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Critical elements in implementing fundamental change in public environmental policy: Western Australia's mine closure and rehabilitation securities reform

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Abstract

Development of public policy is a key role of government. While there is a framework for Australian governments to uphold when developing public policy, this alone will not guarantee good policy development. This research critically explores the policy development process of the Department of Mines and Petroleum in Western Australia for mine closure and rehabilitation securities reform, where significant costs for mining companies, and large environmental and community legacies were at stake. Fundamental change from use of individual bonds to a central Mining Rehabilitation Fund resulted; offering financial advantage for mining companies and government alike, and a mechanism for rehabilitation of legacy abandoned mines. Critical elements in the policy development process were: (1) openness in clearly articulating the policy problem at the outset, (2) retaining focus on the policy scope relevant to jurisdictional level, (3) use of trusted experts especially for contentious aspects of the reform agenda, (4) commitment to stakeholder engagement throughout, and (5) acknowledging and managing uncertainties through transparent and consultative data gathering processes. Attention to these matters enabled an innovative and effective mine closure and rehabilitation policy solution to be implemented by the Government of Western Australia that is unique in the Australia, and perhaps the world.

Keywords: public policy; policy development; mining securities; mine closure; environmental policy reform.

Introduction

Poor or inefficient policy making can result in unnecessary costs being borne by the community or industry, unnecessary adverse impacts on the environment, community, or economy, and lost opportunities. Public policy is essentially meaningless without implementation, and the scope of public policy is dimensionally related to the issue, circumstances, and environment of the relevant government.

This research considers the role of local policymaking regarding consensus and the selection of policy solutions within the limited capacity of institutions to select policy alternatives (cf. Lui et al. 2009). By building on Beem's (2009) discussion of bureaucratic autonomy in relation to the major policy change, we examine a major reform of domestic mining securities in Western Australia (WA) between 2008 and 2014. Details of the process followed and policy changes are detailed. In short, the key policy change was a shift from unconditional performance bonds (UPBs; which are a globally-common mining security mechanism in the form of bank guarantees that approximates the cost of environmental rehabilitation for each mineral tenement being paid by a mining company), to a central Mining Rehabilitation Fund (MRF). Rather than advocating a prescriptive policy approach, a key element was retaining focus on the policy problem at hand and building political support and consensus through trust between the administering Department of Mines and Petroleum (DMP) and industry and other stakeholders. Engaging known and trusted external experts in relation to developing policy innovation in complex and contentious spheres with high financial risk was also central to the adopted approach. A major complicating factor was the lack of empirical data of the eventual fiscal impact of a range of options; including the eventually-selected global-first in terms of the mining closure and rehabilitation.

The aim of this article is to identify aspects of the policy approach adopted by the DMP that appear to have been critical to the success of the mine closure and rehabilitation securities policy reform, and explore what was unique in the policy development process. Our research findings may be of interest to professionals interested in innovative approaches for premature closure and abandonment of mine sites specifically, as well as processes for public environmental policy reform. We start by

contextualising the WA mine closure and rehabilitation securities reform in relation to public policy making guidance from the literature and Australian government practice. We then explain the policy reform process with respect to environmental mining securities in WA that led to establishment of the MRF, along with reflections on the critical elements that contributed to successful development of this public policy.

Public policy making

The obvious policy solution available to the DMP would have been to modify the existing arrangements for UPBs already in place. The aim of UPBs is to make the financial risk to the State Government of the private mining operation negligible. However, in practice the value of UPBs tends to be less (sometimes much less) than the actual cost of mine site rehabilitation if the company were to be unable to pay as a result of financial troubles. The Office of the Auditor General (2011) reported that the WA government was found to be exposed to significant financial risk arising from inadequate rehabilitation of closed mine sites, with the bonds in operation in 2011 covering less than 25% of the predicted cost of rehabilitation for any given site. While ‘obvious’, the policy reform solution to simply increase the UPB amount to cover at least 100% of the potential tenement liability would have created large direct and indirect costs for companies. Further, the large upfront nature of payment is a major barrier to new investments from small and medium companies, and do not solve the problem of historical abandoned mine-sites, or provide a solution for any impact outside the tenement. We believe that pursuit of the obvious policy solution would have resulted in policy failure. The willingness of the DMP to be open to alternative ideas from stakeholders and to take a fresh approach to public policy making was an important starting point to realise an ultimately innovative solution to mining security exposure, which has now been suggested for adoption in other national and international jurisdictions (O’Kane 2014; Department of Environment and Heritage Protection 2014).

Even in the well-regarded literature, there remains ambiguity regarding the definition of ‘public policy’ (Althaus et al. 2007). There are various forms of policies generated by governments, including: political policies (communicated by political parties usually before elections), administrative policies (relating to specific operational issues), statutory policies (formally provided for in legislation), and public policies (formally adopted, usually at senior levels of government, on the intent, opinion, and/or objective of government regarding a certain issue). The focus of this research is on public policy. There has been specific research undertaken on processes and issues relating to the evaluation of public policies (Gunningham & Grabosky 1998). A recurring theme in policy analysis is that the process of developing public policy is critically important in determining whether the policy (and implementation) is ultimately successful. In response, governments throughout Australia have adopted several processes to improve the rigour of policy development within their agencies. These include:

- establishing centralised support - various jurisdictions have developed centralised policy development expertise (e.g., the Australian Government has established the Office of Best Practice Regulation);
- standardising processes - many jurisdictions have some form of compulsory regulator impact assessment for significant policies/legislation;
- building capacity in government - many organisations aim to build policy development capacity within government (e.g., the Australian New Zealand School of Governance, ANZSOG);
- jurisdictional reviews - many jurisdictions have processes to reassess agency service delivery and alignment of government policies (e.g., efficiency reviews by State Auditors General).

These processes are in addition to the policy rigour that may result from Government and Parliamentary processes (especially in the consideration of legislation). They are generally formalised processes, and reflect the desire by governments to have more effective policies developed.

In practice, it is important for public policy development to remain a pragmatic and flexible process, enabling government authorities and agencies to implement timely services and responses to

emerging issues, regulatory paradigms, capacity constraints, political dynamics, and community demands (Fox et al. 1998; Curran 2015). The Australian Policy Handbook (Althaus et al. 2007) is a comprehensive and pragmatic public policy framework for the Australian States and Territories. The framework generally includes the stages of problem definition, options analysis, identification of preferred option, development of implementation strategy, and then implementation and evaluation. It is intended that the communication and engagement of stakeholders occurs across these stages. In the analysis that follows, we document those aspects of the policy reform approach by DMP that appear to have been critical to the success of the policy, and what was different from the process compared with the usual policy development processes.

Policy reform of environmental mining securities in Western Australia

Environmental mining securities are one of the regulatory mechanisms employed by governments around the world that provide confidence to both the government and the community that satisfactory mine rehabilitation and closure will be achieved. The main aim of environmental mining securities is to ensure that sufficient funds are available for government to rehabilitate mine sites in the event of operators not fulfilling their mine rehabilitation and closure obligations. In the late 1980s, environmental mining securities were introduced into WA through amendments to the principal governing legislation, the *Mining Act 1978*. The form of environmental mining securities adopted by WA was primarily UPBs in the form of bank guarantees. The UPBs operated through the DMP as the administering agency, which determined the required value of the UPB, and requiring the company to supply a UPB to that value. The form of the UPB is a contract between a financial institution of appropriate standing and the Minister for Mines, which essentially provides for the financial institution agreeing to pay the Minister for Mines the value of the UPB if the Minister demands it at any time. If the Minister demands the payment from the financial institution, it is then up to the financial institution to seek recovery of costs from the mining operator. This is the usual way that UPBs operate throughout the industry.

When environmental mining securities were introduced in the late 1980s, it was intended that the value of the UPB for each mineral tenement fully covered the costs of environmental rehabilitation. This approach meant that the WA government's financial risk for each site was almost negligible. By 2012, there were nearly 5,000 tenements with a form of UPB out of a total of more than 23,000 live mining tenements in WA; a major global mineral-intensive jurisdiction. For a variety of reasons, including the workload required to review the value of all UPBs in a timely fashion, the value of UPBs for each tenement did not keep pace with the actual costs of mine site rehabilitation. This meant that while the aggregate value of UPBs were around AUD1 billion by 2012, it was estimated that on average this represented less than 25% of the total cost of mine site rehabilitation across WA¹.

The problem that this presented was that in the event that a mine site became abandoned, and the government 'exercised' the UPB (demanded payment from the relevant financial institution), around 75% of the cost of rehabilitating the mine site would have to be met by the government through consolidated revenue. For this reason no money had been spent by DMP on on-ground rehabilitation of abandoned mines in WA for more than a decade. This was recognised as an untenable position by the WA government. In 2008, a review of environmental mining securities was conducted by the Department of Industry and Resources (now the Department of Mines and Petroleum, DMP). The recommendation was the retention of the UPBs as the most suitable financial instrument for mining securities in WA, and that UPB rates should be steadily increased to 100% of total rehabilitation and mine closure costs, and be phased in over a period of six years. In adopting this recommendation, the first stage of bond increases was enacted in 2008. However, in December 2008, the Minister for Mines ('the Minister'), in consideration of the impact of the global financial crisis, set a moratorium on the further implementation of the recommendation of phased increases in UPBs rates until the end

¹ DMP estimated the total mine rehabilitation and closure costs for all mines operating under the *Mining Act 1978* in WA was between AUD4 billion and AUD6 billion in 2012.

of December 2010. The resulting tension for the government was that the UPBs were of such low levels that they could not be effectively used as to rehabilitate abandoned mine sites. However, the economic environment meant that mine sites were already suffering financial stress, which would be exacerbated by UPBs even at a fraction of the total rehabilitation cost.

The *Mining Rehabilitation Fund (MRF) Act 2012*

As a consequence of the prevailing predicament, the DMP commenced a further review of the environmental mining securities system in 2009. The outcome of this process was a recommendation to discontinue the reliance on UPBs as the sole form of environmental mining securities.

It is worth observing that the two separate policy reviews of mining securities in WA undertaken within a few years by the same portfolio, developed very different recommendations. This situation in itself raises the question as to why such different policy solutions were recommended. The scope of the review undertaken between 2006 and 2008 included investigating alternative financial models, and consideration of trust funds. However, it concluded that no working model could be found. It is the view of the authors that the different outcomes were, in this case, the result of one main factor: the change in policy inertia and the advantage taken by the WA government in response.

As noted above, the UPBs are a common form of mining security, and had been applied in WA for more than twenty years. While it was recognised that the UPB approach had certain deficiencies, they did have the advantage of being well-understood by the industry and the government. Therefore, any policy reforms would tend to seek to modify the existing approach as the option of least cost, disruption and perceived risk. However, between the review published in 2008, and the review commenced in 2009, the financial implications of the GFC had become more pronounced on the WA economy. This emerging economic environment led to significantly increased costs to mining company operators to post UPBs. The short term costs of UPBs, and particularly full cost UPBs, was considerably greater by 2009 than had been the case between 2006 and 2008. It is the authors' view that this situation was a 'trigger' for the WA Government to change the policy inertia that related to mining securities, and directly led to there being an increased interest in exploring structural changes to the UPBs. This observation in itself suggests that dealing with the inevitable policy inertia is an important early stage in the development of sound public policy.

UPBs would be replaced with a centralised special government fund. Eventually the WA Parliament would pass the *Mining Rehabilitation Fund Act 2012*, establishing what would be known as the Mining Rehabilitation Fund (MRF). The MRF is a pooled fund, with revenue into the fund generated by contributions through annual, non-refundable compulsory industry levies upon tenement holders according to the environmental disturbance existing on a tenement. The MRF is a special purpose account in accordance with the *Financial Management Act 2006*, and is vested under the control of the Chief Executive of DMP. The interest generated from the money in the fund is not directed to consolidated revenue and remains within the MRF. The *MRF Act 2012* specifically stipulates that money out of the fund can only be spent on certain activities; that the interest generated from the fund can be used by Chief Executive to pay for costs associated with administering the Act, and on any historical abandoned mine site. While the principal in the fund can be used on any mine site abandoned after the commencement of the *MRF Act*. The MRF is expected to receive at least AUD25 million annually from levies, and the DMP estimate that the principal could grow to around AUD500 million.

The policy implemented in WA for environmental mining securities appears to be globally unique. The policy approach is receiving praise from industry (Cervantes et al. 2014), and is also receiving considerable attention from other Australian (O'Kane 2014; Department of Environment and Heritage Protection 2014) and international jurisdictions (Morrison-Saunders 2014a; 20014b). The DMP have published the outcomes of detailed assessment of the advantages and disadvantages of the MRF (Department of Mines and Petroleum, 2011); however, the most significant outcomes are:

- the financial risk to the WA government, and therefore the community, has been substantially reduced (see Office of the Auditor General, 2014) - the projected value of the fund and the annual revenue will enable any demands from mine site abandonment to be adequately addressed;
- the costs to industry are substantially reduced - modelling undertaken by DMP has indicated that the direct and indirect costs of the MRF are approximately 10% of that of full cost UPBs;
- a perpetual funding arrangement is in place for historical abandoned mines - almost all countries with an established mining industry have the challenge of mines that have been historically abandoned without being rehabilitated; the MRF provides a permanent funding source for abandoned mines which did not previously exist;
- the level of publicly available information and data related to the environmental footprint of mining has been substantially improved - as a result of the implementation of the MRF, the DMP is publicly releasing each year the reported environmental footprint and areas under rehabilitation for all *Mining Act 1978* tenements, which is the most comprehensive and current mine data reporting ever achieved in WA.

Overview of the DMP public policy reform process

In accordance with the Australian Policy Handbook (Althaus et al. 2007), the DMP established a formalised industry liaison committee (the Mining Securities Industry Liaison Committee, MSILC) comprising representatives of the key mining industry associations, which convened on 16 occasions. During the course of the reform process, DMP published and consulted on three documents.

1. Issues paper (December 2010): within six months of formally commencing the review process, DMP published for public comment a “Preliminary Discussion Paper on Policy Options for Mining Securities in Western Australia”. This paper was a ‘green paper’ that described the context, policy problem, and the initial appraisal of possible solutions. A total of 19 submissions were received from industry, government and non-government organisations, and a response to comments was subsequently published by DMP.
2. Preferred policy paper (March 2011): following the ongoing consultation and policy analysis, DMP released for public comment the “Western Australia’s Mining Security System: Preferred Option Paper”. This report was a ‘white paper’ that broadly described the conclusion of the policy analysis, and presented the centralised fund as the preferred approach. The report described the policy framework for the new mining securities fund (at that time called a fidelity fund, later to be called the Mining Rehabilitation Fund). A total of 13 submissions were received from industry, government and non-government organisations, and a response to comments was again published by the DMP (Department of Mines and Petroleum, 2011). This relatively low number and supportive nature of submissions, especially given the substantial proposed policy change, indicates that even by this stage, the WA government had obtained broad support from stakeholders.
3. Draft legislation (July 2012): following the final policy analysis, and the necessary approvals by the Government, the draft legislation was prepared and public consultation was undertaken on the ‘exposure’ draft of the Mining Rehabilitation Fund Bill. Public consultation on draft regulations under that Act was also subsequently undertaken (February to April 2013).

On 15 August 2012 the Mining Rehabilitation Fund Bill was introduced into Parliament, and on 5 November 2012 the WA Parliament swiftly passed the *Mining Rehabilitation Fund Act 2012*, with regulations being gazetted on 21 June 2013².

Discussion and analysis of the public policy reform process

² available at www.slp.wa.gov.au

There are a number of factors relating to the environmental mining securities issue that was particularly politically complex, including the likelihood of involving significant costs for mining companies, and that it related to environmental and community legacies regardless of the outcome. That the WA government adopted a significant policy change in this environment was unlikely, however, this is what transpired. The new MRF arrangements have addressed much of the environmental mining securities issues faced by WA. The legislation was supported by the industry sector, and within 12 months of commencement, the WA Auditor General confirmed the success of the policy and its implementation (Office of the Auditor General 2014). In our analysis of the policy reform process we have identified five critical aspects, which if otherwise managed, could have severely compromised the process and its passage into legislation. These are outlined below.

1. Initial focus and engagement on problem definition

It is the experience of the lead author that there are various reasons why government entities do not dedicate sufficient efforts to the identification of the problem that a government's public policy seeks to solve. These include where there is: (1) a predetermined desired solution, (2) a reluctance to quantify the extent of the problem for fear of attracting criticism, (3) a lack of agency capacity in policy development, or (4) policy inertia (a general desire to avoid dramatic changes in policy). The DMP did not have predetermined view of what model for environmental mining securities was the best for WA, and there was a significant contingent (and actual) financial liability facing the WA government that was described through the consultation process. The approach that DMP took in defining the policy problem, was to firstly articulate the principal objective of environmental mining securities, identify the principles that would describe an effective system (evaluating principles), and then describe the current situation against these objectives and principles. This was developed through stakeholder consultation. Early in the process, DMP confirmed that the purpose of environmental mining securities was: "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 evaluating principles and the assessment of the policy options were subsequently published by DMP in the Preferred Options Paper (Department of Mines and Petroleum, 2011). It is the experience of the lead author that the identification of the policy problem was not straightforward, and the process of clarifying the principle objective of environmental mining securities uncovered different views within government, industry, and non-government. The process identified some surprising commentary from stakeholders. For example, some stakeholders believed that environmental mining securities were a form of penalty, while others believed that they had a broader application beyond environmental obligations. In addition, many stakeholders were unaware of the scale of the inadequacy on the UPBs at that time. Therefore, the legitimate openness and identification of the policy problem to all stakeholders was critical to the later delivery of appropriate policy solutions, by demonstrating the need for an honest analysis, evaluation and reconsideration of options (Riege & Lindsay 2006).

2. Retaining focus on policy scope

As noted by Beem (2009) and Liu (2010), the authors agree that the success in delivering the policy reform was significantly aided by keeping a keen focus on the domestic policy problem: an important element of building consensus was an active engagement at the local/domestic level rather than national or international jurisdictions. Throughout the consultation process, stakeholder contributions included aspects that were initially outside the scope of the reform. While some aspects were able to be incorporated into the reform (e.g., the issues relating to historical abandoned mines), the scope of the reform remained the key policy problem. Essentially, the DMP did not try to solve all of the various aspects relating to mineral and energy resources closure and decommissioning throughout WA. It is probable that if all aspects were attempted to be addressed, the environmental mining securities reform process would not have concluded, and the ability to partition aspects out of scope significantly assisted the delivery of the reform outcomes. As an illustration, through the process there were two recurring matters raised by stakeholders that were outside of the scope of regulatory capture under the environmental mining securities: (1) the coverage of the petroleum activities, and (2) the coverage of mineral extractive activities that were regulated outside of the Mining Act (such as those

regulated under State Agreement Acts and/or local government). Without dismissing these suggestions, the approach of DMP was to defer the policy approach for these issues recognising that concentrations of political power in these areas would likely engender a major influence difficult to manage in a relatively open and democratic process (Stiglitz 2002). Instead, the legislation was prepared to allow expansion to encompass State Agreement Act sites if later agreed to by the government, and committed to a separate process to investigate the issues relating to environmental petroleum securities.

3. Use of trusted experts

It is not uncommon for government agencies to engage external subject matter experts to assist in policy reforms. The DMP engaged various experts, and the authors suggest that there were two aspects critical to this engagement. Firstly, expertise was engaged for aspects of the reform process that were particularly contentious. This included modelling the financial impact of the various policy options (and the status quo), and assessment of outstanding mining rehabilitation liabilities across WA. Secondly, and considered to be more important, those experts were known to, and trusted by, stakeholders prior to their engagement by the DMP). Within the context of high levels of mistrust in political institutions at this time, it was clear that trust would be a key element in mitigating some of the potential for eroding the confidence of the key stakeholders in the policy reform (Banks 2014). The authors propose that this trust is the key element in the process, and is a fundamental component of the DMP garnering political leverage rather than engaging in the international policy arena per se, as described by Beem (2009).

4. Commitment to the engagement process

The authors believe that the commitment by the WA government to stakeholder engagement throughout the reform process was critical to its success, and without consultation and engagement it is unlikely that reform would have been delivered. An example is that the option of a fidelity fund (later defined as the Mining Rehabilitation Fund) was not originally suggested by DMP (Western Australian Parliamentary Debates 2012). Clearly then, had DMP simply sought to roll out its own original policy solution rather than be open to new ideas arising from stakeholders consulted, then the end result likely would have been policy failure. The active consultation and engagement to a genuine solution process included multilateral government briefings and engagements, industry forums, and regional 'road-shows'. Within this process, DMP delivered a commitment to formalised consultation at the three key stages of policy development (issue, options, preferred solution). At each stage there was also transparency to the stakeholder engagement (e.g., responses to submissions were published by DMP).

5. Uncertainties throughout the reform programme

There were a number of uncertain aspects of assessment for which there was little empirical data (but considerable anecdotal information). One of these issues was the total contingent liability in WA. DMP published that the total mine rehabilitation and closure costs for all mines operating under the *Mining Act 1978* in WA was estimated to be between AUD4 billion and AUD6 billion. This is a large range; however, DMP was clear in advising stakeholders that detailed data did not exist, as there was no requirement for mine sites to report estimated closure costs. While DMP undertook efforts to better determine the total mine closure and rehabilitation costs (e.g., engaging trusted experts to undertake selective audits), DMP determined that the large range was acceptable if this range was subsequently applied to determining the adequacy of the preferred model and the regulatory impact assessment. This aspect alone could have derailed the reform, although dealing with this uncertainty was assisted through stakeholders also understanding the data limitations. Another area of uncertainty was the quantification of direct and indirect financial impacts arising from the various environmental securities options being considered. This uncertainty arose as mining companies are not required to report (either publicly or to the DMP) the level of financial records that would enable detailed analysis to be undertaken. This was a critical issue as one of the key drivers for the policy reform process (and one of the evaluating principles) was the desire to minimise costs to operators. Therefore, the DMP employed a trusted external expert to assist in this process, however the department also:

- consulted with industry on the model for estimating direct and indirect costs;
- provided a downloadable macro for companies to undertake their own analysis of the impacts on their circumstances; and
- offered that industry associations provide individual companies the option of assisting with modelling (when companies were reluctant to share financial information with the government).

A further uncertainty was no predefined timeframe for conclusion of the policy reform process. This is considered unusual, as the importance of establishing clear stages and milestones for reform programmes to all stakeholders with clarity around expectations are generally considered important in policy reform processes (Althaus et al. 2007; Blackburn 2014). It is therefore of some interest that the environmental mining securities reform process did not have established milestones, yet was still successful, retained the broad support of stakeholders; and was relatively swift considering the scale and significance of the reform³.

Conclusion

Development of public policy is a necessary and vital role of government. Processes for doing so matter; especially in situations where high risk financial and environmental resources are at stake. Environmental mining securities are an issue across the world, and many jurisdictions have identified failings within their policies. In this article we analysed the mining securities policy reform approach recently adopted in WA to identify critical success factors in the public environmental policy making process. The broad steps of policy development used by DMP are consistent with the broad framework of international and national development; however, the process used by DMP was adapted to the situation, and to some may be considered unusual and potentially contentious. We believe the basic rationale is that adopting pragmatic ways of dealing with uncertainty is important in the policy reform process to ensure momentum is maintained. An example is the different options being considered by the DMP would have had different delivery timeframes, and the establishment of set timeframes at the process commencement was not realistic. As such, unusually the timeframes and milestones were not as important as building trust with stakeholders and retaining a commitment to the engagement process. The engagement of known and trusted external experts by DMP (external and trusted by both to the government and industry) was determined to be a key element to deal with contentious issues. An additional contentious issue was that there was little empirical data regarding the actual cost to industry and also of the liability to the WA government.

The genuine desire by the WA government to define and address the problem at hand (rather than implement a predetermined solution or include aspects deemed to be important but out of scope), engendered considerable confidence in the public policy development process itself. As a result, several major outcomes were achieved, including:

- the financial risk to the WA government and the cost to industry has been substantially reduced;
- the amount paid into the MRF for each tenement is based on the disturbed area and condition which provides an incentive for continuous minimal site disturbance and maximum rehabilitation;
- the existence of a perpetual fund for historical abandoned mine rehabilitation;
- availability of funds to government to rehabilitate mine sites in the event of operators not fulfilling their mine rehabilitation and closure obligations; and,
- an unprecedented level of publicly available information related to the environmental footprint of mining in WA (down to the level of each hectare disturbed, rehabilitated, and detailed conditions).

The DMP's public release of details of the MRF and the reported environmental footprint and areas under rehabilitation for all tenements in WA annually, provided confidence to both the government

³ The reform commenced in July 2010, and the legislation was passed in November 2012.

and the community that satisfactory rehabilitation and closure is achieved. Overall the DMP example demonstrates the value of a contextually sensitive, adaptive, participatory, yet pragmatic approach to policy development that engages with stakeholders (without artificial policy delivery deadlines), using five principles that encapsulate the critical aspects outlined in the policy making process: (1) openness, (2) focus, (3) trust, (4) commitment, and (5) acknowledgement and management of uncertainty.

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