



Government of **Western Australia**  
Department of **Mines and Petroleum**



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THE MINING REHABILITATION FUND  
– THE FIRST TWO YEARS

## SUMMARY

In 2012, in response to an increasing potential unfunded liability, the Western Australian government passed the *Mining Rehabilitation Fund Act 2012*. The intent of this Act was to introduce an annual levy on tenements covered under the *Mining Act 1978* based on the area of disturbed land. The fund generated from these levies could then be used to rehabilitate mining sites where all other options to ensure rehabilitation had been exhausted. The fund could also be used to rehabilitate abandoned sites which, in Western Australia, number over 10,000.

The Mining Rehabilitation Fund (MRF) was implemented on 1 July 2013 for an initial voluntary year. It became compulsory on 1 July 2014. The incentive for tenement holders to voluntarily enter the fund was the opportunity to have unconditional performance bonds held against their tenements retired.

During the voluntary year, \$7 million was collected in voluntary levy payments and \$280 million in bonds was retired. A further \$26 million has been collected in the first compulsory year and to date over \$1 billion in bonds has been retired, providing a significant injection of funds into the Western Australian economy in 2013 and 2014.

Implementation of the MRF has been a major success story for Western Australia and the Western Australian Government. This report provides a background to the MRF and its development and explains some of the reasons for its success. A major driver has been strong support from industry, in particular industry groups such as the Chamber of Minerals and Energy, the Association of Mining and Exploration Companies and the Amalgamated Prospectors and Leaseholders Association.

## INTRODUCTION

On 1 July 2013, Western Australia introduced a new form of mining security to replace a system of unconditional performance bonds (UPBs) that were not considered to be providing an adequate level of surety to government in the event of a mine being abandoned prior to rehabilitation. The new system imposes an annual levy to be paid into a mining rehabilitation fund. The levy does not absolve tenement holders of the requirement to properly rehabilitate their sites, however it will provide government with funds to cover costs when required. In addition, interest generated from the fund can be used to rehabilitate Western Australia's legacy abandoned mine sites.

## BACKGROUND

Mining securities were first introduced in Western Australia in the late 1980s for mining operations regulated under the *Mining Act 1978*. The intention of the mining securities system was to provide sufficient security to cover any rehabilitation costs that might otherwise need to be borne by government in the event that a mine site is abandoned.

These securities were held in the form of bank guaranteed UPBs against individual tenements. The bond rate was calculated using a table describing different rates according to the "footprint" disturbance area of proposed activities on a mine site as outlined in an approved mining proposal.

However, the level of security provided by the UPBs did not keep pace with the increasing costs and standards of rehabilitation. In 1999, it was estimated that, on any particular site, the UPBs represented approximately 80 per cent of the total cost of rehabilitation. By 2008, this had dropped to around 25 per cent (DMP, 2010). The Western Australian government was recommended to gradually increase bond rates, over a period of six years, so that securities would approach the full cost of rehabilitation and mine closure. Bond rates received their first increase that year.

The then Minister for Mines and Petroleum halted further implementation of this recommendation when the global financial crisis hit later that year and requested that alternative options to enhance mining securities be investigated.

The Department of Mines and Petroleum (DMP) began researching policy options for mining securities. The aim was to find a mining securities arrangement, to be applied under the *Mining Act 1978*, that would be considered a best practice model for environmental rehabilitation while at the same time minimising long-term contingent liability for both government and industry. The following principles were used as a guide:

- mining securities continue to encourage operators to apply good environmental practice, including progressive rehabilitation and reporting, and to comply with all legal obligations under the *Mining Act 1978* for exploration, mining and mine closure;
- the mining securities framework is clear and workable, and is supported by a robust compliance system to ensure operators do not avoid their mine closure obligations;
- the mining security is secure and immediately accessible by the government, and its administration is cost effective;
- the quantum of mining securities does not unnecessarily deter investment in the State's mining sector, ensuring Western Australia remains competitive in attracting investment to the mineral exploration and mining sector;
- the calculation of a mining security is flexible, being commensurate with environmental risk; and
- the application and relinquishment processes for mining securities are transparent, predictable and applied equitably (DMP, 2010).

A discussion paper was released in December 2010 outlining some policy options, including the recommendation that was on the table of increasing the UPBs to full cost recovery.

At that time, the total mine rehabilitation and closure costs for all mines operating under the *Mining Act 1978* in Western Australia was estimated to be between \$4 billion and \$6 billion (actual data did not exist as there was no requirement for mine sites to report estimated closure costs to DMP). On 1 July 2013, the total value of UPBs held by DMP was \$1.2 billion.

This estimation of total closure costs did not include around 25 mining projects administered under State Agreement Acts (these tend to constitute larger mining operations).

Industry didn't like UPBs because bank guaranteed unconditional performance bonds can require considerable set up and maintenance costs for operators (particularly for smaller companies). Companies may be required to provide either cash or asset backing for the full amount of the bond in addition to paying direct costs such as annual fees and legal costs.

For smaller operators that were required to provide cash backed bonds, they were required to pay the bond upfront, and then pay the rehabilitation costs, before applying to have their initial bond retired and the cash returned to them. This essentially required the value of the bond to be paid up front twice.

Other problems with the system of UPBs also surfaced. The bonds were attached to individual tenements rather than applied on a project basis (which often cover multiple tenements). Bonds, when called in by government, could only be used on the tenement(s) to which it/they applied and were not transferable. UPBs could not be used to cover any cost other than rehabilitation; they did not take into consideration administrative or transport costs (i.e. the cost to transport staff or vehicles to a tenement to undertake rehabilitation works). As DMP (2010) stated:

Bonds can be called-in where companies have gone into administration or have failed to fulfil their mine site rehabilitation obligations. This power, however, is rarely exercised due to the inadequacy of most bonds to provide the funds required by the government to carry out the necessary site works. Where a mining lease is on-sold, rehabilitation obligations are transferred from one tenement holder to another. In cases where a break in tenure has occurred, new tenement holders are not required to accept liability for previous disturbances, except where new operations impact prior workings.

In 2011, the Auditor General produced a report "Ensuring compliance with conditions on mining" and stated that without effective monitoring and enforcement of the conditions placed on mining, the State risked losing financial, economic and social returns as well as gaining potential long term liabilities (Auditor General, 2011). There was a contingent liability on the Western Australian government of approximately \$3.5 billion and rising.

Throughout 2011 and 2012, DMP undertook a series of reviews, culminating with the WA government passing the *Mining Rehabilitation Fund Act 2012*. The MRF Act allowed for the establishment of a Mining Rehabilitation Fund (MRF) and an advisory panel as well as the process to declare a mine site as being abandoned and, therefore, eligible for MRF moneys to be used for its rehabilitation. It also set out the mechanism to impose an annual levy on tenement holders regulated under the *Mining Act 1978*.


## The Mining Rehabilitation Fund

The MRF levy is based on the average expected cost of rehabilitation of different types of land disturbances, multiplied by the “fund contribution rate”, which was set at one per cent.

Land disturbance types were placed into five separate categories, each with its own unit rate (see Table 1). Tenement holders must report areas of disturbance against these land disturbance types, in hectares, to at least two decimal places. The total rehabilitation liability estimate, formed from the sum of each of these categories, is then multiplied by one per cent to determine the amount of levy owed.

TABLE 1 - Land disturbance types and unit rate for the MRF

Item	Description of infrastructure or land	Unit rate
1.	Tailings or residue storage facility (class 1) Waste dump or overburden stockpile (class 1) Heap or vat leach facility Evaporation pond Dam – saline water or process liquor	\$50,000
2.	Tailings or residue storage facility (class 2) 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 Diversion channel or drain Dam – fresh water	\$30,000
3.	Low-grade ore stockpile (class 2) 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	\$18,000
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) Topsoil stockpile	\$2,000



All tenement holders are required to report on the areas of disturbance by 30 June each year, with data that is valid for the year ending 30 June.

If the rehabilitation liability estimate comes to \$50,000 or less (so that the levy would amount to \$500 or less), no levy is payable. Many prospectors and small exploration projects fit into this category so that these tenement holders pay no levy.

The MRF legislation also requires that reporting the areas of disturbance, invoices and other correspondence related to the MRF occur electronically. DMP has built a comprehensive IT system so that all tenement holders can register and submit their disturbance data online.

There are approximately 22,000 live Mining Act tenements in Western Australia. These were bundled up into tenement holder groups using data from eMiTS – the Mineral Titles online system. Any tenements that were owned by the same individual, group of individuals or company, and had the same postal address, made up one tenement holder group. In total, there were 3550 tenement holder groups.

## IMPLEMENTATION

The Mining Rehabilitation Fund regulations were gazetted on 21 June 2013. While the MRF was not due to be formally implemented until 1 July 2014, DMP set up the MRF to begin on 1 July 2013 with entry during the first year being voluntary. The voluntary year was provided following industry request.

Given the regulations were only gazetted in June, there was considerable pressure on DMP to set up the MRF system so that it could be launched on 1 July 2013.

In April 2013, a letter was sent to all tenement holder groups advising them of the MRF and requesting they register through the DMP website. This registration was to include an email address that would be used for all future correspondence.

A second letter was sent in October 2013 to remind those that had not yet registered that it was compulsory to register, and log area disturbance data, by 30 June 2014.

Tenement holders began registering in May 2013. At this stage, the IT system was still in development and rates for each of the types of disturbance had not yet been finalised. Stage one of the system was completed ready for testing a couple of days before the end of June 2013.


### Voluntary year

Considerable interest had been expressed by mining companies in voluntarily entering the MRF early. However, DMP did not know how many companies would actually enter from 1 July 2013. The incentive to enter and pay a voluntary levy in the first year was that, once paid, any bonds on the mining company's tenements would be retired. Given the financial climate that existed in Western Australia's mining industry in June 2013, this incentive was strong.

In order to facilitate the processes of MRF registration, disturbance data submission, invoicing, receipt, the removal of conditions relating to UPBs on the tenements and bond retirement, relevant staff from across DMP (in particular the Environment Division and Mineral Titles) were relocated to one room for three months. A target of having the whole process completed within 30 business days was set.

Leading up to both the voluntary and the compulsory periods, DMP ran information and training sessions, workshops and services in Perth and in regional and remote locations to help all tenement holders with the online registration and reporting processes. Staff also assisted tenement holders and tenement management companies by telephone.

In early June 2013, an external audit was undertaken to determine the readiness of the system and make recommendations for improvement.



On Friday 28 June 2013 three companies “live” tested the system. Two of the companies were able to complete the data submission process, receive the invoice and pay the levy within a couple of hours. The other company completed its submission over the weekend – there were a large number of tenements – and paid the levy on 1 July 2013. All three companies had their bonds retired on 3 and 4 July 2013.

Feedback was positive:

Just a quick note of thanks again to you and your team at DMP for the work done on implementation of the MRF system. It was great to meet some of your team members today and to be able to say thanks in person for making this important regulation come to reality. From our point of view the data entry went smoothly, the MRF system is stable, the process is easy to follow, the outcomes reconciled to our expectations and the generation of the payment request came through without a hitch. Have a lovely weekend safe in the knowledge that you are well prepared for go live on Monday!

(Company 1)

Even with +200 tenements to enter, the number of errors/hangs/timeouts was very low, well done to all.

(Company 3 – that worked over the weekend)

Companies that wished to voluntarily enter the MRF and pay an extra levy during the first year were required to go through an additional check process before being allowed to enter the MRF. Any company under administration or owed royalties would not be eligible to have their bonds retired, and therefore did not enter the MRF during this voluntary period. Any companies that had received stop work orders, directions to modify, had been fined during the previous two years or had tenements expiring during the voluntary period were also not automatically eligible for bond retirement. However, most of these companies were able to enter once an explanation had been given. For example, most of the fines were in relation to late provision of tenement expenditure reports, and this was not a barrier to entry into the MRF.

Despite the additional checks that were required, at times necessitating further correspondence with the tenement holders and executive-level approval to allow entry to the MRF, DMP averaged three business days from the time the tenement holders submitted data to the time the UPBs were retired. The process was well managed and, rather than a massive influx of companies seeking early entry on 1 July, numbers were steady and remained so during the voluntary year.

DMP had expected that, after the first couple of months, numbers of people wishing to enter voluntarily would dwindle, given the advantage of early entry (getting any UPBs retired) would decline. From 1 July 2014 all companies would be required to pay their levy and most would be eligible to have their UPBs retired once the first year's levy had been paid.


Instead, numbers remained steady at a few applying to enter each day, which greatly facilitated the workload.

## Compulsory year

The MRF became compulsory on 1 July 2014. This meant that all tenement holders needed to lodge their disturbance data by midnight on 30 June 2014. This was always going to be a challenge, as some tenement holders, in particular prospectors, did not have access to computers. Some had never used a computer before.

During May and June 2014, DMP staff helped many tenement holders either over the telephone or at DMP head and regional offices. In many cases, this assistance included setting up email accounts for them. Staff were not legally permitted to enter the data for the tenement holders, however they could talk them through the whole process.

The following feedback is typical of many accolades that were received during implementation of the MRF. This one came from the family of “Frank”, who was described as a part prospector, part pensioner.



Frank visited your Perth offices yesterday seeking a remedy for the MRF issue. He was greeted at reception and, through working with one of your team, was able to resolve the issue very quickly. Frank let me know that he was made to feel comfortable throughout the process and he was glowing in his praise that [the staff member] immediately understood the (1980s v 2014 communication divide) challenge and worked really hard on his behalf to make it happen.

During the final two weeks of June 2014, DMP staff sent email reminders to tenement holders who had not completed lodging their data. These emails were targeted depending on the status of the submissions: those that had not yet been started, those not completed, those that had completed in the voluntary year but not yet completed for the first compulsory period, etc.

By the deadline of midnight 30 June 2014, 96.5 per cent of tenement holders had registered and successfully reported their environmental disturbance data. The prospectors group recorded the highest level of compliance, at 98 per cent.

In early July 2014, infringement notices were sent to 1183 tenement holders; legislation required that the infringement notices be sent by 21 July 2014. However, a letter accompanied each notice advising that the fine (\$4000) would be withdrawn if the tenement holder completed the disturbance data during July 2014.

DMP staff continued to contact tenement holders by email and telephone throughout the period July-September 2014, with a second reminder letter going out in August to those that had not yet completed their submission. DMP did not want to fine tenement holders during the first year, so all effort was made to contact the holders. This was a difficult process, as many tenement holders did not update their contact details with DMP. Research on the whereabouts of tenement holders was extensive in attempts to avoid infringing them.

MRF staff (in the Environment Division) also assisted holders in completing Application to Amend forms and submitting documents to the Mineral Titles Division.

In the end, disturbance data was not provided for 31 tenements (out of 22,000) – an amazing result for the first compulsory year. The Fines and Enforcement Registry is now following up these 31 cases. The remaining 1152 infringement notices were withdrawn.

*By March 2015, only four tenement holder groups had not paid the first compulsory levy. They were being followed up, and may have unconditional performance bonds either retained or reimposed on their tenements.*

## The success of the MRF


Developing the proposal for the Mining Rehabilitation Fund (MRF) required extensive consultation and engagement over several years. During this consultation and engagement period, a committee was formed comprising representatives from across industry, government and non-government industry bodies.

The MRF has received many accolades that attest to the effective engagement that was undertaken as part of implementing this new policy to safeguard the environment.

The Association of Mining and Exploration Companies (AMEC), in its March 2015 Explorer Newsletter, reported the following:

*“Minister Marmion acknowledged that DMP’s innovative Mining Rehabilitation Fund project, with strong partnership with AMEC, was one of the Department’s biggest environment reforms...,” and*

*“The MRF has been highly successful and can be used as a model for other States and territories”.*



The fact that AMEC is celebrating its pivotal role in initiating the MRF is perhaps the best endorsement for successful stakeholder engagement that can be achieved.

The President of the Amalgamated Prospectors and Leaseholders Association, Mike Lucas, said in the Kalgoorlie Miner on 21 July 2014:

*“The department has gone above and beyond to ensure leaseholders are registered. The new system is much better – it’s far more equitable”.*

One tenement holder provided feedback to DMP saying that he had managed to “stuff his MRF submission up”, but had been helped over the telephone by a member of the MRF team. He went on to say how well the department had done with its online system, calling it “foolproof”.

The MRF has also had some outcomes that were not initially anticipated. First, it has become apparent that it encourages early and ongoing environmental rehabilitation of mine sites operating under the Mining Act as this reduces the levy payments. It is also a win for the environment.

During the voluntary year, some companies advised DMP that at least some of the cash freed up from having their bond retired would be used to undertake mine site rehabilitation. In one case, a new sea wall was to be constructed.

Western Australia also now has an accurate picture of the mining footprint on tenure administered under the Mining Act. This data is publicly available through the DMP website and, in the future, will be able to show changes in disturbance areas and types over time. At present, it shows that the area of disturbance on tenements granted under the Mining Act is 1,130km<sup>2</sup>, with an additional 318km<sup>2</sup> of land under rehabilitation.

Western Australia’s land area is 2,529,875km<sup>2</sup>, which means that mineral exploration and mining activities on Mining Act tenure currently impact less than 0.05 per cent of Western Australia.

On 19 November 2014, following another audit of DMP, the Auditor General tabled in Parliament a report “Ensuring compliance with conditions on mining – follow-up”. The report stated that the situation, as audited three years earlier (Auditor General, 2011), had significantly improved. The report went on:

The introduction of the Mining Rehabilitation Fund has been the most high profile of the changes. This is a new approach to reducing the State’s exposure to the liability of poor rehabilitation of mine sites. It should, over time, provide greater protection to the State than the previous system of bonds. It will also provide funds to progressively rehabilitate the large number of abandoned mines across the State, and I will remain interested in the extent to which the fund enables that long term legacy to be addressed.

Overall, these changes evidence a commitment to improvement across agencies. Many of the changes will take time to bed in and for their full impact to be assessed. Nonetheless, Parliament can be much more assured now than three years ago that the State has a reliable view of compliance with conditions, will be better protected from liabilities, and is securing the returns it seeks from mining.

An auditor from the Office of the Auditor General commented:

*“It was an interesting audit for me, as the MRF is an innovative idea. Certainly thought provoking and logically intricate. I found your team to be very dedicated and committed to making this work as intended.”*

The MRF is world-first policy with no other system like it. Since its development, several jurisdictions in both Australia and overseas have expressed interest in implementing a similar system.





## THE FUTURE OF THE MRF

At present the fund has over \$33 million in it and it is projected to increase by around \$26 million a year, not including interest earned.

The costs of administering the MRF and any funds used to rehabilitate legacy abandoned mine sites must come from interest generated through the MRF. The capital will only be able to be used for new abandoned sites, once all other options to have the site rehabilitated have been exhausted (tenement holders continue to be responsible for rehabilitation, even after they no longer own the tenement – unless that responsibility has been passed onto the new tenement holder).

The MRF advisory panel will be responsible for considering priority mine sites requiring rehabilitation, using both interest generated through the fund and capital when necessary.

The Western Australian abandoned mine database lists some 10,000 abandoned mine features and an abandoned mine policy currently being finalised will provide a framework for these features to be considered and prioritised for rehabilitation. The reasons for rehabilitation, and how sites will be rehabilitated, will not depend wholly on the environment. Heritage, health and safety will also be important considerations. Four sites have already been selected for rehabilitation and they will assist in determining both the cost and the most efficient ways to rehabilitate sites by third parties.

## REFERENCES

Auditor General, 2011. Ensuring Compliance with Conditions on Mining, Perth.

Auditor General, 2014, Ensuring Compliance with Conditions on Mining – Follow-up, Perth.

Department of Mines and Petroleum, 2010. Policy options for mining securities in Western Australia: preliminary discussion paper, Perth.

Price Waterhouse Coopers, 2013. Mining Rehabilitation Fund unit rates review,

