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## Executive summary and recommendations

## Background

Marsden Jacob Associates was commissioned to undertake a post-implementation review of the Mining Rehabilitation Fund (MRF). This report has been written for the Department of Mines, Industry Regulation and Safety (DMIRS) to satisfy the requirements for a post-implementation review. In addition, the review will ensure that the MRF remains an appropriate, effective and efficient method of ensuring that funds are available for mine rehabilitation, even if the responsible company cannot be identified or pursued.

It is important to note that this is review does not fulfil the requirements set out in section 38 of the *Mining Rehabilitation Fund Act 2012* which specifies a legislative review is due to be undertaken 'as soon as is practicable after the end of the period of 10 years beginning on the day on which this Act receives the Royal Assent'.<sup>1</sup>

## **Evaluation approach**

The evaluation used the following approach:

- 1. Background research was undertaken to identify program objectives and available data.
- 2. Draft evaluation questions and a program logic were workshopped with the department.
- 3. Interviews with key stakeholder groups and further analysis of available data were carried out.
- 4. The performance of the program was assessed against the evaluation questions, and potential changes and improvements were identified.

## Program logic

As part of the evaluation, a program logic was developed, as shown in Figure 1. The refined program logic, taking into account comments from stakeholders, is set out in Figure 2.

While the program logic was broadly supported, there was some disagreement over two shortto medium-term outcomes:

- Mines incentivised to apply good environmental practice and undertake progressive rehabilitation; and
- Increasing industry expertise in rehabilitation.

On balance, Marsden Jacob considered that the MRF contributes to both of the outcomes in question, but that contribution should be seen as part of a broader legislative framework with overlapping outcomes.

Section 38 of the MRF Act, online.

Figure 1. Program logic for the MRF

- All tenements register for MRF
- Each tenement provides annual report setting out disturbance data by 30 June (can be submitted any time in the year)
- Tenements with a rehabilitation liability estimate > \$50k pay a levy based on 1% of liability

ntermediate outputs

- DMIRS audit of ~25% of annual reports
- Annual reports stored in EARs 2
- MRF program and fund produce an annual report

Outputs

- Good data / intelligence on mines allowing better regulation
- Money goes into the MRF
- Interest from MRF fund spent on high priority legacy abandoned mines
- MRF monies spent on abandoned mines that have contributed to the program

Short/ edium term

- Abandoned mines program reducing risks posed by legacy sites
- Mineral exploration and mining companies are incentivised to apply good environmental practice and undertake progressive rehabilitation
- Increasing industry expertise in rehabilitation
- Low barriers to entry for small & mid-tier mines
- Government liability for abandoned mines is progressively reducing

ong term

- Improved environmental outcomes
- Improved economic outcomes
- Improved social outcomes

Source: Marsden Jacob 2018.

#### **Conclusions**

In Marsden Jacob's post-implementation review of the MRF, our consultation with stakeholders and assessment of key evaluation questions found that the fund is performing well against its stated objectives and against the evaluation questions. Our conclusions about each of the evaluation questions are collated in this section.

#### Whether the MRF is meeting its statutory objective

It was generally agreed that the MRF is on the pathway to meeting its statutory objective. However, the risk profile of mine financial failure (low likelihood but very high consequence) means that it can be hard to predict whether the MRF will continue to result in a net increase in funding.

Public confidence in the MRF framework may be tested if multiple mine business failures were to result in abandoned mines with substantial liabilities before the program accrued sufficient funds to remediate a single large site.

#### Whether there are any unintended consequences of the MRF

Stakeholders identified disturbance data and departmental knowledge of rehabilitation as unintended benefits of the MRF. The lower barriers to entry has been identified as a benefit of the MRF system, but it could also have negative unintended consequences. Additionally, while the MRF is generally supported, there are some negative perceptions of the MRF held by

industry and the public. These perceptions appear to arise from a lack of understanding of the MRF and the framework it operates within.

#### Whether the MRF aligns well with and/or assists DMIRS in the broader regulation of mines

It was generally agreed that the MRF assists the department in the broader regulation of mines. As the department fulfils a number of regulatory roles, including tenure management, royalty collection and environmental regulation, there is substantial potential for synergies between the MRF and those other roles.

Whether current processes and systems are suitable and whether there is scope for simplification, improvement or deregulation in relation to the MRF and its administration Generally, the current processes and systems appear to be suitable, and some respondents indicated that while there were initial teething issues in the rollout they have been resolved.

Some stakeholders raised concerns with individual elements of the systems such as the process for submitting data and paying levies, but it is currently unclear whether those concerns are real or misconceptions. However, based on the consultations it appears that each of those concerns is likely to be held by a number of stakeholders across the industry. We note that no stakeholders estimated potential savings that could be made.

#### Whether fee levels and thresholds are appropriate

Levy amounts often elicit strong responses from industry and other stakeholders. In this case, the range of views may be indicative that the levies are set at an appropriate level.

A range of views were articulated in the consultations on fee levels, and this may be indicative that the fees are set at an appropriate level.

With the information available, it is not possible to evaluate whether the points raised about individual fees and project types are valid or are based on misconceptions. For this reason, we recommend that the department review the specific points raised.

#### Whether the role and membership of the Mine Rehabilitation Advisory Panel is appropriate

There is broad support for the role of the Mine Rehabilitation Advisory Panel in providing independent oversight of the MRF. That support appears to run across industry and other stakeholders, as well as members of the panel.

The current membership of the Mine Rehabilitation Advisory Panel is broadly supported. However, stakeholders had differing views on how the expertise of the current members aligned to the expertise of an ideal panel membership.

#### Short to medium-term outcomes

Performance against each of the short- to medium-term outcomes identified in the program logic is collated in Table 1.

Table 1: Assessment of each of the short- to medium-term outcomes identified in the program logic

Outcome	Conclusion		
Abandoned Mines Program reducing risks posed by legacy sites	The MRF appears to be taking early steps towards this outcome, but real progress will not be seen for some years due to the number of legacy sites and the nature of the fund. The current pilot sites may provide the department and industry with useful learnings while the MRF is in its early phases.		
Mines incentivised to apply good environmental practice	The data may indicate a slight increase in progressive rehabilitation, but the movement is relatively small and so a longer time frame is needed to show whether this is a longer term trend or a short-term 'blip' in the data.		
and undertake progressive rehabilitation	It is clear that the MRF fits within a broader legislative framework for the environmental management of mines, and there is uncertainty about whether the fund directly contributes to that outcome and whether it is the key contributor to the outcome.		
Increasing industry expertise in rehabilitation	There was general agreement from stakeholders that there is increased expertise in preparing mine closure plans. However, there were conflicting opinions about whether that is also resulting in increased industry expertise in rehabilitation.		
Low barriers to entry for small and mid-tier mines	The MRF appears to deliver a lower barrier to entry for small and medium-sized mines, particularly in comparison to the requirement for unconditional performance bonds.		
Government liability for abandoned mines is	There is strong stakeholder support for the MRF collecting funds that will be able to be directed to abandoned mines. However, there is caution that the fund is still in a growth phase, and some stakeholders commented that this creates a short-term risk for the government if multiple mines were to be abandoned before the fund reached a sustainable level.		
progressively reducing	Several stakeholders commented that it may have been better if bonds had been returned on the basis of tight criteria and that, furthermore, there may be a role for bonds to be used more in the future in order to facilitate the progressive reduction of government liability.		

#### Other topics

Of the topics raised at the conclusion of each discussion, the point of concern most commonly raised appears to be perceived difficulties in the process to sign off on completed rehabilitation.

#### Recommendations

Following the completion of the post-implementation review Marsden Jacob make four recommendations.

#### Regularly review the fund contribution rate of 1%

The fund contribution rate – which is currently set at 1% of the Rehabilitation Liability Estimate (RLE) should be set at a level that ensures that the MRF is expected to have sufficient funds to pay for the rehabilitation of abandoned mines over the medium and long term.

It is recommended that the fund contribution rate should be reviewed on a regular basis as additional data is collected on mining activities and risks.

To minimise perceived risks for industry, the fund contribution rate could be reviewed at the time of the 10-year legislative review and on a regular interval thereafter – such as every 5 or 10 years.

It is noted that altering the fund contribution rate would impact on all mines that pay a levy. If it were identified that specific types of mines were higher risk than others, then an alternative approach could be to seek an unconditional performance bond for higher risk mines. While bonds would be taken under the Mining Act - not the MRF, it fits within the broader regulatory framework and could assist to achieve the MRF's short to medium term outcomes.

#### Consider changes to the RLE categories

Some stakeholders (particularly smaller operators and quarries) noted concerns with the breadth of the RLE categories and expressed concern that the unit costs were not indicative of their activities.

It is recommended that DMIRS consider whether it is appropriate to include additional RLE categories or include a reduction for shallower, lower impact or lower risk activities.

#### Multiple MRF reports required when a tenure has multiple owners

Small operators commented that multiple MRF reports are required when a tenure has multiple owners. This appears to create duplication and it is unclear whether there is a benefit arising from this requirement. Larger operators indicated that this is not a concern as responsibility is delegated to one company.

It is recommended that the requirement for multiple MRF reports for a project is reviewed to ensure the benefits of this approach outweigh the additional administrative burden. In addition, it may be necessary to assist small operators to implement delegations that can be used to remove the requirement for multiple reports.

#### Closing off of rehabilitated areas

Multiple stakeholders commented that it is not possible to "sign off" or "hand back" rehabilitated areas, and that these areas still contribute to the mine's RLE and levy.

It is recommended that DMIRS review concerns about the reported difficulty to "hand back" rehabilitated areas and, if necessary, develop a statutory process that allows sign off of rehabilitated areas to occur. We note that the DMIRS is currently reviewing its relinquishment processes. Subsequently, it would be necessary to educate stakeholders on this process.

## 1. Introduction

This report presents the results of a post-implementation review (PIR) of the Mining Rehabilitation Fund (MRF), carried out by Marsden Jacob Associates (Marsden Jacob). The review is being undertaken to determine whether the MRF remains an appropriate, effective and efficient method of administering mining securities.

## 1.1 Background on the Mining Rehabilitation Fund

The MRF is a pooled fund, levied annually according to the environmental disturbance on a mining tenement at the annual reporting date. Reporting of disturbance is compulsory for all mines operating under the *Mining Act 1978*, and all mines with a rehabilitation liability estimate over \$50,000 pay levies based on their areas of disturbance.

The intention of the MRF is to provide Western Australia with a funding source to manage current and emerging mine rehabilitation liabilities. However, importantly, the fund does not absolve the miner from their obligations to rehabilitate their mine site.

The interest earnt on the MRF is used to fund the Abandoned Mines Program, which can be used to rehabilitate land when an operator has failed to meet its rehabilitation obligations.

This report has been written for the Department of Mines, Industry Regulation and Safety (DMIRS) to satisfy the requirements for a PIR. In addition, the review will ensure that the MRF remains an appropriate, effective and efficient method of ensuring that funds are available for mine rehabilitation, even if the responsible company cannot be identified or pursued.

## 1.2 Requirement for a post-implementation review

The Better Regulation Unit within the Western Australian Department of Treasury is responsible for overseeing the Regulatory Impact Assessment program, which is designed to ensure that agencies:

... develop efficient and effective regulation that addresses a clear need in the community and provides assurance to the Government and stakeholders that a proper assessment of options, including consultation with stakeholders has occurred.<sup>3</sup>

A PIR is required if a Treasurer's exemption that removes the need to develop a Regulatory Impact Statement (RIS) prior to the introduction or reform of legislation has been granted.

The main purpose of a PIR:4

is to enable a thorough assessment of proposals that did not benefit from a regulatory impact assessment before being introduced. This assessment should be completed within three years of implementation and ensures that any perverse outcomes that may be occurring, are addressed as soon as possible.

Exceptions to this are tenements that are associated with State Agreements (listed <u>online</u>) or those not listed in the *Mining Rehabilitation Fund Act 2012* <u>online</u>.

<sup>&</sup>lt;sup>3</sup> Department of Treasury, Regulatory Impact Assessment guidelines for Western Australia, online.

Department of Treasury, PIR compliance, Government of Western Australia, Perth, last updated October 2017.

Therefore, because a PIR is prepared after legislation is implemented, its focus is on the real impacts rather than the expected impacts.

Before the introduction of the *Mining Rehabilitation Fund Act 2012* (the MRF Act), a RIS was undertaken, including consultation with industry and community stakeholders.

However, a Treasurer's exemption was granted for the Mining Rehabilitation Fund Regulations 2013 on 4 June 2013. This removed the need to develop a RIS before developing the regulations but resulted in the need for a PIR. For this reason, this PIR has been undertaken following advice from the Better Regulation Unit.

## 1.3 Scope of the post implementation review

It is important to note that this is not a comprehensive legislative review of the MRF, and so does not fulfil the requirements set out in section 38 of the MRF Act. The legislative review is due to be undertaken 'as soon as is practicable after the end of the period of 10 years beginning on the day on which this Act receives the Royal Assent'. As the Act received royal assent in November 2012, the 10-year review is required to be undertaken in late 2022 or early 2023.

The purpose of this PIR is to assess the MRF Act and accompanying 2013 Regulations and determine whether the legislation is appropriate and whether it has been effective and efficient in meeting its objectives.

<sup>&</sup>lt;sup>5</sup> Section 38 of the MRF Act, online.

<sup>&</sup>lt;sup>6</sup> MRF Act, <u>online</u>.

## Development of the Mining Rehabilitation Fund

Western Australia hosts world-class mining and petroleum industries and in 2016–17 was the location for 63% of the top 10 global mining projects by value.<sup>7</sup> Approximately 42.5 million hectares is covered by mining tenements, and mining leases make up 6% of that area.<sup>8</sup> It is estimated that the industry employed just over 100,000 workers and generated approximately \$87 billion in 2016–17.<sup>9</sup>

## 2.1 Mining securities before 2013

Mining securities were first introduced in Western Australia in the late 1980s for mining operations regulated under the *Mining Act 1978*. The main aim of mining securities was to ensure that sufficient funds were available to government to rehabilitate a mine site should the operator not fulfil mine rehabilitation and closure obligations.

Under the Mining Act, mining tenement holders were required to hold bank-guaranteed unconditional performance bonds against their liability to rehabilitate tenement holdings. The bond rate was calculated according to the 'footprint' disturbance area of the proposed activities (using a table describing different rates for different activities).<sup>10</sup>

By 2013, the Department of Mines and Petroleum (DMP) administered approximately \$1.2 billion in unconditional performance bonds held over nearly 5,000 tenements.<sup>11</sup>

## 2.2 Towards a Mining Rehabilitation Fund

In 2010, the DMP conducted a review with the specified objective of 'ensuring that mining securities provide a high level of financial security that reflects the full cost of rehabilitation for mine sites operating under the *Mining Act 1978*'. The *Policy options for mining securities in Western Australia: preliminary discussion paper* was published in December 2010. It identified three potential options:<sup>12</sup>

1. Retain the use of unconditional performance bonds and increase bond amounts to cover the full cost of mine closure and rehabilitation.

Department of Mining, Industry Regulation and Safety (DMIRS), Mineral and petroleum statistics digest 2016–17, Government of Western Australia, Perth, December 2017, online, p. 3.

<sup>8</sup> DMIRS, Mineral and petroleum statistics digest 2016–17, p. 9.

<sup>9</sup> DMIRS, Mineral and petroleum statistics digest 2016–17, p. 14.

Department of Mines and Petroleum (DMP), The Mining Rehabilitation Fund: the first two years, Government of Western Australia, Perth, April 2015, online, p. 2.

DMP, The administration of mining securities for mine sites regulated by the Department of Mines and Petroleum, Government of Western Australia, Perth, May 2014, online, p. 1.

DMP, Policy options for mining securities in Western Australia: preliminary discussion paper, Government of Western Australia, Perth, December 2010, p. 10.

- 2. Replace the current system with a 'mining securities fidelity fund' which receives compulsory, non-refundable contributions from operating mines.
- 3. Use an insurance-based system.

Following a consultation period during which submissions were received from stakeholders, including industry, government, non-government organisations and individuals, in March 2011, the DMP published *Western Australia's mining security system: preferred option paper*. The paper outlined the DMP's preferred option—the fidelity fund model—and asked for feedback from industry and stakeholders.

In evaluating the options, the DMP considered a principal objective and six evaluation criteria. The principal objective was:<sup>13</sup>

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 evaluation principles for the fund were:

- 1. Investment in the State's mining sector is not unnecessarily deterred and ensures that Western Australia remains competitive in attracting investment to the resources exploration and development sector.
- 2. Encourages good environmental practice, including progressive rehabilitation and compliance with legal obligations under the *Mining Act 1978*.
- 3. Mining security is secure and immediately accessible by the government, and administration of the scheme is cost-effective.
- 4. Cost calculation is flexible and commensurate with environmental risk.
- 5. Framework is clear and workable and is supported by a robust compliance system to ensure operators do not avoid mine closure obligations.
- 6. Application and relinquishment processes are transparent, predictable and applied equitably.

In 2012, the DMP published the *First stage Decision Regulatory Impact Statement: Reform of WA's mining securities system*, as required to establish the legislation for the proposed fund. It explained that the MRF was the recommended option because it:

- substantially addressed the government's financial risk (assuming appropriate legislative and administrative processes are in place to ensure industry meets its environmental obligations) while not unnecessarily deterring investment;
- was a flexible system allowing the contribution rate to reflect the risk profile;
- was the most cost-effective option for all sectors of the mining industry;
- enhanced the state's investment attractiveness;
- enabled greater community scrutiny of the industry's compliance with environmental requirements; and
- would be used to rehabilitate abandoned sites.

DMP, Western Australia's mining securities system: preferred option paper, Government of Western Australia, Perth, March 2011, p. 12.

## 2.3 Implementation of the MRF

The MRF Act was passed by the Western Australian Parliament and was gazetted in November 2012. The associated Mining Rehabilitation Fund Regulations 2013 were gazetted on 21 June 2013.<sup>14</sup>

The MRF was not formally implemented until 1 July 2014, although in the 2013–14 financial year contributions to the fund could be made on a voluntary basis. An incentive to enter the MRF voluntarily was that tenement holders had the opportunity to have any unconditional performance bonds held against their tenements retired.<sup>15</sup>

Since 1 July 2014, contributions to the MRF have been mandatory, except for areas covered by State Agreements<sup>16</sup> (and therefore not covered by the *Mining Act 1978*).

In December 2014, the Mines and Petroleum Minister announced that \$1 billion worth of environmental bonds had been returned to tenement holders.<sup>17</sup>

## 2.4 Investigation of compliance levels

In parallel with the DMP's reviews of mining securities in 2010–11, the Auditor General carried out a review into whether the relevant agencies were monitoring and enforcing conditions placed on mining companies. Among other issues, the review addressed concerns that 'the State is currently exposed to potentially high financial risk if operators do not meet rehabilitation or mine closure conditions'. However, it also noted that the state was reviewing the financial bonds required from operators as well as rehabilitation planning requirements.

In 2014, a follow-up compliance report found that there had been significant improvement. It noted that the establishment of the MRF had 'decreased the State's exposure to liabilities, and will help manage the risks posed by legacy mines, although it will take some time to build comprehensive coverage'. However, it expressed some concern that the fund did not provide protection against failures of mines operating under State Agreements and regulated by the Department of Jobs, Tourism, Science and Innovation, noting that none of the miners operating under those agreements had elected to voluntarily sign on to the MRF. <sup>20</sup>

Western Australian Government Gazette, no. 96, 21 June 2013, online.

DMP, The Mining Rehabilitation Fund: the first two years, online, p. 2.

A State Agreement is a legal contract between the Western Australian Government and a proponent of a major project within the boundaries of Western Australia. The need for a State Agreement is decided by the Minister for State Development, Jobs and Trade. The agreement will detail the rights, obligations, terms and conditions for the development of the specific project. State Agreements are used particularly where resource projects require the development of railways and ports, and long-term tenure. Under such agreements, proponents take or share responsibility with the state for developing infrastructure specific to the project. Further information is available online.

Bill Marmion MLA, 'Billion-dollar refund supports WA mining jobs', media release, 24 December 2014, online.

Auditor General Western Australia, *Ensuring compliance with conditions on mining*, report 8, September 2011, p. 32 online.

Auditor General Western Australia, Ensuring compliance with conditions on mining: follow-up, report 20, November 2014, p. 5 online.

Auditor General Western Australia, Ensuring compliance with conditions on mining; follow-up, p. 7.

## 3. The operation of the fund

## 3.1 The mining rehabilitation legislation

The MRF Act provides for:

- the establishment of the MRF;
- the declaration of abandoned mine sites;
- a levy payable in respect of mining authorisations; and
- other related matters.

The Mining Rehabilitation Fund Regulations 2013 are required to deal with matters concerning the practical operation of the scheme. Most importantly, the Regulations:

- specify how the mining rehabilitation levy will be calculated, which includes listing
  categories of land disturbance that will be assessed for the levy, and the per-hectare
  dollar rates that will apply for each category;
- deal with administrative matters to do with reporting and assessment, including the due date for reporting;
- list the matters that the Mining Rehabilitation Advisory Panel can advise upon, and set out requirements for the membership and procedure of the panel; and
- provide for infringement notices to be issued for late assessment information.

## 3.2 How the fund works

#### 3.2.1 The levy

All tenement holders operating on tenures under the *Mining Act 1978* (except for tenements covered by State Agreements not listed in the Regulations) are required to report disturbance data and contribute an annual, non-refundable payment to the MRF, which is administered by DMIRS. This includes quarries that are on public land (those on private land are regulated by local government). Tenements with a rehabilitation liability estimate (RLE) below a threshold of \$50,000 must report disturbance data but are not required to contribute to the fund.<sup>21</sup>

The MRF levy is based on the total RLE<sup>22</sup> for a tenement multiplied by the 'fund contribution rate', which was set at 1%.<sup>23</sup> The payment is tied to the area of unrehabilitated land, thus providing an incentive for companies to rehabilitate as they operate and minimise disturbance.

DMP, Mining Rehabilitation Fund guidance, Government of Western Australia, Perth, 2013, updated March 2017, p. 2 online.

The RLE is derived from the area and type of disturbances reported for each tenement.

DMP, Mining Rehabilitation Fund guidance, p. 5.

The term "rehabilitation" is defined in the MRF Act and supporting regulations as follows:

- Rehabilitation work is defined under section 10(1) of the MRF Act 2012 (in relation to an abandoned mine) to mean work to rehabilitate an abandoned mine site or affected land that is funded from money standing to the credit of the Fund.
- Regulation 3 of the MRF Regulations provides for a broad definition of rehabilitation, which is not limited to rehabilitation work for environmental impacts only and instead is linked to the closure obligations that apply to the mining authorisation.<sup>24</sup>

DMIR's *Guidelines for Preparing Mine Closure Plans*<sup>25</sup> set out that rehabilitation does not necessarily require land to be returned to native vegetation and instead focusses on the subsequent land use for that site. The guidelines include the following land use hierarchy for determining post-mining land use(s):

- 1. Reinstate "natural" ecosystems to be as similar as possible to the original ecosystem.
- 2. Develop an alternative land use with higher beneficial uses than the pre-mining land use.
- *3. Reinstate the pre-mining land use.*
- 4. Develop an alternative land use with beneficial uses other than the pre-mining land use.

It should be noted that the mine closure plan may include leaving assets in place for community use – such as an airstrip or road.

Land disturbance types were placed into five separate categories, each with its own unit rate as set out in Schedule 1 of the MRF Regulations (Table 2). Tenement holders must report areas of disturbance against the land disturbance types, in hectares, to at least two decimal places. The total RLE, formed from the sum of each of those categories, is then multiplied by 1% to determine the amount of levy payable.

Table 2: Land disturbance types and unit rate (per hectare) for the MRF

Item	Description of infrastructure or land	Unit rate (A\$)
1	Tailings or residue storage facility (class 1)	50,000
	Waste dump or overburden stockpile (class 1)	
	Heap or vat leach facility	
	Evaporation pond	
	Dam—saline water or process liquor	
2	Tailings or residue storage facility (class 2)	30,000
	Waste dump or overburden stockpile (class 2)	
	Low-grade ore stockpile (class 1)	
	Plant site	
	Fuel storage facility	
	Workshop	
	Mining void (with a depth of at least 5 metres)—below ground water level	
	Landfill site	

Similarly for tenements that have expired, been surrendered or forfeited, remedial work is defined under section 114C(1) of the Mining Act 1978, to relate with former holders' compliance with tenement conditions.

This is set out in Department of Mines and Petroleum, *Guidelines for Preparing Mine Closure Plans, May* 2015, online.

Item	Description of infrastructure or land	Unit rate (A\$)
	Diversion channel or drain	
	Dam—fresh water	
3	Low-grade ore stockpile (class 2)	18,000
	Sewage pond	
	Run-of-mine pad	
	Building (other than workshop) or camp site	
	Transport or service infrastructure corridor	
	Airstrip	
	Mining void (with a depth of at least 5 metres)—above ground water level	
	Laydown or hardstand area	
	Core yard	
	Borrow pit or shallow surface excavation (with a depth of less than 5 metres)	
	Borefield	
	Processing equipment or stockpile associated with basic raw material extraction	
	Land (other than land under rehabilitation or rehabilitated land) that is cleared of vegetation and is not otherwise described in this table	
4	Land (other than land under rehabilitation or rehabilitated land) that has been disturbed by exploration operations	2,000
5	Land under rehabilitation (other than land that has been disturbed by exploration operations)	2,000
	Topsoil stockpile	

Source. Mining Rehabilitation Fund Regulations 2013

#### 3.2.2 The fund

The proceeds of the MRF levy are kept in a special-purpose account (called the Mining Rehabilitation Fund) under the *Financial Management Act 2006*. The use of the fund must be within the purposes stated in the MRF Act.

Section 8 of the MRF Act establishes the purposes for which the MRF can be used. There are two categories within the fund: the principal amount and the interest earned annually on the fund. The principal is made up from annual levy payments and can only be used to rehabilitate mine sites for which levy payments have been (or should have been) made (that is, mine sites abandoned after 2014). However, the interest generated by MRF can be spent on the administration of the fund as well as the rehabilitation of any abandoned mine site (including historically abandoned sites).

#### 3.2.3 Mining Rehabilitation Advisory Panel

The Mining Rehabilitation Advisory Panel was established under section 33 of the MRF Act, while Part 3 of the MRF Regulations prescribes the functions and make-up of the panel. Division 1 of Part 3 of the Regulations outlines the matters on which the panel can advise.

At minimum the panel meets quarterly to provide advice to the Director General of DMIRS on specific MRF matters. It is made up of five members who have skills and experience in mining operations, land rehabilitation practices, environmental issues, financial matters or legal issues. The current panel was appointed for a three-year term beginning in March 2016.

As an example of the role of the panel, during the 2016–17 year it:<sup>26</sup>

- endorsed the Abandoned Mines Program's request to the former Economic and Expenditure Reform Committee for increased funding for the Black Diamond Pilot Site Project to enable revegetation works to be undertaken;
- endorsed the development and implementation of DMIRS's new stakeholder identification and rating tool;
- endorsed the implementation of the Black Diamond Pilot Site Revegetation Strategy; and
- provided feedback to the policy development and work program for the coming years, including endorsing the final version of the Partnership Guideline.

#### 3.2.4 Current information from the MRF

The *Mining Rehabilitation Fund:* yearly report 2017 reported that in 2016–17: <sup>27</sup>

- levy payments totalling \$28,913,725.20 were assessed (compared with \$27,967,341.26 during 2015–16);
- the balance of the fund stood at approximately \$92.4 million, including \$3.6 million in interest earned since 1 July 2014, when the scheme became compulsory;
- 99.1% of all required tenement reports were provided by the due date, 30 June 2017 (slightly lower than the 99.5% received in 2015–16, although the number of reports received was higher); and
- as an indicator of the accuracy of reporting, of the 4,071 tenements submitting assessment information, 3,976 had no discrepancy, 12 tenements clarified identified discrepancies, and 83 tenements required that the information be amended.

It also reported that, since the introduction of the MRF, unconditional performance bonds totalling \$1,049,146,275 have passed the eligibility criteria for retirement and been returned to the mining sector. The value of unconditional performance bonds still held by DMIRS has declined to \$31,607,100 for mining companies still operating within the MRF. A further \$106,772,632 was held for entities not subject to the MRF (such as those operating under State Agreements).<sup>28</sup>

#### 3.2.5 Future of the fund

Under the current arrangements, the MRF is growing at around \$26 million per year, excluding interest earned.

In the Decision RIS supporting the legislation, a total of \$300 million in the fund was considered an appropriate initial target, as it represented an approximate cost to rehabilitate the largest of the projects operating under the *Mining Act 1978*.<sup>29</sup> At the current rate, the fund would

<sup>26</sup> DMIRS, Mining Rehabilitation Fund: yearly report 2017, Government of Western Australia, Perth, 2017, online.

<sup>&</sup>lt;sup>27</sup> DMIRS, Mining Rehabilitation Fund: yearly report 2017.

There are currently 29 mining State Agreements, which are administered by the Department of Jobs, Tourism, Science and Innovation. A list of these is available online.

DMP, First stage Decision Regulatory Impact Statement: reform of Western Australia's mining securities system, Government of Western Australia, Perth, 2012, p. 28.

reach \$300 million in 2023-24. However, that number is not mandated and there is no provision for contributions to the levy to be ceased at any point.

The future of the levy, including incentives such as credits and refunds previously discussed in the Decision RIS, would be determined in the full legislative review, to be carried out within the next 5 years.

## 4. Evaluation undertaken

While the MRF Act was subjected to extensive consultation before legislation was implemented, the MRF Regulations were enacted without the completion of a RIS. Therefore, this PIR is technically a review of the Regulations. However, DMIRS requested that the evaluation also include a preliminary review of the broader MRF program and its administration.

The evaluation considered input from stakeholders as well as information collated from published data.

The evaluation used the following approach:

- 1. Background research was undertaken to identify program objectives and available data.
- 2. Draft evaluation questions and a program logic were workshopped with the department.
- 3. Interviews with key stakeholder groups and further analysis of available data were carried out.
- 4. The performance of the program was assessed against the evaluation questions, and potential changes and improvements were identified.

#### 4.1 Literature considered

In background research, a number of documents were reviewed. They included:

- the MRF Act and the second reading speech, which introduced the Bill to parliament;<sup>30</sup>
- the MRF Regulations;
- the DMIRS website,<sup>31</sup> which provides guidance to the MRF and reports on yearly data received in the MRF reports;
- notes and guidance written by DMIRS in the first few years of the MRF's operation, including *The Mining Rehabilitation Fund: the first two years*, April 2015; *The administration of mining securities for mine sites regulated by the Department of Mines and Petroleum*, May 2014; and *Mining Rehabilitation Fund guidance*, 2013, updated March 2017; and
- consultation and discussions on the preferred options, which resulted in the implementation of the MRF and included First stage Decision Regulatory Impact Statement: Reform of WA's mining securities system, April 2012; Western Australia's mining securities system: preferred option paper, March 2011; and Policy options for mining securities in Western Australia: preliminary discussion paper, December 2010.

This literature assisted the development of the draft program logic and questions upon which we based our evaluation.

Government of Western Australia, *Parliamentary debates: Hansard*, Legislative Assembly, 15 August 2012, pp. 5011–5012 (Mr Colin Barnett, Premier) online.

DMIRS, What is the MRF?, Government of Western Australia, Perth, no date, online.

#### 4.1.1 Statutory objectives

In its consultation document, the DMP stated that the aim of the new legislation was that government expects:

... costs for mine rehabilitation and closure to be borne by industry and that, accordingly, the State should not be held financially responsible in cases where companies fail to address their environmental obligations.<sup>32</sup>

The MRF Act was determined to be an Act to provide for:<sup>33</sup>

- the establishment of the Mining Rehabilitation Fund;
- the declaration of abandoned mine sites; and
- a levy payable in respect of mining authorisations, and for related purposes.

The Act states the objective of the fund as follows:

The main purpose of the Fund 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.

The second reading speech stated that the MRF would achieve both economic and environmental goals. It proposed that the MRF would:<sup>34</sup>

- reduce ... the State's exposure to financial risk relating to the rehabilitation of abandoned mines.
- diminish the annual financial operating burden on resource industry participants, which would strengthen Western Australia's attractiveness as an investment location.
- 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.

A further objective identified internally was that the program would provide a fully online end-to-end processing system:<sup>35</sup>

Therefore, the expectation of the State Government is that costs for rehabilitation and closure of mines must be borne by the industry and the State should not be financially liable where environmental obligations have not been addressed by the tenement holder(s).

<sup>&</sup>lt;sup>32</sup> DMP, First stage Decision Regulatory Impact Statement: Reform of WA's mining securities system, p. 13.

<sup>33</sup> MRF Act.

Government of Western Australia, *Parliamentary debates: Hansard*, Legislative Assembly, 15 August 2012, pp. 5011–5012 (Mr Colin Barnett, Premier) online.

<sup>35</sup> DMP, Mining Rehabilitation Fund Levy System (post implementation review): internal audit, p. 8.

### 4.2 Evaluation questions

Through a preliminary review of the Act and relevant literature, two groups of evaluation questions to be used to evaluate the current performance of the MRF were identified. The first group aimed to assess the overall performance of the MRF and so related to a broader evaluation of the fund. We refer to these as 'high-level evaluation questions'. Questions on the 'short- to medium-term outcomes' of the MRF arose from the program logic, which was developed with staff from DMIRS (discussed in Section 5).

The second group of questions focused on the Regulations and are referred to as 'questions on the MRF Regulations'.

The slides used for the consultation, including the discussion points and the questions, are reproduced in Appendix 1.

#### 4.2.1 High-level evaluation questions

- 1. Do you think the suggested short- to medium-term outcomes are right (are there any edits or omissions)?
- 2. To what extent is the MRF meeting its statutory objective?<sup>36</sup>
- 3. To what extent does the MRF achieve or encourage each of the short- to medium- term outcomes?
  - Abandoned Mines Program reducing risks posed by legacy sites
  - Mines incentivised to apply good environmental practice and undertake progressive rehabilitation
  - Increasing industry expertise in rehabilitation
  - Low barriers to entry for small and mid-tier mines
  - Government liability for abandoned mines is progressively reducing
- 4. Are there any unintended consequences of the MRF?
- 5. Does the MRF align well with / assist DMIRS in the broader regulation of mines (e.g. safety, environment, royalties).

#### 4.2.2 Questions on the MRF Regulations

- 1. Do you think the current processes and systems are suitable? This includes:
  - a) complexity and transparency of processes
  - b) application times
  - c) duplication of information
  - d) any delays imposed.
- 2. Is there any scope for simplification, improvement or deregulation in relation to the MRF legislation and its administration by the department?
  - If so, then how and what savings would this result in?

The Act states: 'The main purpose of the Fund 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.'

- 3. Do you think the fee levels and thresholds are appropriate?
- 4. Do you think the role and membership of the Mine Rehabilitation Advisory Panel is appropriate?

## 4.3 Stakeholder interviews

The proposed program logic, along with the questions set out below, formed the basis for our discussions with stakeholders in evaluating the MRF at this point in time.

#### 4.3.1 Stakeholders consulted

Marsden Jacob consulted a broad range of stakeholders and a total of 14 interviews were held. The key stakeholder groups consulted are listed in Table 3.

Table 3: Key stakeholders consulted

Stakeholder	Group represented	
Amalgamated Prospectors and Leaseholders Association	Tenure holders (focus on smaller prospectors)	
Association of Mining and Exploration Companies	Tenure holders (focus on exploration and mid-tier mines)	
Cement Concrete & Aggregates Australia	Tenure holders (quarries)	
The Chamber of Minerals and Energy of Western Australia	Tenure holders (focus on larger mines)	
Austwide Title Management Pty Ltd	Tenure management advisers	
McMahon Mining Title Services Pty Ltd	Tenure management advisers	
Australian Mining Petroleum Law Association	Legal advisers	
HWL Ebsworth	Legal advisers	
Environmental Consultants Association	Environmental advisers	
EPA Services—Department of Water and Environmental Regulation	Related government agency	
Environmental Defenders Office	Non-government organisation	
Conservation Council of WA	Non-government organisation	
Mining Rehabilitation Advisory Panel	Advisory panel	
Department of Mines, Industry Regulation and Safety	Administrators of the fund	

## 5. Evaluation results

## 5.1 Program logic

As part of the evaluation, a draft program logic was developed. The program logic sets out how industry inputs and the department's activities relate to the program's objectives and proposes outcomes against which the MRF can be assessed. The refined program logic, taking into account comments from stakeholders, is set out in Figure 2.

Figure 2. Program logic for the MRF

nputs

- All tenements register for MRF
- Each tenement provides annual report setting out disturbance data by 30 June (can be submitted any time in the year)
- Tenements with a rehabilitation liability estimate > \$50k pay a levy based on 1% of liability

ntermediat outputs

- DMIRS audit of ~25% of annual reports
- Annual reports stored in EARs 2
- MRF program and fund produce an annual report

- Good data / intelligence on mines allowing better regulation
- Money goes into the MRF
- Interest from MRF fund spent on high priority legacy abandoned mines
- $\bullet$  MRF monies spent on abandoned mines that have contributed to the program

Short/ ledium term

- Abandoned mines program reducing risks posed by legacy sites
- Mineral exploration and mining companies are incentivised to apply good environmental practice and undertake progressive rehabilitation
- Increasing industry expertise in rehabilitation
- Low barriers to entry for small & mid-tier mines
- Government liability for abandoned mines is progressively reducing

ong term

- Improved environmental outcomes
- Improved economic outcomes
- Improved social outcomes

Source: Marsden Jacob 2018.

The program logic was broadly supported by the department and all stakeholders.

However, there was some discussion over the relevance of including two short- or medium-term outcomes in the program logic:

- Mines incentivised to apply good environmental practice and undertake progressive rehabilitation; and
- Increasing industry expertise in rehabilitation.

A key point of discussion was the extent to which those outcomes related to the MRF or whether some outcomes were due to other elements of the broader environmental regulation of mines, such as the development of mine closure plans under the Mining Act.

On balance, Marsden Jacob considered that the MRF will contribute to both of the outcomes in question, but that contribution should be seen as part of a broader legislative framework with overlapping outcomes.

## 5.2 Whether the MRF is meeting its statutory objective

Section 6 of the MRF Act sets out the statutory objective:

The main purpose of the Fund 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.

#### 5.2.1 Consultation responses

All stakeholders agreed that the MRF is currently making progress towards meeting its statutory objective. However, almost all commented that progress is still in its initial stages and that the fund will need to operate for a number of years to secure progress towards the statutory objective:

Yes—but exposure to risk is still there (risk is not totally removed)

On the pathway to meeting it but there is always a level of exposure while the fund is increasing.

Is meeting its statutory objective but small steps—revenue raising progressing but the usage needs to be seen.

Yes—meeting objective within the broader legislative and policy regime of managing liability. It is innovative and facilitates responsible mining.

Less repeat offenders as more likely to be noticed if breaking the rules—social licence to operate is strong

Two stakeholders commented that the statutory objective could not be fully achieved while mines operating under State Agreements are excluded from the scheme:

Will never meet the objective entirely until mines operating under State Agreements are brought into the scheme.

Some stakeholders commented on the importance of compliance auditing in achieving the objective:

*DMIRS* compliance auditing is important in maintaining the objective.

#### 5.2.2 Data and literature

The department's 2011 *Preferred options paper* suggested a target balance of around \$300 million for the fund. While that suggested target is not mentioned in current policy documents, it is useful as an indicative 'working value'. Based on the financial reporting in the *Mining Rehabilitation Fund: yearly report 2017*, it appears that the fund accrued interest at around 3.3% in 2016–17. If that interest rate were continued, the fund would raise around \$10 million per annum on a total value of \$300 million.

Marsden Jacob undertook some preliminary financial analysis to identify the likely time frames for the MRF to reach a working total of \$300 million. The result depends on assumptions about funds collected and expenditure of the interest, but an indicative growth of total fund value and of the interest collected is shown in Figure 3. It can be seen that, *if no significant funds are expended*, the MRF will approach a total of \$350 million in 2025 and will be accruing interest at around \$10 million per year.

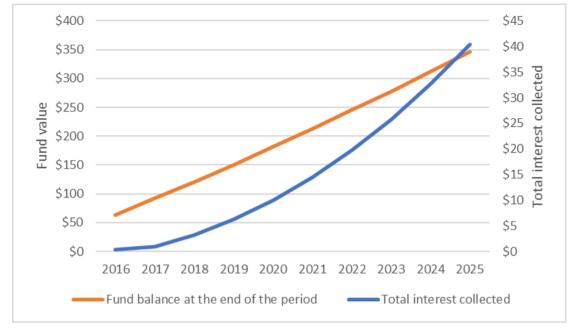


Figure 3: Indicative growth of the MRF—total value and interest collected, 2016 to 2025 (\$ million)

Note: The analysis includes a number of assumptions – particularly that contributions would remain steady at \$27 million per annum and that interest would accrue at 3.35%. Employee and operational costs are assumed to increase as a constant proportion of the total fund value.

Source. Marsden Jacob modelling, 2018.

#### 5.2.3 Conclusion

It is generally agreed that the MRF is on the pathway to meeting its statutory objective. However, the risk profile of mine financial failure (low likelihood but very high consequence) means that it can be hard to predict whether the MRF will continue to result in a net increase in funding.

Public confidence in the MRF framework may be tested if multiple mine business failures were to result in abandoned mines with substantial liabilities before the program accrued sufficient funds to remediate a single large site.

## 5.3 Whether there are any unintended consequences of the MRF

Stakeholders were asked whether there were any positive or negative consequences of the MRF that were not a primary objective of the program.

#### 5.3.1 Advantages

Two categories of benefits or advantages were identified: disturbance data and departmental knowledge.

#### Disturbance data

Several stakeholders commented that the MRF has resulted in better data on the progress and development of mines:

Advantage is that it now has a huge amount of data—particularly disturbance data which was previously not available.

DMIRS has learnt a lot about the number of prospectors and disturbance. There is also a lot more publicly available data (which is useful).

Data quality—now tracks implementation of mines and clearing.

DMIRS gets better information—and therefore can use it to regulate through other regimes such as the Mining Act (which can use bonds).

Three stakeholders noted this advantage but also commented on ways in which the data could be improved:

Better data than before—but that was deliberate. Although it is unfortunate that currently don't have whole state—due to exemptions for mines operating under State Agreements.

Information—better if liability and status of tenement is all in one place—could be better lined up with [annual environmental report] and closure plan.'

Data is collected on areas disturbed or under rehabilitation. The MRF does not collect data on the 'rehabilitated' area because it is not levied; however, that information would be useful. i.e. collect data on the rehabilitation areas that have been signed off—would be useful going forward.

#### Departmental knowledge

A small number of respondents commented that an unintended benefit is that the MRF and Abandoned Mines Program have improved DMIRS's knowledge and understanding of rehabilitation:

Unintended benefit that the department has learned a large amount about rehabilitation (including risk assessment and program management).

#### 5.3.2 Disadvantages

Some respondents indicated that they did not consider that there were any unintended negatives arising from the MRF.

Importantly, there is no evidence that the calculation of the levy on a per hectare and per year basis has distorted incentives around mining operations – such as to shorten mine lifespan or cause a mine to operate on a significantly smaller footprint. As set out in section 5.8.2, the incentives created by the MRF appear to be reasonably "light" so appear unlikely to significantly alter mining operations.

Other points raised were about the abandonment of the Ellendale mine, low barriers to entry and perceptions of the MRF.

#### Ellendale diamond mine

A few stakeholders commented that the timing of the failure of the Ellendale diamond mine was unfortunate. The stakeholders commented that, while the MRF did not contribute to the failure of the mine – and therefore this is not an unintended consequence, the process by which the mine became abandoned was not anticipated and resulted in a negative view of the MRF:

Ellendale—it didn't close because of MRF but has provided a lot of negative PR due to the return of the bond.

Ellendale decision to return bonds may have been an unintended consequence and feels there is a risk with Cockatoo Island which also joined during the voluntary year and had bonds returned.

A summary of the background to the mine is set out in Box 1.

#### Box 1: Background on the Ellendale diamond mine

#### Ellendale diamond mine

The abandonment of the Ellendale diamond mine was the first incident to test the newly formed MRF.

Kimberley Diamond Company Pty Ltd signed on to the MRF in July 2013, and there was an immediate retirement of the associated unconditional performance bonds, then valued at \$12.2 million.<sup>37</sup> In total, \$819,000 had been collected from the operators of the mine before the company went into liquidation in 2015.<sup>38</sup> It had outstanding debts (including unpaid wages, more than \$10 million in creditor debts and \$1.5 million in unpaid royalties) and an estimated rehabilitation cost of \$28–40 million.<sup>39</sup> Therefore, there was a significant gap between the funds contributed to the MRF, the unconditional performance bonds that may have been able to be accessed by DMIRS before their retirement, and the total estimated rehabilitation bill.

Kimberley Diamond Company's liquidator initially looked for a buyer for the mine site. When that failed, it lodged a 'disclaimer of onerous property' under section 568 of the *Corporations Act 2001* (Cwlth) and effectively transferred responsibility for the rehabilitation of the site to DMIRS (which chose not to challenge the notice).

Since July 2015, DMIRS has used funds from the MRF to ensure the ongoing safety and environmental condition of the site, including for on-ground works to keep the site stable and non-polluting. Expenditure of funds on the mine has been limited, with \$84,000 spent to the end of June 2017.<sup>40</sup>

DMIRS stated that there is currently no plan in place to fully rehabilitate the Ellendale mine site (so it would not be closed through the Abandoned Mines Program), as it believes that the mine remains a viable resource project.

#### Low barriers to entry

Two stakeholders commented that the removal of bonds did remove some barriers to entry for small to medium-sized mining operations, but that this could indirectly increase the business failure rate among small and medium miners. This would arise if mines are able to commence but do not have a strong understanding of their long-term costs and liabilities:

Removal of bonds creates low barriers to entry, but these mines are still creating a liability as those who enter market may not be able to pay for the rehabilitation

Slightly easier to start but still need to pay at the end.

Kimberly Diamonds Ltd, Media Release July 2013, Retirement of \$12.2 million Environment Bond, online

Kimberly Diamonds Ltd, Quarterly report: September 2013, 2013 online.

<sup>&</sup>lt;sup>39</sup> 'Australian mining: securing rehabilitation obligations', *Conventus Law*, 21 February 2016, online.

<sup>&</sup>lt;sup>40</sup> DMIRS, Mining Rehabilitation Fund: yearly report 2017 online.

One stakeholder also noted that there are some historical examples of large mining companies selling facilities to new entrants who are not able to operate the facilities profitably. However, the example provided was in another jurisdiction and the circumstances have not been independently confirmed by Marsden Jacob.

#### Public and industry perception

Two stakeholders commented that the MRF had resulted in misconceptions. One stakeholder commented on possible industry perceptions, while the other commented on public perceptions:

May be viewed as a safety net—so people assume the company can fail as government can cover the liability.

Negative—people forget it is part of a broader framework of regulation and so tend not to look at the whole regime.

#### 5.3.3 Conclusion

Stakeholders identified disturbance data and departmental knowledge of rehabilitation as unintended benefits of the MRF. The lower barriers to entry has been identified as a benefit of the MRF system, but it could also have negative unintended consequences. Additionally, while generally supported, there are some negative perceptions of the MRF held by industry and the public – which appear to arise from a lack of understanding of the MRF and the framework it operates within.

## 5.4 Whether the MRF aligns well with and/or assists DMIRS in the broader regulation of mines

#### 5.4.1 Consultation responses

Almost all stakeholders commented that the MRF aligns well with DMIRS's broader regulation of mines or assists DMIRS with its broader regulatory role. Some commented that the MRF assists with general compliance and enforcement. For example:

The MRF should be viewed as a fund of the 'last resort', but an essential component of the government's overall compliance and enforcement regime through such processes as the Mining Act and the Corporations Act.

Some stakeholders focused on the alignment between the MRF and other elements of environmental regulation:

The disturbance data helps DMIRS broader understanding (particularly the environmental reporting).

Increased potential to look at safety and environmental risks.

Some stakeholders focused on the alignment between the MRF and the department's understanding of abandoned mines:

Certainly gives a better understanding of the abandoned mines legacy (and risk).

A bit more understanding of public safety with the reporting of open shafts and pits.

Finally, one stakeholder said that the successful rollout and implementation of the MRF have improved the department's reputation and so would assist it in other areas where it works with industry:

I think the MRF has been rolled and implemented very successfully and has helped those that need to be helped and so has helped the department's reputation.

Only one stakeholder queried the alignment or assistance that the MRF provides:

The MRF is a backward-looking tool so don't over-state the value.

#### 5.4.2 Data and literature

No data or literature specific to this evaluation question was identified.

#### 5.4.3 Conclusion

It was generally agreed that the MRF assists DMIRS in the broader regulation of mines. As the department fulfils a number of regulatory roles, including tenure management, royalty collection and environmental regulation, there is substantial potential for synergies between the MRF and those other roles.

# 5.5 Whether current processes and systems are suitable and whether there is scope for simplification, improvement or deregulation in relation to the MRF and its administration

In response to this question, several stakeholders were quite positive about the MRF as well as its processes and systems. However, other respondents provided a range of suggested improvements.

#### 5.5.1 Positive consultation responses

Some respondents commented that the current processes and systems are suitable, and while there were initial teething issues in the rollout they have been resolved:

Largely working (after teething problems in the first year).

The quick roll out caused problems that DMIRS had to solve quickly (and did).

Bigger issues with smaller companies but have overcome that reasonably well.

Others were unconditional in their support for the MRF's processes and systems:

Feel it is currently pitched at the right level and the high success rates (>90%) reflect this—prefilled forms (for example) helps this

Suitable as clear and concise as to how the RLE is set out—may be some duplication but not sure.

#### 5.5.2 Suggested improvements

Stakeholders provided a range of suggestions for improvements to processes and systems, as described below.

#### Need for owners of mines with multiple owners to each submit an MRF report

A few respondents commented that it is unnecessary for mines with multiple owners to have the owners each provide an MRF report:

Unsure of why the need for double up with owners reporting; multiple forms so may be an opportunity to align this to 30 June.

Duplication—why does each owner have to put in an MRF—surely just one and sign a statutory declaration. Is particularly a small end problem because not involved in joint ventures etc.

#### Overlaps between the MRF report and the Annual Environmental Report

A few respondents indicated in frustration with the overlaps between the MRF and the AER reports. Some also commented that the computing links that aim to transfer the data between the systems do not work consistently:

Why necessary to duplicate MRF information in the AER when same information (can populate as stated by DMIRS but feel that is not the point)—feel the systems don't talk to each other that well and therefore create extra administrative burden.

Alignment of categories—would be beneficial if they could align the categories as the importing system never really works.

#### **Grouping tenures**

Some respondents commented that they consistently experienced difficulties in the grouping of tenements into the right projects:

There are still some issues with computer systems—grouping tenements against the wrong projects—information not carrying across and populating correctly.

Still a few issues in relation to grouping structures (project versus tenement issues) but these are mainly in old projects/sites like the Goldfields. Issue is around IT grouping in a logical manner.

DMIRS clarified that the grouping of tenements into "projects" occurs within the systems for Annual Environmental Reports not the MRF systems but committed to pass this feedback on to the appropriate section in DMIRS.

#### Still pay a levy on rehabilitated areas

Several stakeholders commented that a current failing of the system was a perceived difficulty to declare an area fully rehabilitated – particularly under some circumstances:

There is a bottleneck in legislation when 'handing back'—seems to be a block on returning—rehabilitated land still charged the levy as DMIRS not keen to 'take back' rehabilitated land—only one closed under the MRF—mineral sands returned to pasture. Mine closure plan is important.

Why is the MRF payable on rehabilitated areas when prospecting or exploration is done via a 'Program of Works' on a mining license, but not so when done on a prospecting license or an exploration license via a program of works?

#### Categorization of disturbance types

Two respondents commented that there is some difficulty in selecting the appropriate category of disturbance or estimating the area of disturbance:

The breakdown by tenements by purpose/land use can be difficult.

So the categorization can change from year to year. Clearly not an issue of non-compliance—there will be some slop from year to year.'

#### 5.5.3 Conclusion

Generally, the current processes and systems appear to be suitable, and some respondents indicated that while there were initial teething issues in the rollout they have been resolved.

Some stakeholders raised concerns with individual elements of the systems such as the process for submitting data and paying levies, but it is currently unclear whether those concerns are real or misconceptions. However, based on the consultations it appears that each of those concerns is likely to be held by a number of stakeholders across the industry. We note that no stakeholders estimated potential savings that could be made.

#### Recommendations

Consider changes to the RLE categories

Some stakeholders (particularly smaller operators and quarries) noted concerns with the breadth of the RLE categories and expressed concern that the unit costs were not indicative of their activities.

It is recommended that DMIRS consider whether it is appropriate to include additional RLE categories or include a reduction for shallower, lower impact or lower risk activities.

Multiple MRF reports required when a tenure has multiple owners

Small operators commented that multiple MRF reports are required when a tenure has multiple owners. This appears to create duplication and it is unclear whether there is a benefit arising from this requirement. Larger operators indicated that this is not a concern as responsibility is delegated to one company.

It is recommended that the requirement for multiple MRF reports for a project is reviewed to ensure the benefits of this approach outweigh the additional administrative burden. In addition, it may be necessary to assist small operators on the delegations that can be used to remove the requirement for multiple reports.

Closing off of rehabilitated areas

Multiple stakeholders commented that it is not possible to "sign off" or "hand back" rehabilitated areas, and that these areas still contribute to the mine's RLE and levy.

It is recommended that DMIRS review concerns about the reported inability to "hand back" rehabilitated areas and, if necessary, develop a statutory process that allows sign off of

rehabilitated areas to occur. We note that the DMIRS is currently reviewing its relinquishment processes. Subsequently, it would be necessary to educate stakeholders on this process.

## 5.6 Whether levies and thresholds are appropriate

Consideration of the levy calculation and thresholds incorporates three key elements:

- rehabilitation liability categories and unit rates—set out in Schedule 1 of the MRF Regulations;
- the fund contribution rate of 1%—set out in paragraph 4 of the MRF Regulations; and
- the \$50,000 threshold for the RLE below which the levy is waived.

#### 5.6.1 Consultation responses

A range of responses was received in relation to the question of levy amounts and thresholds. Around half the respondents indicated that they thought the current levies and thresholds are appropriate:

Yes—seems reasonable and enough currently seems to be collected.

*OK*—the cost is not so high that it makes companies angry, but it also increases the fund—the 1% levy did result in winners and losers but seemed to be about equal.

I think the \$50,000 threshold is reasonable.

I think the 1% levy is similar to bond rates—and would rather the funds go to this fund rather than the banks.

#### Proposed increase in rates

A few respondents indicated that the current levies may need to increase. Two respondents indicated that generally the current rates per hectare are low:

The individual rates per hectare are appropriate but there is a gap. Some overhead costs such as project management costs, post closure monitoring and maintenance as well as contingency costs are not included. These add about 25% to costs.

Another stakeholder commented that the rates may need to increase in the future:

May need to increase at some point as rehabilitation becomes more costly.

One stakeholder (representing a non-government organisation) commented that the rates should not consider only rehabilitation costs and the likelihood of sites becoming abandoned:

Several factors to consider when setting the fees (beyond rehabilitation costs and likelihood of sites being abandoned). Also need to consider the environmental values that are threatened or lost and needs to be sufficient to disincentivise land clearing.

#### Proposed decrease in some rates

A few respondents commented that the total burden on mines needed to be considered and noted that they pay royalties and safety levies as well as the MRF levy.

One respondent noted that quarries and mines operating within areas controlled by the Forest Products Commission paid compensation for lost revenue to the commission and then also paid the MRF levy.

A number of respondents identified particular instances in which the rates were perceived to be too high:

Category 3 (\$18,000) is far too high for some of the activities in the category where none or very little additional material is deposited on the land—e.g. access track/road; core yard—remove the core racks and rip the ground; laydown area. The whole of Category C needs to be reviewed.

Salt lakes fall under category 1—which seems excessive. This is not important because all current mines operations are under State Agreements, but should that ever change it will be huge contributions for negligible rehabilitation and will likely send them out of business.

Quarries taking sand from North West river beds during the dry season have disturbance area contribute to their RLE. However, after the wet season it is not possible to see any area that requires rehabilitation.

Stakeholders associated with quarries raised a number of points supporting an argument that their current fee levels are too high:

Feel the flat rate based on footprint size doesn't work as well for quarries. Small gravel pits are assessed with same liability as the super-pit—quarries have a large footprint but a shallower excavation. In other states quarries are separated out from general mining.

Risk at quarries is much lower (but pay a similar rate) for example a portable crushing unit with few potential contamination issues has a similar rate for a processing plant on a gold mine (which has potential contamination issues).

Fees levels should consider capacity to pay.

#### \$50,000 threshold for the RLE

Two stakeholders commented that the Act appeared to specify that the \$50,000 threshold applied per mining tenement. However, their understanding is that DMIRS applies the threshold to each 'environmental grouping', which may include multiple tenements.

DMIRS clarified that the \$50,000 threshold applies per tenement and noted that this misconception would be addressed with industry.

#### 5.6.2 Data and literature

#### Principles of fee setting

While the levy is not the same as a government fee or charge, there are similarities in the principles that should be applied. The Australian Government publishes guidance on fees and charges, which sets out the following principles:<sup>41</sup>

- transparency—making available key information about the activity, such as the authority to charge, charging rates and, where relevant, the basis of the charges
- efficiency—delivering activities at least cost, while achieving the policy objectives and meeting the legislative requirements of the Australian Government
- performance—which relates to effectiveness, risk mitigation, sustainability and responsiveness.
- equity—where specific demand for a government activity is created by identifiable individuals or groups they should be charged for it, unless the government has decided to fund that activity.
- simplicity—whereby charges should be straightforward, practical, easy to understand and collect
- policy consistency—charges must be consistent with Australian Government priorities and policies, including entity purpose and outcomes.

It can be seen that the current rates based on the RLE are performing well on the principles of transparency and simplicity.

#### Fund contribution rate

One of the key elements of the levy is the fund contribution rate of 1%, established in the Mining Rehabilitation Fund Regulations, which sets the levy at 1% of the RLE.

The fund contribution rate of 1% should be seen as a dynamic number – as it acts in a similar way to an insurance premium. Accordingly, it may need to be adjusted up or down as risks of abandonment change or the understanding of the risks of abandonment change. Through our analysis of the documentation we did not identify a quantitative risk assessment of the risk of abandonment to support this rate.

We were advised that the MRF disturbance reports have provided more data than was available when the rates were set, and that this information will continue to grow in the future.

It is noted that the fund contribution rate is set in the regulations and so is not suited to frequent revision. In addition, any change in the fund contribution rate could impact on the profitability or viability of some mines.

It is noted that altering the fund contribution rate would impact on all mines that pay a levy. If it were identified that specific mines were higher risk than others, then an alternative approach would be to seek an unconditional performance bond for the higher risk mines. While this

Department of Finance, *Australian Government Charging Framework*, Australian Government, Canberra, 2015, p. 9 online.

would not fall within the MRF, it is part of the broader regulatory framework and assist to manage the achievement of the MRF's short to medium term outcomes.<sup>42</sup>

#### 5.6.3 Conclusion

Levy amounts often elicit strong responses from industry and other stakeholders. In this case, the range of views may be indicative that the levies are set at an appropriate level.

With the information available it is not possible to evaluate whether the points raised about individual RLE and project types are valid or are based on misconceptions. For this reason, we include a recommendation on this topic.

#### Recommendations

It is recommended that the fund contribution rate should be reviewed on a regular basis as additional data is collected on mining activities and risks. To minimise perceived risks for industry, the rate could be reviewed at the time of the 10-year legislative review and on a regular interval thereafter – such as every 5 or 10 years.

It is recommended that DMIRS consider whether it is appropriate to include additional RLE categories or include a reduction for shallower, lower impact or lower risk activities.

# 5.7 Whether the role and membership of the Mine Rehabilitation Advisory Panel is appropriate

#### 5.7.1 Consultation responses

A small number of stakeholders indicated that they were not aware of the Mine Rehabilitation Advisory Panel (MRAP), its role or its membership. However, most had views on both the role of the panel and its membership.

#### Role

Some stakeholders outlined the role that the panel has played historically compared to its role in the future:

Panel has spent the last five years building a foundation through governance and policy (with DMIRS)—that is now established.

Good governance now but need to consider going forward—what happens needs to be transparent (no favouritism for projects).

As fund gets substantially larger—will become more important because don't feel DMIRS has the capacity to deal with that amount of money to be spent on rehabilitation.

A number of stakeholders (both panel members and others) commented that the MRAP could be used more heavily by DMIRS:

<sup>&</sup>lt;sup>42</sup> DMIRS clarified that Unconditional Performance Bonds are able to be applied/ retained on a site by site basis.

Feel panel could and would do more if more resourced in terms of information—needs to be more proactive in asking questions and providing guidance. Currently panel is driven by DMIRS and feel should be other way around.

DMIRS not using panel as it should—panel should be providing oversight and ensuring the funds are used properly (need financials etc). State needs transparency in decisions that are being made. In addition, there is a reputational risk—need to show industry and community fund is being used in the best way—so it can have a defendable position if there are problems with legacy sites in the future

DMIRS underestimate the capacity on the panel for help and advice—moving forward should use that more particularly in terms of prioritisation development.

#### Membership

A range of views were expressed on the membership of the panel:

Useful to have an independent panel (removes the need for ministerial advice). There is a level of independence in decisions although currently only advisory and viewed as such.

Currently there is a high level of competition for a spot on the panel and that needs to be maintained to support its independence.

*Need to maintain independence—both from DMIRS and industry.* 

An industry representative is needed.

Good working and composition of panel—previously had a representative from CME—maybe could do with a lobby group representative and an NGO.

The membership of the panel is appropriate—the regulations allow for a financial expert and should probably have one. However, the regulations are fine—cannot mandate financial expertise.

Panel membership could perhaps be more contemporary (less retired!) and is currently environmentally heavy.

It is instructive that the word 'independence' was used a number of times. This appears to indicate that independence is seen as a key asset of the panel and its membership.

Some respondents advocate for more industry involvement in the panel, whereas others advocate for the panel's independence from industry.

#### Transparency

Two respondents commented that the role and activities of the MRAP could be made more transparent through an increased flow of information:

Could be more transparency.

[We] note that the panel releases irregular communiques on the department's website, with the last one being dated September 2017. That communique indicated that DMIRS involvement in the first two pilot projects has now ceased.

However, no further details are available on the role, meeting agenda items or proposed work program of the advisory panel. It is therefore difficult to provide

additional comment on its role or activities, including how potential conflict of interest is dealt with at meetings of the advisory panel.

Note: DMIRS clarified that the middle quote is not current as communiques of 6 December 2017 and 12 March 2018 available on the DMIRS website. 43

### 5.7.2 Relevant data and literature

The MRAP is a statutory body formed under section 33 of the MRF Act, and its functions and membership are set out in Part 3 of the MRF Regulations (paragraphs 9 to 19).

### 5.7.3 Conclusion

There is broad support for the role of MRAP in providing independent oversight of the MRF. That support appears to run across industry and other stakeholders, as well as members of the panel.

The current membership of the MRAP is broadly supported. However, stakeholders had differing views on how the expertise of the current members aligned to the expertise of an ideal panel membership.

## 5.8 Performance against short- to medium-term outcomes

The performance of the MRF against each of the short- to medium-term outcomes was considered and is described in this section.

## 5.8.1 Abandoned Mines Program reducing risks posed by legacy sites

#### Consultation responses

Stakeholders provided a reasonably uniform response that the MRF is making some preliminary steps in reducing the risks posed by legacy sites. However, all stakeholders noted that the program is still in a preliminary phase while the value of the fund is being increased, and only two sites have been remediated to date:

There is a reduced risk because money is now available where it was not previously.

Moving in the right direction by reducing environmental and safety risks (particularly those near local communities).

Early days, as still looking at small pilot projects at this stage. There is a large backlog so not yet making large dent.

The MRF and the Abandoned Mines Program is building capacity for the future and starting to look at programs now—clarifying the mines and features to rehabilitate.

Total legacy is as yet unknown so cannot know if the fund will be able to solve everything and if the rate is right.

http://www.dmp.wa.gov.au/Environment/Mining-Rehabilitation-Advisory-4989.aspx

#### Relevant data and literature

Abandoned mine sites are defined in the Department's *Abandoned Mines Policy*, <sup>44</sup> and can be described as:

areas of land impacted by former mining activities for which no individual, company or organisation can be held responsible for rehabilitation.

There are around 190,000 abandoned mine site features in Western Australia, although that estimate is based on an incomplete database. <sup>45</sup> It is noted that there is potential for confusion with this number – as a single abandoned mine may include a number of features (such as shafts, rock dumps and buildings).

The Abandoned Mines Program was established in 2015 and is funded by the MRF. To date, four legacy sites have been identified as pilot sites for early remediation. Two of them were remediated during 2016–17: the Black Diamond pit lake (near Collie) and the Pro-Force plant site (near Coolgardie). Remediation at the two remaining pilot sites—the Bulong nickel tailings storage facility (near Kambalda) and the Elverdton dumps (near Ravensthorpe)—is proposed to commence shortly. The strategies of t

Under section 8(2) of the MRF Act, the remediation of legacy mines is funded from interest collected on the fund. It is expected that \$3.1 million in interest will be collected in 2017–18,<sup>48</sup> which indicates that interest is being collected at around 3.35%.

If the MRF continues to both collect and draw funds at its current rate, it will reach a total of around \$300 million in 2023–24. At a total value of \$300 million, if the fund continues to collect interest at 3.35%, it will collect around \$10 million per annum, which could be spent on legacy sites (as well as research or administration).

In the Abandoned Mines Policy<sup>49</sup> the phrase *Rehabilitate an abandoned mine site* refers to the range of activities undertaken to physically rehabilitate an abandoned mine site in order to be (physically) safe to humans and animals, (geo-technically) stable, (geo-chemically) non-polluting/non-contaminating, and capable of sustaining an agreed post-mining land use.

The full remediation of a site to facilitate post-mining land use is seen as a secondary objective and would not be undertaken in all cases. An example where full remediation would not be undertaken is where there is a potential resource base that may allow responsible mining to recommence; after an abandoned site is made safe, secure and non-polluting.

### Conclusion

The MRF appears to be taking early steps towards this outcome, but real progress will not be seen for some years due to the number of legacy sites and the nature of the fund. The current pilot sites may provide DMIRS and industry with useful learnings while the MRF is in its early phases.

Department of Mines and Petroleum, Abandoned Mines Policy, January 2016, online.

DMIRS, Abandoned Mines Program, January 2016, online

<sup>&</sup>lt;sup>46</sup> DMIRS, Mining Rehabilitation Fund: yearly report 2017, p. 7online.

DMIRS, Mining Rehabilitation Fund: yearly report 2017, p. 7.

DMIRS, Mining Rehabilitation Fund: yearly report 2017, p. 6.

<sup>&</sup>lt;sup>49</sup> Department of Mines and Petroleum, *Abandoned Mines Policy, January 2016*, online.

# 5.8.2 Mines incentivised to apply good environmental practice and undertake progressive rehabilitation

### Consultation responses

As noted in Section 5.1, there was some discussion about whether incentives for progressive rehabilitation were due to the MRF or other elements of the policy and legislative framework to regulate the environmental impacts of mines, such as mine closure plans and environmental reporting.

Most respondents felt that the framework as a whole provided some incentive to undertake progressive rehabilitation, but that the impact of the incentives on behaviour would depend on other factors:

The MRF creates a small incentive but the outcomes will be subject to broader influences.

Mine site closure plans will be the main driver of rehabilitation—if progressive or not will be dictated in the plan at the start of operations. Those obligations under the mining lease will be the driver and main incentive.

The mine site closure plan is a greater incentive than the payment of a levy.

Two possible mechanisms for mines being incentivised by the MRF to undertake progressive rehabilitation identified by stakeholders were as follows:

- 1. The annual calculation and reporting of the mine's RLE may focus mine management on this total and encourage the management to minimise the liability estimate.
- 2. Payment of the levy may encourage mines to reduce their levy payments by rehabilitating some areas. While it is noted that undertaking rehabilitation would increase costs in the short term, the potential reduction of future levies may incentivise some mines, particularly those that have a long future life.

#### Relevant data and literature

The *Mining Rehabilitation Fund yearly report* provides data collated from MRF annual reports on the area of 'disturbed land' and of 'land under rehabilitation' on Mining Act tenure. The 2017 report shows a marginal increase in the area of land under rehabilitation over the period from 2013–14 to 2016–17, during which the percentage increased from 23.0% to 23.5%. The total area of land over that period is shown in Figure 4. It can be seen that both disturbed land and land under rehabilitation increased in the most recent year, which appears to indicate a higher level of total activity.

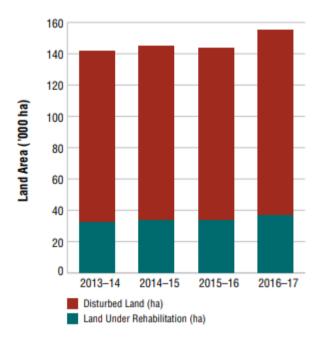


Figure 4: Total 'disturbed land' and 'land under rehabilitation' at 15 September 2017

Source. DMIRS, Mining Rehabilitation Fund: yearly report 2017.

#### Conclusion

The data may indicate a slight increase in progressive rehabilitation on Mining Act tenure, but the movement is relatively small and so a longer timeframe is needed to show whether this is a longer term trend or a short-term 'blip' in the data.

It is clear that the MRF fits within a broader legislative framework for the environmental management of mines, and there is uncertainty about whether the MRF directly contributes to this outcome, and whether it is the key contributor to the outcome.

### 5.8.3 Increasing industry expertise in rehabilitation

As noted in Section 5.1, there was some discussion about whether the MRF would result in increasing industry expertise in rehabilitation and whether this outcome was attributable to the MRF, rather than to the development of mine closure plans.

#### Consultation responses

Some stakeholders indicated that there was a gradual increase in rehabilitation expertise in Western Australia which can be attributed to the MRF. However, several other stakeholders considered that, while there has been an increase in expertise for developing mine closure plans, that did not translate into on-the-ground expertise. Some representative comments were:

Slowly increasing expertise in rehabilitation

Not really seeing a level of expertise improving—only a handful of people in WA have real expertise. There is however an increasing level of closure planning expertise as closure planning guidelines now require plans to be updated every three years. Planning for closure is improving.

Good experience in the planning side but not sure that there has been that much increase in technical expertise.

Expertise is driven by the mine closure plans and the main incentive is cost—doubt the MRF helps this in any way.

A small number of stakeholders stated that a benefit of the MRF and Abandoned Mines Program was increased levels of expertise within DMIRS in relation to rehabilitation and mine site closure.

### Relevant data and literature

No additional data that estimates the scale of the mine rehabilitation industry or identifies a trend in industry activity was identified.

#### Conclusion

There was general agreement from stakeholders that there is increased expertise in preparing mine closure plans; however, there were conflicting opinions on whether that is also resulting in increased industry expertise in rehabilitation.

### 5.8.4 Low barriers to entry for small and mid-tier mines

#### Consultation responses

Almost all stakeholders indicated that they consider that the MRF has created low barriers to entry for small and mid-tier mines:

Certainly are lower barriers for smaller companies and they don't want to return to the Unconditional Performance Bonds system.

Makes WA attractive because it is simple and easy to calculate—it's not the true cost of rehabilitation but it is not supposed to be (contrast with the system that Queensland is looking at which is 100% bonds plus the levy—bond is calculated as the 'worst case scenario' around rehabilitation cost and so can be enormous (cripplingly so).

Have lowered the barriers in terms of capital barriers (such as lithium with mainly small players).

Low barriers but combined with other regulatory tools it doesn't make it easier to be a 'fly by night' operator.

The only exceptions were stakeholders representing quarries extracting basic raw materials. This group considers that the RLEs are excessive for many quarries and that the MRF levy may be greater than the amounts that some small or medium-sized quarries were previously paying for unconditional performance bonds.

#### Relevant data and literature

The department's 2011 *Preferred options paper* set out a financial analysis that compared the cost of obtaining and maintaining bonds, which can then be compared with the levies under the MRF.

The MRF levy is based on 1% of the RLE and can be compared to the modelling of the previous costs of bonds.

Before the introduction of the MRF, unconditional performance bonds tended to be based on less than 25% of rehabilitation and closure costs. The *Preferred options paper* set out a financial analysis for funding under unconditional performance bonds and estimated that:

- for a high-risk company, the annual cost was 2.7% of the total rehabilitation and closure liability; and
- medium-risk companies would pay between 2.4% (for cash-backed bonds) and 1.8% (for asset-backed bonds) of the total rehabilitation and closure liability.

This modelling therefore indicates that the costs to medium- and high-risk companies are lower under the MRF than the predicted costs under the unconditional performance bonds system.

#### Conclusion

The MRF appears to deliver a lower barrier to entry for small and medium-sized mines, particularly in comparison to the requirement for unconditional performance bonds. The only exception is the quarrying industry which commented that for some quarries the MRF levy may be greater than the amounts previously paid for unconditional performance bonds.

### 5.8.5 Government liability for abandoned mines is progressively reducing

#### Consultation responses

Most stakeholders commented that there was some progress in reducing government liability for abandoned mines:

Government liability/community liability—is progressively reducing but it is a very long game.

Progressively reducing—had nothing before and slowly increasing. (So better than under UPB [unconditional performance bonds] system).

Lowered, but really a longer term outcome.

Two stakeholders expressed more caution:

Sort of. Small changes, however, some gains have been countered by the abandonment of Ellendale (and still some risks at other mines).

Not sure if government liability is reducing yet.

Several stakeholders commented that legislative provisions to take unconditional performance bonds still exist under the Mining Act and that the handing back of bonds before the fund had reached a significant value had increased short- to medium-term government liability for abandoned mines.

DMIRS clarified that bonds had been retained for some mines on their entry into the MRF. This appears to highlight a misconception amongst stakeholders, which DMIRS may wish to clarify. Despite this misconception, our impression is that these stakeholder responses should be interpreted as "more bonds should have been retained on the introduction of the MRF".

Some commented that government liability could be further reduced by selectively reintroducing bonds for high-risk mines. However, it was acknowledged that if bonds were now sought when a company showed signs of financial distress that could 'tip the company over the

edge'. Taking this into account, some criteria for requiring bonds were suggested, such as requiring them from mines using polluting processes or from mines producing products with high levels of price volatility.

#### Relevant data and literature

Due to the similarities of this output with the statutory objective, the relevant data and literature are considered in Section 5.2.

#### Conclusion

There is strong stakeholder support for the MRF collecting funds that will be able to be directed to abandoned mines. However, there is caution because the fund is still in a growth phase, and some stakeholders commented that this created a short-term risk for the government if multiple mines were to be abandoned before the fund reached a sustainable level.

Several stakeholders commented that it may have been better if bonds had been returned more selectively on the basis of a tighter set of criteria. More importantly stakeholders commented that bonds may be used more in the future in order to facilitate the progressive reduction of government liability.

## 5.9 Other comments provided

### 5.9.1 Stakeholder comments

At the end of each discussion, stakeholders were given an opportunity to make any other comments or observations, and a range of such comments was made. In Table 4, stakeholders' comments are grouped under common topics and are summarised with selected quotes. The topics are listed broadly in order of the frequency at which they were raised and the time spent discussing them.

Table 4: Summary of other comments provided

Topic	Selective quotes
Completed rehabilitation	MRF levies for on-going rehab are an issue, as DMIRS has not released any guidelines to what constitutes finished / completed rehabilitation—in areas where extended dry periods cause vegetation to almost die off and recover in rainy periods, there is a feeling that rehab is complete but DMIRS is not signing off on completed rehab and this causes complaints from clients. Disturbance in river beds should not be included as 'rehabilitated' in the table, as nature rehabilitates this when the river floods. There is a different perception of what some parts of the industry see as rehabilitation and what the DMIRS sees.
	Can't relinquish land—so feel there might be a disincentive for best environmental practice when putting together the closure plan.
	Some mining lease holders are paying for rehab even though it is several years since the rehab was done—DMIRS not signing off in a timely fashion. There is still a perception that the MRF only pertains to the present reporting year.
Exemption of mines operating under State Agreements	State Agreements—should at least report so have full coverage of risk (and state not know extent because they don't report). As not contributing would only be using interest.
	Lack of State Agreement information (and big footprints) leaves funding risks quite high.
	State Agreements are out of date—needed in 1970s but not now.  State Agreement issues. What will happen if a State Agreement mine goes under? Resentment from
	smaller miners—feel they do a lot of the heavy lifting.
	Coal mines are a significant risk to the state—but operate under a state agreement Act
Abandoned Mines Program	Concerned about transparency once have the funds—how are they dispersed etc. The Regulations have nothing to say about abandoned mines—feels that might be worth noting that 'DMIRS develop guidelines on how policy will be developed for abandoned mines with consultation'
	Nothing in the legislation says the money has to be spent.  Setting up an enduring fund to cover an amorphous and uncertain liability—so needs to be clever as to how it is spent.
Management of fund values	A further issue discussed during the design of the Mining Rehabilitation Fund was the concept of determining a financial 'cap' for the fund It was notionally suggested that when the fund reached a level of \$500 million consideration should be given to reducing the annual levy and/or provide a discount to companies with proven sound environmental performance.
	When the model hits a certain target, will there be a soft landing? If rates drop, do the companies that have contributed for 20 years cease contributing or have a reduced levy?
MRF as innovative policy	Feels that MRF should be marketed better so that industry can also go out and 'sell' it as well as the community. Other jurisdictions are looking at the model.
	Queensland developing own fund/levy system at the moment. Seems to be bank guaranteed bond managed by Queensland Treasury, which then charges the company an annual fee.
Compliance and audit	Suggest less audits and more deeply, rather than large number which are probably a bit superficial. Government is maturing as a regulator, <i>but</i> compliance monitoring needs to be improved.
Transparency	Process is transparent—and can see all the data.
	Concerned about transparency and process if questions asked about the decisions made (at a later date).
	Insufficient detail is publicly available on the nature or eligibility of payments from the fund. A more transparent and accountable reporting regime should be implemented.
Levy	Could consider offset contributions for 'in kind'—industry rehabilitates nearby legacy sites and take that off against the levy.

## 5.9.2 Conclusion

Of the topics raised at the conclusion of each discussion, the most frequently raised concern appears to be DMIRS's perceived difficulty in signing off on completed rehabilitation of mining operations and cease the ongoing levy payable on "land under rehabilitation".

This topic is closely related to a topic raised in relation to fees (section 5.6), and a conclusion and recommendation relate to this concern.

# **Abbreviations**

DMIRS Department of Mines, Industry Regulation and Safety

DMP Department of Mines and Petroleum

FPC Forest Products Commission

MRAP Mining Rehabilitation Advisory Panel

MRF Mining Rehabilitation Fund

MRF Act Mining Rehabilitation Fund Act 2012

MRF Regulations Mining Rehabilitation Fund Regulations 2013

PIR Post-implementation review

RIS Regulatory Impact Statement

RLE Rehabilitation liability estimate

UPB Unconditional performance bond

# Appendix 1: Consultation slides

# Mine Rehabilitation Fund Post Implementation Review Stakeholder Interviews

May/June 2018
Marsden Jacob Associates

# Post Implementation Review

# **Post Implementation Review**

- Requirement of WA Government (Better Regulation Unit) following a Ministerial exemption on the MRF Regulations
  - Bit like a retrospective Regulation Impact Statement
  - Bit like an evaluation of the program

# Scope of review

## The review will cover both:

- The Mine Rehabilitation Fund &
- funding of Abandoned Mines Program

## The review will not:

- Replace the need for a 10 year statutory review
- Consider exemptions to MRF (e.g. State Agreement Acts)

# Stakeholders being approached

- Mining Rehabilitation Advisory Panel
- Peak industry bodies (AMEC / CME / APLA / CCAA)
- Government (EPA Services in DWER)
- Industry consultants (lawyers and environmental consultants)
- Peak community groups (such as environmental defenders' office, CCWA) and
- Tenement holders & tenement consultants

# Objectives in the Act

# The Act states:

The main purpose of the Fund 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.

2<sup>nd</sup> reading speech proposed the MRF would:

- reduce ... the state's exposure to financial risk relating to the rehabilitation of abandoned mines.
- diminish the annual financial operating burden on resource industry participants, which strengthens Western Australia's attractiveness as an investment location.
- 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.

# Suggested program logic

Inputs

- All tenements register for MRF
- Each tenement provides annual report setting out disturbance data by 30 June (can be submitted any time in the year)
- Tenements with a rehabilitation liability estimate > \$50k pay a levy based on 1% of liability

Intermediate outputs

- DMIRS audit of ~25% of annual reports
- Annual reports stored in EARs 2
- MRF program and fund produce an annual report

Outputs

- Good data / intelligence on mines allowing better regulation
- Money goes into the MRF
- Interest from MRF fund spent on high priority legacy abandoned mines
- MRF monies spent on abandoned mines that have contributed to the program

Short/ medium term outcomes

- Abandoned mines program reducing risks posed by legacy sites
- Mineral exploration and mining companies are incentivised to apply good environmental practice and undertake progressive rehabilitation
- Increasing industry expertise in rehabilitation
- Low barriers to entry for small & mid-tier mines
- Government liability for abandoned mines is progressively reducing

Long term outcomes

- Improved environmental outcomes
- Improved economic outcomes
- Improved social outcomes

# High level evaluation questions

- 1. Do you think the suggested Short term outcomes are right (any edits or omissions)?
- 2. To what extent is the MRF meeting its statutory objective? (see slide 5)
- 3. To what extent does the MRF achieve or encourage each of the short term outcomes:
  - Abandoned mines program reducing risks posed by legacy sites
  - Mines incentivised to apply good environmental practice and undertake progressive rehabilitation
  - Increasing industry expertise in rehabilitation
  - Low barriers to entry for small & mid tier mines
  - Government liability for abandoned mines is progressively reducing
- 4. Are there any unintended consequences of the MRF (good or bad)?
- 5. Does the MRF align well / assist DMIRS with the broader regulation of mines (e.g. safety, environment, royalties)

# Questions on the Regulations

- Do you think the current processes and systems are suitable?
  - a) Complexity & transparency of processes
  - b) Application times
  - c) Duplication of information
  - d) Any delays imposed?
- Is there any scope for simplification, improvement or deregulation in relation to the MRF Legislation and its administration by the Department?
  - If so then how and what savings would this result in?
- 3. Do you think the fee levels & thresholds are appropriate?
- 4. Do you think the role and membership of the Mine Rehabilitation Advisory Panel is appropriate?
- 5. Any other comments or questions?