabilitate progressively”. What does that mean?’: M1.

532 ‘[Y]ou have these mine closure plans... they’re glossy brochures that you’ve done up... They sit on the shelf and they’re not actively applied.’: Anonymous.
conditions had not been met. Without a benchmark against which to hold operators accountable, enforcement activity was difficult.

One interviewee backed the need for a robust review of mine closure plans, rather than a ‘box-ticking’ approach. Others added that it should not be left a company’s sense of corporate social responsibility, they felt it was currently. The interviewee asserted that an annual reporting on progress against the mine closure plan should be mandatory, and subject to audit by the DMP to ascertain that sufficient progress is being made. ‘Until there is real incentive, the government comes down harder… I just don’t think the corporate social responsibility piece is big enough’, one interviewee commented.

Some interviewees noted that an increase in prosecutions would be the most effective method of improving mining company management boards’ attention on environmental obligations, and the DMP previously had neither the funding nor the disposition to take action in this area. However, some interviewees pointed out that imprisoning or penalising directors would not benefit the State, and instead, any penalties should focus on financial repercussions, such as shutting down operations, or withholding approvals.

As Ward contends, there are inherent limitations of rehabilitation obligations within the WA environmental compliance framework. While operators remain

533 M1, M3. ‘That goes then goes back to writing the approvals properly and having clear conditions that are easy to prove in court’: M3.

534 ‘Our mine closure plans are you know… we’ll tip a couple of bits here and we’ll do this. And that’s our mine closure plan. Well whose fault is that? It’s the regulator… for approving that mine closure plan.’: Anonymous.

535 M3.

536 M1, M4, M5, M10.

537 M3, M5, M6, M8. ‘[Referring to progression towards mine closure plans]… there might be in the corporate social responsibility side of things. Some companies might voluntarily do that, but there's nothing from a statutory point of view or from a regulator point of view that requires you to report against those.’: M5.

538 M1.

539 ‘The DMP doesn’t prosecute because they never had the money… it costs money to prosecute, to have inspectors to collect the evidence, run the prosecutions’: M3.

540 M1, M5. Interviewees attributed this to the difficulty in identifying a victim of environmental harm, and noted that enforcement activities were often restricted to warning letters and adverse findings.

541 Ward, above n 300, 468.
liable for rehabilitation after tenement relinquishment, there has been no reported instance where it has been applied, and as interviewees pointed out, in scenarios of operator insolvency, any enforcement action would be pointless. This was evident in the recent example of previously Indian-owned, Griffin Coal mine in WA’s South-West entering voluntary administration, where no Australian entity remains to be held liable for rehabilitation.

(c) Legislative Reform

While several interviewees commented on the need for increased enforcement of existing legislation, there was also a frequently expressed view among some of the need for legislative change. Given the complexity of implementing a system like the MRF, interviewees saw legislative obligation as the only way to ensure compliance.

Many interviewees argued that reforms with a financial or legal impact were required to manage a non-compliant minority, with one asserting, ‘[N]o board is going to accept fines and defending as a cost of business. Vigorous enforcement should weed out most. You’ll still get ones who are recalcitrant regardless, but for most of industry, it is reputation’.

The concept of corporate social responsibility and reputational risk was perceived to only impact behaviour among the largest miners, with minimal effect among smaller entities. For this reason, interviewees argued the DMP required stronger powers to enforce environmental responsibilities on culpable third parties such as directors, or parent companies who undertake restructuring to avoid rehabilitation.

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542 *Mining Act 1978 (WA) s 114B.*
543 Ward, above n 300, 464.
544 Griffin Coal was owned by Lanco Infratech Limited, a company based in India.
545 ‘It needs to be a legislation change. Compliance with legislation requires effort, time, money, [which a] company won’t do voluntarily. Because you want to be compliant with the legislation you need… to track it, map out exactly, that’s all costs. Legislation such as the MRF was complicated to implement and work out... it involved fly-overs and people to work out how much clearing and within the financial year to work out how much to pay. A company is not going to send people out to record all of that voluntarily. They might do some, but not all.’: Anonymous.
546 M1, M3, M5, M10.
547 M3.
548 ‘It might tick some good corporate social responsibility items but… there needs to be better incentive for companies to rehabilitate.’: M1.
obligations. This was consistent with findings by Truscott, Bartlett and Tywoniak, who noted that operators often make ‘token efforts which lack substance and are designed to generate favourable publicity’.

Trebeck further suggested that corporate social responsibility efforts were often targeted more at achieving a positive corporate image, and protecting their ‘social licence to operate’, rather than any genuine long-term outcomes.

There were multiple suggestions as to areas where legislative change could focus. Directors’ responsibilities under the Corporations Act 2001 (Cth) (‘Corporations Act’) was a common theme for interviewees, and some expanded on this to discuss the role that statutory guarantees could play. Other interviewees focused on the limits of the State’s power under the Mining Act and Environmental Protection Act 1986 (WA) (‘EP Act’), or considered the Chain of Responsibility model recently adopted in Queensland.

However, those interviewees who suggested the need for legislative change noted the need for moderation. Any changes had to balance the improvement of environmental outcomes with the need to avoid onerous or draconian restrictions on the industry or its directors.

(i) Directors’ Responsibility

The Ellendale scenario provoked discussion among interviewees about the limitations of the Corporations Act and the role of the directors. Ellendale exemplified the ease for a company to walk away from obligations through sale, restructuring or liquidation, thereby voiding rehabilitation liabilities.

Directors seeking to take advantage of the system could postpone rehabilitation indefinitely. One interviewee theorised that the directors could place the company into administration, and the appointed liquidator could disclaim the onerous asset.

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551 M1.
thereby avoiding rehabilitation obligations.552 Hence, interviewees attributed any deficiencies to the Corporations Act, and not the MRF legislation.553

Ellendale reinforced the risk to the State of the reduced financial assurance following the return of bonds. Without a bond at risk, the director’s primary incentive, and indeed their responsibility under the Corporations Act, was to act in the best interests of the corporation.554 This could be perceived as directly contradictory to the interests of the State government and the environment. In particular, the requirement to be able to pay debts when they become due and payable, 555 and to prevent insolvent trading,556 applies only to financial liabilities557, not environmental obligations, which could therefore be repudiated by voluntary administration. This change would mean that the directors could be held personally liable for environmental obligations, if they traded insolvently.

An interviewee thought this could perhaps be addressed by extending the definition of creditors in the Corporations Act to cover environmental obligations. 558 However, interviewees acknowledged that a change in the Corporations Act would have profound effects beyond the mining sector.559

To several, the absence of any personal responsibility was an issue.560 Some suggested this could be mitigated by amending Mining Act to make executive officers potentially liable for the offences of the corporation, particularly the requirement for rehabilitation.561

552 M8, M9.
553 Corporations Act 2001 (Cth) s 568.
554 Ibid s 181.
555 Ibid s 95A.
556 Ibid s 588G.
557 Corporations Act 2001 (Cth) s 588G applies only to instances where a debt is incurred. Since a rehabilitation is not owed to any particular individual, it does not fall under the definition of a debt.
558 ‘… how companies account for their liabilities currently and in the future, there is no standard way that they have to do that under the Corporations Act.’: M6.
559 Corporations Act 2001 (Cth) s 588G.
560 M8.
561 Interviewees referred specifically to the Contaminated Sites Act 2003 (WA), and the Environmental Protection Act 1986 (WA).
Interviewees also acknowledged the practical difficulties in enforcing personal liability for directors against foreign nationals, or those with overseas assets, and that it may not result in any significant funds being recovered to address rehabilitation liabilities. Ward also highlighted the difficulties of pursuing directors or group companies for rehabilitation obligations, due to the limited circumstances in which associated group companies can be held liable, and because directors ‘may be dead, bankrupt, or unable to be located.’ An interviewee who was also a company director, expressed concern of being an ‘easy target’, as the only remaining party with assets onshore.

Consequently, there was little enthusiasm for amending the Corporations Act, with an interviewee noting that it would strongly deter individuals from seeking company board positions, and would result in significantly increased Directors and Officers (D&O) insurance costs. Furthermore, any attempt to remove the benefit of incorporation would have risked making the MRF as a replacement mining security system politically unpalatable to the industry.

This was reflected in WA’s submission to the Senate Inquiry, which noted the risk nationally, and that action would need to occur at the Commonwealth level. The ability of a liquidator to disclaim onerous property under the Corporations Act limits the State’s capacity to minimise its exposure to the rehabilitation

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562 M5, M8,


564 ‘As a director of the Australian company… so I get a little defensive about and protective of my own personal assets. Because I’m the easy target… Would it be shared equally among the directors? No. They’d go for the easy target that’s based in the State.’: Anonymous.

565 M4, M8. ‘There shouldn’t be, and there won’t be amendments to the Corporations Act. They could fix it within the mine closure and environmental framework. The corporations law applies to all corporations.’: M4.

566 This could be considered to be contrary to Evaluation Principle 1.

567 M9.

568 ‘The MRF legislation falls short of making directors liable - that may have been. You have to do things incrementally. And while the package as it was, was palatable, the package plus director’s liability may very well not have been.’ M8.

569 Western Australian Government, Submission No 44 to Senate Standing Committee on Environment and Communications References Committee, Parliament of Australia, Inquiry into the Rehabilitation of Mining and Resources Projects as it relates to Commonwealth Responsibilities, 13 April 2017.
liability on the tenement, since the Corporations Act prevails over the Mining Act. 570 Remedies suggested included holding liquidators responsible, 571 or ensuring that provisions recognised for environmental costs are treated similarly to creditors.572

(ii) Statutory Guarantees on Directors

Expanding on the issue of directors’ responsibilities, some interviewees considered the case for the imposition of statutory guarantees on directors, whose decisions are responsible for creating a disturbance. They noted that this could be implemented through the Mining Act.573

However, this was not a popular approach. Some interviewees believed it would be a deterrent mining development, and would make the role of director of a mining company unacceptably risky, resulting in significant industry protest.574 It would also significantly increase the cost of D&O Liability Insurance.575

Another interviewee noted that any attempt on the State’s part to claim against individual directors was unlikely to be effective. In the case of a project in financial difficulty, directors may also be experiencing financial stress, or may be located overseas, resulting in a low probability of recovering significant assets, whereas bank guarantees offered the government prompt access to funds.576

It was acknowledged that the MRF itself was not intended to prevent poor corporate behaviour, or directors who repudiate their responsibilities. Instead, it gave the State a level of risk mitigation when it occurred, 577 and it was considerably easier to access funds compared to other systems that required

570 Sections 5G(4) and (11) of the Corporations Act 2001 (Cth) allow the priority of State laws over the Corporations Act 2001 (Cth) provisions where there is a direct inconsistency.
571 M6.
572 Western Australian Government, Submission No 44 to Senate Standing Committee on Environment and Communications References Committee, Parliament of Australia, Inquiry into the Rehabilitation of Mining and Resources Projects as it relates to Commonwealth Responsibilities, 13 April 2017.
573 M5, M9.
574 M5, M9. Although one interviewee suggested that ‘... the people who would complain most are the ones I would vote most likely to ultimately avoid a liability’: M9.
575 M9.
576 M5.
577 M9.
tracing such as the Chain of Responsibility model and *Contaminated Sites Act 2003* (WA) (‘Contaminated Sites Act’).\(^{578}\)

One interviewee noted that a similar system already existed in respect of the Contaminated Sites Act,\(^{579}\) and conceded that such a system was a ‘good preventative measure’.\(^{580}\) However, another argued that apart from the complexities associated with tracing, the effect of the Contaminated Sites Act was to go after the deepest pockets, rather than those that were the most responsible.\(^{581}\)

(iii) The Chain of Responsibility Model

Some interviewees highlighted that WA could consider Queensland’s Chain of Responsibility concept.\(^{582}\) An interviewee noted that recently the Queensland government used the Chain of Responsibility to require Linc Energy’s major shareholder to undertake decommissioning work, and provide a $5.5 million bank guarantee against costs.\(^{583}\)

The interviewee also referred to the *Linc Energy Case*,\(^{584}\) which attained ‘effectively the opposite result of Ellendale’,\(^{585}\) by finding that State laws prevailed over the Corporations Act in the case of inconsistency, which

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578 M3, M4.

579 Although as interviewees pointed out, the *Contaminated Sites Act 2003* (WA) is limited to the area of contamination only.

580 M3: ‘It’s good because it scares people when I advise them on it, so it’s a preventative measure’.

581 M7.

582 The *Environmental Protection (Chain of Responsibility) Amendment Act 2016* (Qld) amended the *Environmental Protection Act 1994* (Qld) which empowered the State to extend responsibility for the costs of mining rehabilitation to a ‘related person’. See above Chapter II(C)(1) for a description of the Chain of Responsibility concept.


584 *Linc Energy Ltd (in Liq): Longley & Ors v Chief Executive Dept of Environment & Heritage Protection* (‘*Linc Energy Case*’) (2017) 318 FLR 262. Jackson J found that sub-sections 5G(4) and (11) of the *Corporations Act 2001* (Cth) prioritise State laws over the provisions of the *Corporations Act 2001* (Cth) where a direct inconsistency exists. The pre-existing Queensland environmental laws have priority over the *Corporations Act 2001* (Cth) disclaimer provisions, in instances of inconsistency between the State and Commonwealth laws. This decision is now under appeal.

585 M9.
effectively rendered impossible the liquidator’s disclaiming of environmental liabilities.

However, the prevailing view among interviewees was that the Chain of Responsibility requirements were too onerous, and that effort was better spent in bolstering the DMP’s enforcement and investigation powers, and ensuring that robust penalties for non-compliance were in place.\(^{586}\) One described it as ‘horrendous’,\(^ {587}\) and another as ‘difficult to enforce’\(^ {588}\) due to the ability of a director to distance themselves from the operation, or because the chain would often end with a company in administration.

Some interviewees highlighted perceived deficiencies in the Mining Act,\(^ {589}\) with one commenting on the lack of offences within it,\(^ {590}\) limiting the DMP’s capacity to issue fines or impose forfeiture for non-compliance with tenement conditions. Additionally, as noted by Ward,\(^ {591}\) forfeiture was not an effective sanction against land with rehabilitation obligations, since there was no enforcement mechanism after a tenement was surrendered.\(^ {592}\)

**(iv) The Balancing Act as a Regulator**

Interviewees acknowledged the need for legislation to balance environmental compliance without discouraging mining activity, and its associated economic benefits.\(^ {593}\) The regulator’s longstanding role as ‘guardians of the environment for future generations,’ on whom the public rely, inevitably created a tension against a mining company’s focus on short-term benefits and profits.\(^ {594}\)

\(^{586}\) M3, M4, M5, M9.

\(^{587}\) M3.

\(^{588}\) M9.

\(^{589}\) M3, M4, M8.

\(^{590}\) M4.

\(^{591}\) Ward, above n 300, 464.

\(^{592}\) Mining Act 1978 (WA) s 114B; Van Merwyk and Collin, above n 497, 615.

\(^{593}\) M3, M6, M9. ‘Governments want the economic benefit of having the mining operation, and the community wants jobs…but it must be balanced against the risk…and that’s not unique to mining.’: M6.

\(^{594}\) M3.
Interviewees stressed that the focus was mainly on a minority of unethical or non-compliant miners, with the risks generally being greater among smaller operators, who were looking for quick returns. One commented ‘those are precisely the people who need a bespoke mine closure plan and who the State requires some security around, because… they’re going to over-extend and they’re going to not have any [funds] left over for rehabilitation’. Interviewees recognised the need to balance the interests of shareholders against those of the State and the public, and the need for balance was also recognised by McLeod. Financial assurance regimes for mine rehabilitation and closure are difficult to get right due to the fine line between implementing adequate regulation and discouraging investment. It is likely that regulatory change will continue to occur in this space until an appropriate balance is struck.

One interview asserted that, in granting approval to mining operations, the State accepts that there would inevitably be some environmental impact, and the State’s role is to manage risk rather than to eliminate it, by ensuring that activity is environmentally sustainable. Therefore, the State’s role is to monitor, identify warning signs, enforce compliance, in order to ‘ensure economic activity is happening in a socially acceptable way’.

(d) Concluding Remarks

Overall, interviewees considered the technical barriers to progressive rehabilitation to substantially exceed any incentives the MRF could deliver. Like Gorey et al, interviewees observed that, while the MRF was not introduced as a comprehensive solution to all mine closure and rehabilitation issues, it was a mechanism that could assist in achieving positive environmental outcomes, when considered within the broader environmental framework.

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595 M3, M9. ‘90 per cent of the industry do the right thing… But the focus is managing miners who wind up not being good corporate citizens’: M9.

596 ‘… a lot of small guys just want to get on the ground, dig it up, and get a cash flow’: M9.

597 M9.

598 McLeod, above n 26.

599 M2.

600 M2.

601 Gorey et al, above n 40, 379.
Interviewees reemphasised the MRF’s primary objective, of providing the State with a pool of funds for abandoned sites, and therefore concluded that it was intended as an economic mechanism rather than a compliance one, being effectively an insurance policy for the State if other regulatory measures failed. Rehabilitation and long-term site management was primarily regulated through other legislation in the wider mine closure and environmental framework, EP Act, and tenement and licence conditions imposed, with compliance being achieved through DMP inspection and audit, rather than through the MRF. This contrasted with the State government, which had indicated that the MRF also had environmental objectives.

The introduction of the MRF was supplemented by an ‘enhanced compliance system’ to encourage progressive rehabilitation. However, Gorey et al emphasised that the DMP’s approach was to ensure that scope of the reform remained relatively small and achievable, with more politically challenging elements, such as the management of State Agreements, being deferred for later consideration.

Nevertheless, interviewees recognised a compliance element resulting from the implementation of the MRF, both in encouraging a lower footprint, and in providing improved data for the DMP. However, the compliance function of the MRF was limited, and did not address mine closure or the risk of abandonment. Therefore, interviewees generally supported a greater use of UPBs to incentivise compliance.

The consensus was that the ongoing issues with compliance, including the lack of progressive rehabilitation, tenement sales to small operators, and over-use of care and maintenance, were at best, secondary objectives of the MRF. Interviewees believed that the primary solution to these issues was likely to be more robust enforcement of the existing mine closure framework, although this needed to be implemented cautiously to avoid damaging the industry. Interviewees also saw a basis for some legislative reform, particularly in the event of insolvency, both to

602 M3.
603 M2, M3, M6, M8.
604 Department of Mines and Petroleum (WA), above n 31, 12.
605 Gorey et al, above n 40, 379.
the status of the environment as a creditor, and the ability for the State to extend responsibilities to third parties.

Sustainable development requires the mining industry to balance social, economic and environmental interests. 606 Interviewees recognised the need to balance competing interests and achieve a politically acceptable solution. The MRF’s development in consultation with industry stakeholders was seen as part of its success. A complete overhaul of the framework would struggle to gain acceptance, whereas the limited scope of the MRF could deliver majority of the desired environmental outcomes.607

606 Brueckner et al, above n 198.
607 Gorey et al, above n 40, 379.
V CONCLUSION

The previous system of mining securities, based on Unconditional Performance Bonds (‘UPBs’), was widely acknowledged as grossly inadequate compared to the associated rehabilitation liabilities. Given this, and the inadequacies in the reporting of disturbance data and environmental compliance to the Department of Mines and Petroleum (‘DMP’), the case for change was unarguable.

The empirical research of this thesis has analysed whether the Mining Rehabilitation Fund (‘MRF’) was the appropriate vehicle with which to implement that change, and how its consequences, both predicted and unforeseen, compare to the original objectives of the legislation.

Evaluated against the principal objective of the legislation, being the establishment of a pool of funding for the rehabilitation of abandoned and legacy mine sites, the MRF should be considered a success. It has been largely, although not entirely successful in meeting the DMP’s Evaluation Principles. Any deficiencies were largely anticipated at the outset, reflective that the policy was designed to favour certain objectives over others.

The MRF’s nature as a special purpose fund has taken the immediate financial obligation for rehabilitation work away from general State revenue, and given the State a greater ability to act rapidly and decisively when needed. It has provided a capital injection into the resources industry at a time when it was most needed, and has also been relatively straightforward to implement and administer, for the DMP and the mining industry.

Interviewees’ reservations about the MRF’s ability to meet its principal objective centred on the size of the Fund, which has grown more slowly than initially anticipated. However, the MRF was intended, and should be considered, a long-

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608 Auditor General Western Australia, above n 3, 19.
609 Ibid 24.
610 See Appendix A for an excerpt of the Evaluation Principles, including the Principal Objective.
611 Department of Mines and Petroleum (WA), above n 31, 12.
612 Evaluation Principle 3.
613 Evaluation Principle 1.
614 Evaluation Principles 3 and 5.
term system which may require decades to grow to a size that allows it to appropriately rehabilitate all the State’s abandoned mines and legacy sites. Concern about the Fund’s size may also reflect a common misplaced expectation that the MRF will immediately rehabilitate any abandoned mine, rather than the more likely approach of site maintenance to prepare for a tenement sale, as seen with Ellendale. However, given the finite nature of mineral resources, the MRF will need to accumulate rapidly enough to meet rehabilitation needs, together with further incremental policy improvements.

Observations raised by interviewees about the size and growth of the MRF are also reflective of its key weakness – the non-inclusion of State Agreement operations in the system. This is a significant deficiency given that State Agreement operations tend to be major projects, which inevitably have the most significant rehabilitation obligations, and therefore the largest source of unfunded liability to the State. Allowing State Agreements to sit outside the scope of the MRF, and, in most cases, having no requirement for UPBs, appears excessively generous to State Agreement mines, and deprives the MRF of a potential source of funds.

The argument that State Agreement mines do not require inclusion as the size of their operators results in a very low risk of abandonment does not appear valid. Not only has there been a recent case of a State Agreement operator, Griffin Coal entering administration, but there is also the frequently noted issue of projects being sold to smaller operators as they near the end of their mine life.

The MRF legislation has already been drafted in such a way to allow the MRF’s extension to State Agreement mines in future, and therefore the difficulty in bringing State Agreement mines into the MRF appears to be primarily political rather than legal. However, a two-tier system for mining securities appears to be inequitable, and the case for change in this area is overwhelming.

The issue of end-of-life mine tenement sales also raises the question of whether the financial assurance provided by the MRF is sufficient by itself. While it may be adequate to provide overall financial assurance for the State, the introduction of the MRF instead of UPBs has introduced a greater element of moral hazard.

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615 Evaluation Principle 4.
into the mining securities system, as the financial incentive to complete rehabilitation work is no longer present, and the cost is borne by the industry, not the individual company.

Ellendale may have demonstrated that WA has progressed too hastily in returning UPBs to all but a very few operators. The policy review underway in Queensland also reflects this conclusion, and suggests the need for flexibility and optionality in dealing with different types of resource projects, through its recommendation for a hybrid mining securities system.616 However, the different approaches across the various states and territories suggests that no one clear best option exists. While any policy needs to reflect a balance of competing stakeholder interests, including that of the industry, the State could make greater use of its existing authority to require UPBs without disrupting this balance, at least during the transitional period while the Fund accumulates.

As interviewees emphasised, the MRF is not the appropriate tool to address all environmental compliance issues. It offers minimal incentive for progressive rehabilitation,617 and is weaker than full UPBs in this regard. This is perhaps an unavoidable shortcoming of the MRF as a mining security system, as the reality of the industry is that progressive rehabilitation often does not make commercial sense. The current evidence from Queensland and NSW suggests that a bond system would not result in a significantly different outcome.

Improving mine rehabilitation outcomes will require action both at the State and Commonwealth level. Potential reforms include revisiting the Corporations Act 2001 (Cth), or considering legislation that goes further in holding directors, shareholders or associated companies liable for rehabilitation. The treatment of rehabilitation liabilities in company liquidation, and the role and responsibilities of company directors may require amendment to meaningfully address environmental responsibilities.

At the State level, the nature of State Agreement mines and their exclusion from the MRF appears the most significant area compelling reform. There is also scope

616 Queensland Treasury Corporation, above n 153.
617 Evaluation Principle 2.
for the DMP to further expand and refine its monitoring and compliance operations.618

While the MRF may not be a universal solution to all the State’s environmental and rehabilitation issues, overall, the evidence presented in this thesis suggests that the MRF is a significant improvement to the previous mining securities system, and the State government’s ability to fund rehabilitation of mine sites should operators not fulfil their rehabilitation obligations.

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618 This would enhance the State’s capacity to meet the Principal Objectives, Evaluation Principles 2 and 4.
APPENDICES

A DMP Evaluation of Policy Options

Evaluation of policy options – Evaluation criteria (excerpt from Western Australia's Mining Security System Preferred Option Paper). 619

The principal objective of mining securities is to ensure that sufficient funds are immediately available to government to rehabilitate mine sites in the event of operators not fulfilling their mine rehabilitation and closure obligations.

The suitability of the proposed options was also based on principles listed below:

1. The quantum of mining securities does not unnecessarily deter investment in the State’s mining sector, ensuring Western Australia remains competitive in attracting investment to the resources exploration and development sector (‘Evaluation Principle 1’). 620

2. Mining securities continue to encourage operators to apply good environmental practice, including progressive rehabilitation and reporting, and to comply with all legal obligations under the Mining Act 1978 for exploration, mining and mine closure (‘Evaluation Principle 2’).

3. The mining security is secure and immediately accessible by the government, and its administration is cost effective (‘Evaluation Principle 3’).

4. The mining securities framework is clear and workable, and is supported by a robust compliance system to ensure operators do not avoid their mine closure obligations (‘Evaluation Principle 4’).

5. The calculation of a mining security is flexible, being commensurate with environmental risk (‘Evaluation Principle 5’).

6. The application and relinquishment processes for mining securities are transparent, predictable and applied equitably. 621

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620 For clarity, the Evaluation Principles have been referred throughout the thesis as Evaluation Principle 1-5.

621 Evaluation Principle 6 was not relevant to the MRF, as it relates to the application and relinquishment of UPBs.
B  Key Legislation Regulating Mining in WA

Mining Act 1978 (WA)

Mines Safety and Inspection Act 1994 (WA)

Environmental Protection Act 1986 (WA) Parts IV and V

Aboriginal Heritage Act 1972 (WA)

State Agreement Acts, under Government Agreements Act 1979 (WA)

Conservation and Land Management Act 1984 (WA)

Wildlife Conservation Act 1950 (WA)

Rights in Water and Irrigation Act 1914 (WA)

Contaminated Sites Act 2003 (WA)

Various planning Acts and schemes
### Mining Rehabilitation Fund Rehabilitation Rates

Table modified from Schedule 1 of the *Mining Rehabilitation Fund Regulations 2013* (WA).[^622]

<table>
<thead>
<tr>
<th>Rehabilitation liability category</th>
<th>Description of infrastructure or land</th>
<th>Levy rate per hectare (unit rate)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>Tailings or residue storage facility (class 1)</td>
<td>$50 000</td>
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<tr>
<td></td>
<td>Waste dump or overburden stockpile (class 1)</td>
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<td></td>
<td>Heap or vat leach facility</td>
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<td></td>
<td>Evaporation pond</td>
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<td></td>
<td>Dam – saline water or process liquor</td>
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<td><strong>B</strong></td>
<td>Tailings or residue storage facility (class 2)</td>
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<td>Waste dump or overburden stockpile (class 2)</td>
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<td>Low-grade ore stockpile (class 1)</td>
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<td></td>
<td>Mining void (depth of at least five metres) – below ground water level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Landfill site</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diversion channel or drain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dam – fresh water</td>
<td></td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>Low-grade ore stockpile (class 2)</td>
<td>$18 000</td>
</tr>
<tr>
<td></td>
<td>Sewage pond</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Run-of-mine pad</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Building (other than workshop) or camp site</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transport or service infrastructure corridor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Airstrip</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mining void (depth of at least five metres) – above ground water level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Laydown or hardstand area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Core yard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Borrow pit or shallow surface excavation (depth of less than five metres)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Borefield</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Processing equipment or stockpile associated</td>
<td></td>
</tr>
</tbody>
</table>

[^622]: Mining Rehabilitation Fund Regulations 2013 (WA) sch 1.
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Land (other than land under rehabilitation or rehabilitated land) that is cleared of vegetation and is not otherwise described in this table</td>
<td>$2,000</td>
</tr>
<tr>
<td>E</td>
<td>Land under rehabilitation (other than land that has been disturbed by exploration operations) Topsoil stockpile</td>
<td>$2,000</td>
</tr>
<tr>
<td></td>
<td>Exploration operations: land under rehabilitation, rehabilitated land</td>
<td>No rate applicable</td>
</tr>
</tbody>
</table>

Source: *Mining Rehabilitation Fund Regulations 2013* (WA) Schedule 1.
D  Interview Questions

PROJECT WORKING TITLE: An assessment of whether the Mining Rehabilitation Fund in Western Australia has met its objectives, and what legislative change, if any, could improve its effectiveness?

RESEARCHERS: Dr Jo Goodie and Pearl Chong, Murdoch University

1. What do you believe were the objectives/purpose of the Mining Rehabilitation Fund Act 2012 (WA)?
2. What do you see as the main environmental issues as a result of mining operations in Western Australia?
3. How has this changed since the introduction of the Mining Rehabilitation Fund (‘MRF’)?
4. What benefit(s) has the MRF brought to the industry and society?
5. Do you think that it has improved compliance with rehabilitation and environmental obligations? Why/why not?
6. What implementation issues have there been with the MRF legislation?
7. Do you think there are any gaps/loopholes in the law?
8. How well/not does the MRF address: Planned mine closure and Unplanned mine closure?
9. How could the MRF be changed to better meet its objective to encourage rehabilitation?
10. Is the MRF the appropriate vehicle to encourage rehabilitation, or does it have to be addressed through the wider mine closure framework?
11. How do you think the WA mining securities framework compares to those in other Australian States?
E Information Sheet for Participants

An assessment of whether the Mining Rehabilitation Fund in Western Australia has met its objectives, and what legislative change, if any, could improve its effectiveness?

Information Sheet for Participants in Research Project

Introduction

The aim of our study is to investigate whether there are any implementation issues that may have arisen in practice, and whether further legislative or regulatory change might be necessary to better achieve the objectives of the Mining Rehabilitation Fund ('MRF').

This study aims to use practical observations of legal practitioners gathered through interview to contribute to a better understanding of the underlying working mechanisms of environmental and rehabilitation requirements in the mining industry, and to determine what impact the MRF has had on these. The study will be a practical contribution to better understand the role of mining rehabilitation legislation in meeting society's environmental objectives for the mining industry.

The research will help us to assess whether the Mining Rehabilitation Fund in Western Australia has met its objectives, and what legislative change, if any, could improve its effectiveness and to encourage increased focus on progressive and quality rehabilitation of mine sites.

We have contacted you because of your expertise in relation to mining and environmental law, and we highly value your input, should you choose to participate in this research project.

This project has been approved by the Murdoch University Human Research Ethics Committee (Project No. 2017/034).

What will I be asked to do?

Should you agree to participate, you would be asked to contribute by participating in an interview of approximately 60 minutes, to get a detailed
picture of your experience and understanding of the operation of the Mining Rehabilitation Fund and environmental securities in Western Australia.

With your permission, the interview will be recorded to ensure the research can benefit from an accurate record of what you say.

**How will my confidentiality be protected?**

We intend to protect your anonymity and the confidentiality of your responses to the fullest possible extent, within the limits of the law. Your name and contact details will be kept in a password-protected computer file, separate from any data that you supply. Your name and contact details will only be able to be linked to your responses by the two researchers named below.

In the final thesis or any publication that may result, you will be referred to by a pseudonym. As, however, only a select sample of lawyers in the area are being asked to participate, there is a risk that your identity may be inferred from the responses you provide. All efforts will be made to reduce that risk.

In accordance with Murdoch University guidelines, the data will be kept securely in the School of Law for five years from the date of publication before being destroyed.

**How will I receive feedback?**

Once the analysis arising from this research has been completed, a brief summary of the findings can be forwarded to you. Just let us know via the consent form, that you would like to receive the summary. It is also possible that the results will be presented at academic conferences, and in academic journals or other publications.

**What happens if I want to withdraw?**

Your participation in this study is completely voluntary. Should you wish to withdraw at any stage during this interview (including before it starts), or to withdraw any unprocessed data that you have supplied after the interview has been completed, you are free to do so without prejudice.
Where can I get further information?

Should you require any further information, or have any concerns, please do not hesitate to contact any of the researchers below.

Researchers:

Dr Jo Goodie                  Pearl Chong
Senior Lecturer              Honours Law Student
Murdoch Law School           Murdoch Law School
Murdoch University           Murdoch University
[Contact details]            [Contact details]
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