

REHABILITATION BONDS FOR THE MINING AND EXTRACTIVE INDUSTRIES

Position Paper

Minerals & Petroleum Division

2004



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ISBN 1741469163

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REVIEW OF DPI POLICIES FOR MANAGEMENT OF REHABILITATION BONDS FOR MINING AND EXTRACTIVE INDUSTRIES

Position Paper

1 INTRODUCTION

The following paper sets out the Department of Primary Industries response to submissions received on the discussion paper "Review of NRE's Policy on the Determination and Application of Rehabilitation Bonds for Mining and Extractive Industries" 2002.

2 BACKGROUND

The current review of rehabilitation bond policies is intended to determine:

- how impacts on the extractive and mining operations could be reduced while still maintaining a
 high degree of assurance that rehabilitation costs would not ultimately be borne by the wider
 community, and
- how Department systems for management of bonds could be changed to reduce the amount of government resources required without incurring increased financial risk to the community.

The discussion paper sought stakeholder views on the type, setting and reviewing of rehabilitation bonds by:

- outlining the legislative context for the setting and reviewing of rehabilitation bonds for mines and quarries in Victoria, the Government's policy context, and the Department's current rehabilitation bond procedures;
- summarising rehabilitation bond procedures in other Australian jurisdictions and overseas;
- outlining some of the options for:
 - the type of bonds, and;
 - setting and reviewing rehabilitation bonds, and
- seeking other options and comments.

A number of detailed responses were received from industry, government and environment groups.

The following Conclusions have been developed after consideration of the submissions and analysis of Department needs and the Government policy context.

3 FUNDAMENTAL PRINCIPLES

The Department's policies on rehabilitation bonds should be based on clear, agreed principles.

The following principles have been developed based on government policy and the responses received, and form the basis for the conclusions identified in this report:-

- Bonds must ensure the cost of rehabilitation is borne by the company;
- Bonds must cover the actual and foreseeable liability based on the works required by the approved Work Plan;
- Bonds should be reviewed as appropriate to ensure they are adequate;
- Bonds should encourage good environmental performance and progressive rehabilitation;
- Bonds must encourage operators to fulfil their legal responsibility to undertake adequate rehabilitation;
- Bonds must be secure and easily retrievable;
- Bond policies should be applied consistently;
- Bonds should be appropriate to the liability at a site and therefore should be assessed on a site-by-site basis wherever possible; and
- Bond policies should wherever practical be consistent with other interstate jurisdictions

4 REHABILITATION BOND PROPOSALS

4.1 General Issues

(a) Quarrying versus Mining

Many respondents to the discussion paper argued that the extractive and mining sectors should be treated differently in respect to bonds. While the issues of public risk and environmental management are principally the same for the mining and quarrying sector, it is accepted that a strong case can be made for applying different bond management practices to these two industries. Extractive industries do not impose the same degree of risk on the community in relation to rehabilitation liability. There are a number of mitigating factors:-

- quarries often operate for very long periods, sometimes many decades while mines are often worked out more quickly;
- the rate of advance is usually significantly slower in quarries than in mines;
- quarries produce low value products but at relatively stable prices whereas many minerals are price volatile;
- some mines use toxic reagents in their processing whereas this does not generally occur in the quarry sector;
- most quarries are located near urban areas and the hole in the ground can provide a valuable community asset in terms of land fill or other community uses; and
- experience has shown that financial failures are more likely to occur in the mining sector.

The Department should have consistent policies for bonds irrespective of the industry sector. However, in view of the fundamental differences between the industry sectors, it is considered that some objectives of the review could be met by applying different management practices to the extractive industry sector as opposed to mining. Potential areas for differentiation include;

- The frequency of regular reviews Given the lower risk level, it might be appropriate to extend the period between automatic reviews. The Department considers this could be done for many extractive industry sites with relatively little increase in risk given the slow rate of work and the fact that serious problems would probably be identified during normal safety or environmental auditing or in response to complaints. In many cases it is thought review periods could be extended to as much as 10 years, although the actual periods should still be determined by a risk assessment process. NB The Department recognises that in some cases (eg at the time of site establishment) it would not be in the interests of the operator for the Department to assume too long a time period for assessment of maximum liability. The Department would need to exercise judgment in such cases.
- Acceptance of greater variation between assessment and actual bond. The Department has a policy of not pursuing bond increases for small titles where the discrepancy between assessed liability and the actual bond falls below a certain threshold. This could be seen as being at odds with the principles set out in section 3. However, it recognises the reality that bond variations have a cost to both the Department and operator and this must be weighed against the benefits accrued from the change. The Department accepts that in some cases the cost is greater than the benefit and considers the current approach is justified. Furthermore, it is considered appropriate in the case of extractive industries to apply this concept more widely. As the Department is less likely to have to meet the liability itself, the risk profile for the extractive industry sector could be adequately addressed provided bonds are within an acceptable range of actual liability. An allowable variance of 20% up to a maximum of \$20,000 is recommended. In other words if the bond review indicated a liability no more than 20% higher than the existing bond and this represented an increase of no more than \$20,000, there would be no change. This approach would reduce the number of bond transactions for work authorities and thereby reduce the costs and resource demands on both industry and the Department without any significant increase in risk to the community.
- Implementation of a start-up bond One extractive industry body responded to the discussion paper arguing that the initial bond applied by the Department at the time of grant of a work authority was a serious impediment to potential new operators. The problem arises from the fact that current Department policy requires submission of a bond sufficient to cover the maximum liability over a period of several years. At commencement of the operation, there may be a period of several months or longer where the proponent is engaged primarily in site preparation, construction, overburden removal and extraction of lower grade near-surface material. This means the proponent must commit a large

sum to the bond at a time when no income has yet been received and cash flow may be negative. The Department considers this is a real potential problem for smaller operators and may represent a barrier to entry for new operators. The impact of the initial bond could be much reduced if the Department adopted a policy of setting a smaller initial bond and then increasing the amount progressively. Unfortunately this would require significant resources if bonds were re-assessed progressively using current bond review systems. The Department considers that initial bonds should be assessed as at present, but the Department could allow small operators to submit only a proportion of the assessed amount prior to commencement followed by the balance at a pre-determined interval. Such a scheme could operate effectively if it was not unduly complex and provided the Department could decline to enter the arrangement in cases where the risk was considered to be too high. It is recommended that where this approach is appropriate the Department adopt a policy of requiring 25% of the assessed bond as an initial security. The remaining 75% should be submitted at the end of the first twelve months.

Conclusion (i)

The Department should adopt separate practices for management of extractive industry bonds as opposed to mining. Key areas of differentiation should be:

- Reduced frequency of review for extractive industry sites,
- Increased allowance for variation between assessed liability and actual bonds, and
- Implementation of a staged start up bond for suitable extractive industry proposals.

(b) Exploration

The current standard bond requirement is \$5,000. None of the discussion paper submissions commented adversely on the operation of bonds in this area. However, the standard bond amount has been in place since the introduction of the current Act in 1991 and it's value has been eroded by inflation. In addition the Act has been amended in 2000 to introduce low impact exploration as a defined activity. No bond is required for low impact exploration so the bonds that are held are now directed at more substantial liabilities than was typically the case previously. The Department considers the standard amount should be brought up to date to ensure continued community confidence in the exploration sector. Changing the standard amount immediately for all titles under current legislative requirements would be administratively complex and is probably not necessary. However, a change could be implemented progressively by introduction of the new amount for new titles at the time of grant and existing titles at the time of renewal. An amount of \$10,000 is considered appropriate taking into account the change in value since the current bond level was set and the level of bond imposed by other States. The Department also considers that the current legislative requirements for consultation in regard to exploration bonds are onerous given the generally low level of risk evident over the period since introduction of the Mineral Resources Development Act 1990. The current consultation requirements of the Act make it difficult for the Department to review bond amounts for exploration when more intrusive works are proposed. It is recommended the provisions of the Act be reviewed at the earliest possible opportunity.

Conclusion (ii)

The consultation requirements of the *Mineral Resources Development Act 1990* should be reviewed when the opportunity arises to make revision of exploration bond amounts more practicable in future.

Conclusion (iii)

A new standard bond amount for Exploration Licences should be applied to new applications and renewals as they arise. It is proposed to increase the standard amount to \$10,000.

(c) Private Land versus Crown Land

Submissions on the discussion paper gave no indication of support for a differential approach to bonds on the basis of land type. The establishment of bonds based on site specific rehabilitation plans results in different bond outcomes from site to site in any case. Some extractive industry operators believe private landowners should bear the responsibility for rehabilitation liabilities. This approach did not receive support from most submitters. One submission suggested that companies on private land might have sufficient incentive to rehabilitate in order to maximise the private benefits from the future sale of the land. While standards of rehabilitation on private land are principally a matter for landowners, it is also true that the community has a valid interest in the outcomes in relation to public safety, amenity and potential impacts on the wider environment. Weakened bond requirements for private land operations would make enforcement of standards in such areas more difficult and would introduce very significant transitional problems for landowners who had concluded agreements with operators based on the existing legislation. In addition there would be practical problems for any government wishing to enforce rehabilitation requirements on a third party.

Conclusion (iv)

The Department's policy should remain non-discriminatory with respect to land tenure.

(d) Environmental Performance Discounts

Both industry and other submissions argued against discounting bonds on the basis of performance. It was generally agreed that bonds should always cover the rehabilitation liability. Industry argued that incentives to minimise impacts could be provided in other ways (eg. licence conditions and expenditure requirements) while one environmental group suggested that bonds should be increased to penalise poor performing operators. There is a risk that performance discounts or penalties would result in discrimination between large operators with significant track records and smaller, single operation companies. Discounts could also create a barrier to entry for new operators who were unable to demonstrate a record of past performance.

Conclusion (v)

Disconnection of the bond assessment from the liability by use of discounts is undesirable and could reduce incentives for good rehabilitation. The Department should retain current policies in this respect.

4.2 Types of Bond

(a) Industry Insurance or Levy Based Scheme

Little support was apparent for industry wide insurance or levy-based schemes in the submissions received.

One extractive industry body argued in favour of an industry run scheme but no respondent has been able to demonstrate an example of such a scheme in operation. On the contrary, the mining industry argue that it would be difficult to agree on a universal production unit on which to base a levy for the minerals sector. The Department is aware of a hybrid scheme combining industry funding with some insurance coverage designed to meet a similar need for the municipal landfill sector in Victoria. However, this scheme covers a relatively small number of operators who are fairly uniform in size and is not considered to be directly transferable to the extractive industry.

The South Australian government operates a levy scheme for rehabilitation liabilities for extractive industries in which a fund accumulates and can be drawn upon for rehabilitation works. It is noted the South Australia government are also reviewing their funding arrangements for rehabilitation in the extractive industries. The levy scheme is favoured by some industry operators but disliked by others because accountability for rehabilitation would be removed from specific companies and applied across the whole industry. This approach tends to favour lower performing operators. At Boral Lysterfield Quarry the *Extractive Industries (Lysterfield) Act* 1986 establishes a fund based on progressive contributions from the operator and is drawn upon for rehabilitation expenses. However, the Lysterfield example has proved to be administratively complex and would not be practical for wider application involving hundreds of sites.

For any levy or insurance scheme to be successful it would need to be simple and secure for the government and ultimately the community. The funds would need to be adequate and readily accessible to the Department, and the scheme would need to be self-funding. No existing model seems to fit these requirements. Adoption of these schemes would also require implementation of an alternative mechanism to encourage good environmental performance and progressive rehabilitation in order to overcome the disconnection between the bond and the actual liability. In addition it is considered unlikely any such scheme could meet the requirements for security against liabilities in the mining sector where liabilities can change more rapidly and the operating environment is more volatile.

Conclusion (vi)

The Department has not been able to identify any good working model for an industry based insurance or levy scheme at present. It is recognised that there is interest in further developing such

concepts and further consideration will be given to any practical proposal put forward by industry in the future.

(b) Bank Guarantees, Insurance Bonds and Company Bonds

There was general agreement in the submissions that Bank Guarantees remain the most appropriate financial instrument for the establishment of bonds. It was argued bank guarantees are a commercial arrangement that is common in a wide range of industries. Other forms of security such as insurance bonds secured by individual companies on a site by site basis or company guarantees were considered feasible by some respondents, but no strong case was made for their adoption and the Department does not consider they offer the same degree of security as a bank guarantee.

It was suggested in one submission that open ended guarantees are unsuitable for large mines with long lives as banks prefer to provide guarantees with a fixed life. It is acknowledged that the Department requirement for an unconditional guarantee may make it harder for some mines to obtain a bond. However, allowing guarantees to be date limited would impose significant additional risk on the community and the Department considers this cannot be justified.

Another feature of the Department's bond policies that attracted comment was the fact that bank guarantees could not be released progressively to provide funds for rehabilitation. The current system requires that rehabilitation works be completed and successful before guarantees are released. In effect, this requires operators to find the money twice, first to submit a bond and then to pay for the works. This is a result of the use of the bank guarantee which is an inherently inflexible instrument. This problem could be partially overcome if operators submitted additional bonds (where required) as separate guarantees. These could then be released progressively when rehabilitation was in progress. The disadvantage to this approach is that in some cases it may result in higher overall bank charges. Levy or fund based systems as described previously could possibly allow for withdrawal of progressive amounts to refund the cost of rehabilitation works provided the disadvantages of such a system could be overcome. While the shortcomings of the bank guarantee are acknowledged, the Department believes no other instrument has been demonstrated to provide the security provided by such guarantees. The Department should therefore continue to require the use of bank guarantees.

Conclusion (vii)

The Department should continue to require provision of bonds in the form of bank guarantees (subject to the further recommendation in relation to cash bonds).

(c) Cash Bonds

The discussion paper elicited little comment on the merits of accepting bonds as cash. However, it has become apparent in recent months that the Department policy of not accepting cash bonds is considered

onerous by some members of the small mining sector. Many holders of small mining or extractive tenements regard the fees associated with establishment and maintenance of a bank guarantee as a significant impost. The Department's policy position on this matter has been developed based on past experience when Department finance systems were not well able to handle the holding in trust of small amounts of cash. It has also been influenced by the view that the holding of cash bonds effectively transfers the administration costs associated with bonds from the licensee to the Government.

The Department's systems for financial management have changed significantly in recent years however, and the Department believes the first of these arguments is no longer sufficient to justify the continued imposition of the Bank Guarantee system on small operators.

Preliminary Department estimates of the administrative costs associated with establishment and ongoing management of a cash bond trust account system indicate that the overall cost may not be prohibitive. An initial cost would be incurred for design and establishment of the systems and processes required to ensure good management of the funds. Following establishment there would be costs associated with each transaction and an annual running cost for audit, systems maintenance and other requirements. A further more detailed evaluation is required to quantify the costs, identify means of cost recovery and verify the feasibility of operating a cash bond system. Provided the costs can be met, and the proposal is practical, the most significant concern with re-introduction of cash bonds would be the potential for high demand from existing licensees for change over from bank guarantees to cash with the consequent short term impact on Department administrative resources. This could be addressed with appropriate introductory arrangements.

The Department believes the re-introduction of cash bonds may be practicable but cannot be implemented unless provision is made for recovery of the ongoing costs. Further detailed costing is required to establish the transaction costs. The Department will continue this work. However, amendment of Regulations to provide for the required fees or charges may delay any proposal for this change.

If cash bonds were re-introduced it is not considered necessary to extend this facility beyond small mines and quarries and for this purpose it should be adequate to accept cash only for amounts up to \$10,000.

Conclusion (viii)

The Department should implement a more detailed evaluation of the practicability and cost of reintroduction of cash bonds. If appropriate the Department should then develop a project plan for establishment of a cash bond system.

Conclusion (ix)

In line with current cost recovery principles, any proposal for cash bonds should include measures to ensure cost recovery. The exact nature of any fees or charges and their amount should be determined

by a specific costing exercise in consultation with the Department's finance group. (It is recognised that it may not be possible to set fees until an opportunity arises for amendment of Regulations)

Conclusion (x)

If implemented, the proposed cash bond facility should be planned so as to minimise the impact on Department administration. This could be achieved by ensuring existing licensees are permitted to change from a bank guarantee to cash only at the time of amendment of the current bond or at the next anniversary of grant of the licence or work authority (whichever is earlier).

4.3 Method of Assessment

The discussion paper compared the current case-by-case approach for determination of bonds to less rigorous approaches using standardised amounts. The current case by case costing approach is considered justifiable and desirable due to the high variability in the nature, scale and cost of rehabilitation options. Submissions were universally supportive of the approach, regarding it as ensuring accuracy and accountability as well as encouraging progressive rehabilitation. Detailed case-by-case costing directly relates the bond to the amount of disturbance and the Department considers it should be retained for most bonds. However, in order for the Department to rationalise resource usage in the management of bonds it is desirable that costing is not unnecessarily complex – particularly where risks are low.

Mining licensees are now required to submit annual self-assessments of rehabilitation liability under the provisions of the MRD Regulations 2002. General guidelines for reporting have been published but guidelines for the rehabilitation costing element are still in development. It is proposed that holders of large mining licences be required to document this assessment in accordance with Department guidelines and submit an assessment by a competent independent professional. The Department should establish competency requirements for assessors. With such a system in place the Department could discontinue automatic reviews of large mining titles and initiate a program of targeted audits of bond assessments for quality assurance. Extractive industry work authority holders are not required to report liability so self-assessment would not be mandatory for that sector. However, once assessors and the associated systems are in place, the Department should make voluntary submission of self-assessments an option for extractive industry operators. The ability to obtain independent third party assessments undertaken according to standard Department guidelines should increase confidence in both the industry sectors and community that liabilities are assessed consistently and fairly.

The Department considers that in many cases bonds can be safely determined using a set of pre-determined costs per unit hectare for the various site elements. This approach could be used for small sites in both the mining and extractive sectors. Provided the unit rates were set at appropriately conservative levels, risk to government and the community would be minimal.

Small mining licensees should be required to establish liability for annual reports using the standard predetermined Department rates described above. Assessments could be subject to audit at the time of Department inspection.

It is considered desirable that the Department establishes the initial bond for a proposed mining or extractive industry operation based on an assessment of liability up to the time of the first review. By doing so, the Department can provide added assurance that the starting point for the bond amount will provide a sound benchmark for later assessments.

Extractive industry work authority holders would continue to be subject to regular bond reviews by Department staff but the frequency of reviews and the outcomes might vary in accordance with Conclusion (i). The Extractive Industry Development Act is due for review in 2005. The Department considers reporting requirements and self-assessment of bonds by extractive industry operators should be examined at that time with any proposals subject to appropriate consultation with industry, the community and other stakeholders.

NB Table 2 provides a summary of the outcomes recommended in this section.

Conclusion (xi)

The Department should continue to set the initial bond for all mining and extractive industry operations based on the work to be undertaken prior to the first review.

Conclusion (xii)

New Department guidelines for establishment of rehabilitation liability by mining and extractive industry title holders should be completed as a matter of priority as the reporting proposals cannot be fully implemented until these guidelines are available. These guidelines should include a simple assessment method for use by small mining licensees.

Conclusion (xiii)

The Department should develop a schedule of requirements for assessors of rehabilitation liability. The Department should monitor the quality of assessments through targeted audits of licensee returns and provider records.

Conclusion (xiv)

The Department should require mining licensees to provide their annual rehabilitation liability in accordance with Department guidelines. These reports should be provided either by an independent assessor or (in the case of small mines) using a Department assessment tool. Extractive industry work authority holders should be permitted to use the self-assessment approach if they wish. This should significantly reduce the need for Department reviews of rehabilitation bonds.

Table 1 SUMMARY OF CONCLUSIONS

Conc. No	Issue	Conclusion
i	Different approach to bonds for extractive industry	The Department should adopt separate practices for management of extractive industry
	versus mining	bonds as opposed to mining. Key areas of differentiation should be:
		- Reduced frequency of review for extractive industry sites,
		- Increased allowance for variation between assessed liability and actual bonds, and
		- Implementation of a staged start up bond for suitable extractive industry
		proposals.
ii	Provision for amendment of Exploration bonds	The consultation requirements of the <i>Mineral Resources Development Act 1990</i> should be
		reviewed when the opportunity arises to make revision of exploration bond amounts more
		practicable in future.
iii	Requirement for increase of standard EL bond.	A new standard bond amount for Exploration Licences should be applied to new applications
		and renewals as they arise. It is proposed to increase the standard amount to \$10,000.
iv	Consideration of different approach to bonds on	The Department's policy should remain non-discriminatory with respect to land tenure.
	Private land as opposed to Crown land.	
v	Consideration of Environmental performance	Disconnection of the bond assessment from the liability by use of discounts is undesirable and
	discounts	could reduce incentives for good rehabilitation. The Department should retain current
		policies in this respect.
vi	Proposals for industry levy or insurance based	The Department has not been able to identify any good working model for an industry based
	schemes.	insurance or levy scheme at present. It is recognised that there is interest in further
		developing such concepts and further consideration will be given to any practical proposal
		put forward by industry in the future.

vii	Bank guarantees	The Department should continue to require provision of bonds in the form of bank guarantees (subject to the further recommendation in relation to cash bonds).		
viii	Acceptance of cash bonds	The Department should implement a more detailed evaluation of the practicability and cost of re-introduction of cash bonds. If appropriate the Department should then develop a project plan for establishment of a cash bond system.		
ix	Cost recovery - cash bonds	In line with current cost recovery principles, any proposal for cash bonds should include measures to ensure cost recovery. The exact nature of any fees or charges and their amount should be determined by a specific costing exercise in consultation with the Department's finance group. (It is recognised that it may not be possible to set fees until an opportunity arises for amendment of Regulations)		
х	Impact on Department resources – Cash bonds	If implemented, the proposed cash bond facility should be planned so as to minimise the impact on Department administration. This could be achieved by ensuring existing licensees are permitted to change from a bank guarantee to cash only at the time of amendment of the current bond or at the next anniversary of grant of the licence or work authority (whichever is earlier).		
xi	Calculation of initial bonds	The Department should continue to set the initial bond for all mining and extractive industry operations based on the work to be undertaken prior to the first review.		
xii	Requirement for new Department guidelines on establishment of liability	New Department guidelines for establishment of rehabilitation liability by mining and extractive industry title holders should be completed as a matter of priority as the reporting proposals cannot be fully implemented until these guidelines are available. These guidelines should include a simple assessment method for use by small mining licensees.		

xiii	Requirements for bond assessors	The Department should develop a schedule of requirements for assessors of rehabilitation liability. The Department should monitor the quality of assessments through targeted audits of licensee returns and provider records.
xiv	Bond reviews	The Department should require mining licensees to provide their annual rehabilitation liability in accordance with Department guidelines. These reports should be provided either by an independent assessor or (in the case of small mines) using a Department assessment tool. Extractive industry work authority holders should be permitted to use the self assessment approach if they wish. This should significantly reduce the need for Department reviews of rehabilitation bonds.

Table 2 SUMMARY OF RECOMMENDED PROCESSES

PROCESS	EXTRACTIVE		MINING		EXPLORATION
	Small	Large	Small	Large	
INITIAL BOND	 Assessed by Department using simple standard rates "Start-up' bond available. 	Assessed by Department by detailed costing in accordance with Department guidelines – "Start-up" bond available.	Assessed by Department using simple standard rates	Assessed by Department by detailed costing in accordance with Department guidelines	New standard bond of \$10k
BOND REVIEWS	 Reviewed by Dept – holder can have review by independent assessor if they wish. Increased tolerance for discrepancies at review. Frequency of review reduced 	 Reviewed by Dept – holder can have review by independent assessor if they wish. Increased tolerance for discrepancies at review. Frequency of review reduced 	 Annual submission by licensee using simple standard rates Subject to audit by Department 	 Annual submission of assessment by independent assessor Subject to audit by Department 	Reviewed by Department when significant ground disturbing works proposed
TYPE OF BOND	Bank Guarantee Cash may be accepted subject to outcome of further Department evaluation	Bank Guarantee	Bank Guarantee Cash may be accepted subject to outcome of further Department evaluation	Bank Guarantee	Bank Guarantee
HOW ASSESSED	Simple standard rates assessment technique	Detailed costing in accordance with Department guidelines	Simple standard rates assessment technique	Detailed costing in accordance with Department guidelines	Standard amount Detailed costing where required

