NATIONAL COMPETITION POLICY

REVIEW

OF THE

EXTRACTIVE INDUSTRIES DEVELOPMENT ACT 1995,

EXTRACTIVE INDUSTRIES REGULATIONS 1989

AND

EXTRACTIVE INDUSTRIES DEVELOPMENT REGULATIONS 1996

REPORT

PETER DAY CONSULTING PTY LTD

Management Consultants - Regulation Reform
Post Office Box 665
Blackwood SA 5051
Telephone 08 8278 7188 Facsimile 08 8178 0689
E-mail pdc@senet.com.au

22 October 2001

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SUMMARY OF REVIEW CONCLUSIONS AND RECOMMENDATIONS

Broader Issues

There is no consistent approach to the regulation of the extractive industry across Australia and this is brought out by an inconsistent definition of minerals where for some States this includes extractive material and its aggregates whereas in other jurisdictions these are specifically excluded. Victoria is unique, however, in having a specific piece of legislation for extractive operations. Controls in other States are equally divided between the mining law and the planning and development law administered through local councils.

In the broader sense these differences must interfere and add unnecessary costs to companies that operate in more than one jurisdiction. The extractive industry in Victoria has had specific legislative controls since 1966 with the *Extractive Industries Act 1966*. This was amended by the current enactment, the *Extractive Industries Development Act 1995*.

The current Act commenced the move from prescriptive and detailed industry regulation covering safety, environment and economic components to only those relating to safety and rehabilitation.

In the absence of specific objectives identified in the Act the review has concluded that appropriate objectives are "to encourage an efficient extractive industry sector which makes the best use of stone resources in a way that is compatible with the economic, social and environmental objectives of the State'.

The apparent duplication of the Act's safety provisions with the *Occupational Health and Safety Act 1985* (OHS Act) is evident. This questions the need for the Act to continue to have safety in the industry as one of its purposes.

A Memorandum of Understanding was signed between the WorkCover Authority and the Department of Natural Resources and Environment (DNRE) concerning the distinction in roles of inspectors under each Act. Following training, it is understood DNRE inspectors are to be appointed under the OHS Act. While this is to do with efficient enforcement and administration activities of government it recognises the duplication of these roles because of the duplication in both enactments. It also recognises the expertise of DNRE officers in extractive industry matters.

The extractive industry has generally learned to operate within the legislated controls and, with some exceptions, these specific controls do not impose significant impediments to competition. As the industry is highly competitive and therefore operates on small margins, any unnecessary compliance cost should be removed. One of those regulations that have a direct impact on business viability is the system of rehabilitation bonds. The report finds that the system can be improved by, for example, the introduction of an incentive scheme to reduce bond amounts and reviewing the formulas used to set the bond.

The review should consider the potential risks associated with various quarry types and sizes and aim to determine a level of risk below which a bond is not required. Also, the review should consider the equity of existing levels of bonds and recent increases relative to the reviewed formulas.

Specific Issues

The Act contains restrictions on competition in provisions relating to the permit to search, work plan, work authority, rehabilitation plan, rehabilitation bond, certification of quarry manager's and the many controls contained in the Extractive Industries Regulations 1989. Royalties, while not restrictive in themselves, have unintended outcomes for the market.

Findings and recommendations associated with these restrictions on competition are as follows:

Search Permit (refer to section 3)

Permit to search

The Permit to search for stone as contained in section 11 of the Act provides a method of seeking landowner permission to enter Crown land. The permit mechanism ensures that access and use of Crown land is in the public interest and provides for geological and other data obtained from surveys to be used for public purposes. The costs associated with obtaining a permit and in maintaining a recording system are not significant.

The restriction on competition is therefore considered justified on public benefit grounds.

Restrictions on access to land

The benefits arising from the restrictions on access to certain land contained in section 10 of the Act are substantial especially as they meet key Government social and environmental objectives. This is particularly relevant as one of the principles of the National Competition Policy is that it is not intended to override other key policy objectives.

The costs of the restriction are not significant especially considering stone resources are not scarce in Victoria.

The restriction on competition is therefore considered justified on public benefit grounds.

Work Plan (refer to section 4)

The work plan as contained in section 17 of the Act, is arguably the single most important instrument that provides the vehicle to achieve the Act's objectives. While it imposes costs in preparation, these costs of compliance are offset in large part as the components of the work plan will generally need to be prepared as part of normal business practice and for the planning permit.

The Act delegates to the Department Head approval of a work plan and the setting of conditions attaching to a work plan. This allows a large degree of administrative discretion.

The Review Team in no way suggests the administration has been undertaken in the past in anything other than propriety and in the public interest nor has there been any indication of this through consultations. However, as the work plan is the key instrument established under the Act it is considered appropriate for applications to be considered by the Minister.

Recommendation 1:
It is recommended that the Act be amended to allow the Minister to approve a work plan and to set conditions.

Inconsistent setting of conditions or unnecessarily stringent conditions can have a significant effect on the competitive position of an extractive industry.

Recommendation 2:
It is recommended that conditions be appealable by applicants to the Victorian Civil and Administrative Tribunal (VCAT).

The Review Team considers that minor variations should be allowed without the formal approval process and that the parameters beyond which a variation should be submitted should also be prescribed in regulation for transparency reasons and to enable the appropriate Parliamentary processes to be followed.

Recommendation 3:
It is recommended that parameters be prescribed in regulation beyond which a variation of a work plan should be made.

<u>Work Authority</u> (refer to section 5)
The work authority process as contained in section 19 of the Act, as one of the two primary approval instruments under the EID Act, adds unnecessary costs for business and the regulating agency for little apparent benefit.

Recommendation 4:
It is recommended that the process be simplified by reducing to one these approvals. This can be done by abolishing the work authority and relying on the Work Plan.

Recommendation 5:
Should the work authority remain, it is recommended that:
- **conditions of a work authority be appealable by applicants to VCAT; and**
- **any variation to a work authority should include consultation with the landowner.**

To ensure restoration of the site is completed a stronger link is required between the planning permit and the EID Act approving mechanism.

Recommendation 6:
It is recommended that the work authority number be recorded on the relevant planning permit.

The requirement for a work authority holder to submit an annual production return duplicates data collected by the Australian Bureau of Statistics (ABS).

Recommendation 7:
It is recommended that the required data be obtained from one government agency, either the DNRE or the ABS, and be made available by that agency to the other body.

The requirement for a work authority holder to submit a quarterly accident return summarising all accidents imposes additional costs for work authority holders and duplicates accident reporting required under the Occupational Health and Safety (Incident Notification) Regulations 1997.

Recommendation 8:
It is recommended that the requirement for a work authority holder to submit quarterly accident returns be abolished.

<u>Rehabilitation Plan</u> (refer to section 6)
The rehabilitation plan as contained in section 17 of the Act, is an important part of the work plan and requires, in a performance-based fashion, matters that proponents need to consider in the development of the work plan. The requirements are consistent with the objectives of the Act and allow for flexibility by proponents in meeting the objectives.

The requirements are not considered overly restrictive and are in the public interest.

The Review Team is aware that for some materials (that is, stone types) ongoing restoration may not be practical due to competing demands for other materials at the time. In these cases a work authority holder may not complete working in a particular area or face and will leave it open for a period, possibly months.

This may also happen where a major construction project is planned such as a pipeline construction, and the extractive material, say sand, is ideally suited as bedding for the pipeline. It would be financially wasteful to undertake any restoration work in this area if the holder intends further extraction.

However, the Act is quite definite in requiring rehabilitation 'in the course of doing work' and although this is not defined it is recommended that the Act be framed to allow for circumstances as described above.

Recommendation 9:
It is recommended that the Act be framed to allow a flexible approach to progressive rehabilitation.

<u>Rehabilitation Bond</u> (refer to section 7)
The requirement for a work authority holder to provide a bond is a restriction on entry to the industry with several negative effects including:

- it ties up capital – there is now between $21 and $27 million in bond moneys held;
- it acts as a disincentive for new entrants, especially small operators;
- it interferes with the commercial relationship between the work authority holder and the landowner;
- it presumes operators will fail;
- bond increases, which have run at 63% for the five years since 1996, have the potential to collapse businesses.

The corresponding benefits of the bond system include:

- it provides a sense of insurance for the Government (on behalf of the community) against unfinished restoration of an extractive industry site;
- it protects the land owner from any costs associated with restoration and making the site safe; and
- it serves to encourage ongoing rehabilitation of the site (so that the bond is ultimately returned).

The identified impacts of the current system are quite considerable and solutions need to be found to reduce the negative effects while maintaining the positive aspects of the bond system.

Recommendation 10:
It is recommended the responsibilities of work authority holders and landowners in relation to the site be clearly identified in the legislation. It must be clear that the first level of responsibility for restoration and compliance with the Act must be with the holder and in default, the second level of compliance must be with the landowner.

Recommendation 11:
It is recommended an incentive system be devised that in a tangible way rewards work authority holders who actively rehabilitate their sites in an ongoing manner.

Recommendation 12:
It is recommended the extractive industry associations be encouraged to take a more active role in industry regulation matters. This can be achieved by the associations:

- **developing appropriate codes of practice for good quarry practice including efficient and effective methods of site restoration;**
- **developing effective processes and procedures to deal with members who infringe the codes of practice; and**
- **developing close relations and protocols with Minerals and Petroleum Victoria's (MPV) inspectorate to ensure all sites are managed in accordance with the Act and Regulations.**

Recommendation 13:
It is recommended enforcement of the Act and Regulations by MPV continue to be undertaken in a fair, consistent and rigorous manner. It is suggested that the MPV, in consultation with the industry bodies, develop a system of regular audits of all sites and that such audits be conducted on a full cost recovery basis.

Recommendation 14:
It is recommended a review should be conducted of the guidelines used in setting bonds to ensure that the application of the guidelines provide for the optimum level of outcome in terms of restoration while providing the least costs of compliance for industry.

In identifying appropriate guidelines for bond setting, the review should consider the potential risks (environmental and safety) associated with various types and sizes of quarry operations and determine a level of risk below which a bond is not required.

The review should consider the equity of existing levels of bonds and recent increases relative to the reviewed guidelines.

The review should also consider the potential for independent assessments, against agreed guidelines, of restored sites and the provision of appeal rights for work authority holders following the determination of a bond level.

The review should be conducted by DNRE with representation from the industry bodies, landowners and local government.

Recommendation 15:
It is recommended that for transparency reasons the guidelines for bond setting and to the extent appropriate, the process of bond setting and its exemption criteria, should be included in regulations.

Recommendation 16:
As the Auditor-General identified that the value of bonds held was less than the estimated funds required for rehabilitation, it is recommended the exact nature of any liability in this area be ascertained.

Royalty (refer to section 8)
Royalty payments as contained in section 28 of the Act and as prescribed in the regulations, have unintended outcomes including, loss of potential revenue due to inability to adjust charges quickly, inflexibility in allowing changes in different types of stone depending on demand, and by setting a benchmark for stone in the industry.

There is no available formula or package of data that is used to determine royalty payments.

Recommendation 17:
It is recommended that royalty rates for stone from Crown land should be set by the responsible land manager (Minister), possibly with advice from the DNRE.

Recommendation 18:
It is recommended that royalty rates be reviewed on a regular basis, say each year, to ensure the beneficiaries obtain fair market value for the product.

Recommendation 19:
It is recommended that a review of the setting of the rate be undertaken to provide advice about all the matters that should be considered in the setting of the rate. This may be provided in a formula.

Quarry Manager's Certification (refer to section 9)
The Review Team considers the statutory appointment of a quarry manager as contained in Part 4 of the Act, is a relic of early legislative enactment in an environment where little other safety or environmental law was in existence. While such a mechanism continues, the industry may continue to play a subservient role to the regulatory apparatus and consequently not focus on developing new strategies to deal with ensuring appropriate management of a work site.

The OHS legislation of 1985 introduced the concept of identifying responsibility for safety in all work sites. Adopting this concept it would be appropriate to identify the roles and responsibilities of the work authority holder and, if necessary, the quarry manager as the on-site manager, in terms of safety. The industry, in conjunction with the regulating authority, should determine how these people can reasonably demonstrate that they can achieve their responsibilities

The certification of quarry managers does not impose significant costs on the industry for experienced industry applicants.

The benefits of the certification requirements for the industry appear to be in the package of competencies assessed for quarry managers – safety, quarry operations and business management.

As a package these are required by the industry. As the review argues however, the Act's objectives are concerned with safety and site rehabilitation and not business management. The changes to the former Act in the regulation of quarry managers signalled a less interventionist role by the Parliament. It is the view of the Review Team that the industry is organised well enough to manage this process in the near future. This would continue the move from a very regulated and controlled industry to one that, with certain requirements for safety and rehabilitation, is free to determine its own destiny.

Recommendation 20:
It is recommended that the certification of quarry managers be discontinued. This should be done over a reasonable period (say, 2-3 years) to enable the industry time to develop its own accreditation or other similar process.

Recommendation 21:
In the interim or should the certification process continue in the same format it is recommended:

- **assessment for certification purposes only relate to the Act's objectives and not include other competencies.**
- **certificates of quarry manager be issued for a fixed term, say, 5 years, or alternatively, for the period the person remains as an operating quarry manager;**
- **that the inquiry process be reviewed to ensure:**
  (a) the work authority holder is consulted about the process; and
  (b) the inquiry investigate and recommend appropriate action.

<u>Alternative Means of Regulating the Industry</u> (refer to section 10)
The Review Team favours the existing administration of the Act which provides experienced mining and extraction industry personnel from DNRE to be responsible for legislative enforcement. Benefits are derived by the industry and the community in having this centralised experience and expertise available in the regulation of the industry. A local council cannot be expected to possess the range of experience required in each industry it has controls over. Where such experience exists, it should be utilised.

Recommendation 22:
It is recommended that administration of extractive industry controls remain with the DNRE and these controls be retained in the existing Act.

Division 5 – Mineral Resources, of the Act requires that the Department Head must not grant a work authority over land which is the subject of a licence under the MRD Act unless the licensee has consented. Notwithstanding this, the Minister may issue the work authority if after 28 days of notice, the exploration licensee has not given consent and the Minister considers this is unreasonable.

Consistent with the arguments presented in this report concerning work authorities it is considered that responsibility for advising a *Mineral Resources Development Act 1990* licensee should be with the applicant for a work authority rather than with the Minister.

The inclusion of this procedure is considered a relatively minor process and not one that would typically achieve 'objective' status.

Recommendation 23:
It is recommended that:

- **The Act be amended to require the applicant for a work authority to obtain the consent of the MRD Act licensee; and**
- **consideration be given to abandoning the current purpose in the Act for the notification procedure.**

<u>Competitive Neutrality</u> (refer to Section 11)
Several government entities, State and local, operate quarries in Victoria and some are involved in trading in extractive material. It is not clear whether there are any subsidising effects being derived by these bodies due to their public ownership. However, as these matters are clearly of concern to the industry it is considered prudent that these operations are made transparent.

Recommendation 24:
It is recommended that a review be conducted of the operations of government quarries to establish whether any receive net competitive advantages and to provide options for establishing competitive neutrality in their operations.

The following Table summarises the results of the assessment of the restrictions on competition contained in the EID Act.

Restriction	Is the impact major or minor?	Do benefits outweigh costs (yes/no)?	Is there a better alternative (yes or no)?
Search Permit			
Permit to Search	Minor	Yes	No
Restriction on access to land	Minor	Yes	No
Work Plan	Major	Yes	Yes
Work Authority	Major	No	Yes
Rehabilitation Plan	Major	Yes	Yes
Rehabilitation Bond	Major	No	Yes
Quarry Manager's Certification	Minor	No	Yes

1. INTRODUCTION

1.1 The Review

Peter Day Consulting Pty Ltd has been engaged by the Victorian Department of Natural Resources and Environment to undertake a National Competition Policy (NCP) review of the *Extractive Industries Development Act 1995* (the Act), the Extractive Industries Regulations 1989 and the Extractive Industries Development Regulations 1996. Details of the NCP Agreement and its requirements are contained in Appendix 1.

The Terms of Reference for the review are included as Appendix 2. In brief, they require the review to examine the case for reform of any restrictions on competition contained in the legislation in accordance with the Victorian Government's Guidelines for the Review of Legislative Restrictions on Competition. In particular, the review will:

- clarify the objectives of the legislation, and the market failure the regulation is intended to address;
- identify the nature of the restrictions on competition arising from the legislation or from its administration;
- analyse the likely effect of the restriction on competition and on the economy in general;
- analyse the costs and benefits of any identified restrictions and assess whether the benefits of the restrictions to the community as a whole outweigh the costs; and
- consider alternative means of achieving the same result including non-legislative means.

The Act and Regulations are concerned with the extraction of stone and associated material from private and Crown land. As such, the community of Victoria has a direct interest in what legislative controls exist and might exist in future over the community's rights to this land. Being concerned to ensure the views of the community, industry and the relevant governing bodies were taken into account in the review, an Issues Paper was released to identify potential restrictions on competition contained in the existing controls and to seek specific responses from stakeholders about these matters.

An advertisement was placed in the local press on 13 May 2000 advising of the review and inviting submissions. The Issues Paper was widely circulated and a list of responses is included as Appendix 3.

In addition to promulgation of the Issues Paper and the public advertisement, the Review Team conducted numerous meetings with relevant organisations and interested parties. In many cases these meetings took the form of identifying responses to the matters raised in the Issues Paper. The Review Team also conducted on-site visits of six separate extractive industries. A list of the organisations consulted is included in Appendix 3.

This report provides a brief outline of the extractive industry in Victoria and details the legislative framework covering the industry. It also identifies and assesses the restrictions on competition contained in the Act and Regulations and provides an assessment of the relevant costs and benefits. Finally, the report considers alternative means of achieving the objectives and provides recommendations for any changes to the legislation and regulations.

The Review Team would like to express its gratitude to the many people from the community and the industry who gave up their valuable time to assist the review. Appreciation is also extended to staff of the Department of Natural Resources and Environment and other government agencies.

1.2 A Brief Outline of the Extractive Industry in Victoria

A key component of the construction, building and in many cases manufacturing industries is the supply of competitively priced rock, sand, clay and gravel products which are essential for the production of concrete, cement, bricks, tiles, asphalt, crushed rock products and a host of other applications. Stone is primarily used for construction of roads and buildings but it also has other uses in engineering and manufacturing.

While Victoria has an abundance of good quality extractive resources, unlike metallic minerals and ores, stone resources are low in value and therefore to be viable extraction needs to occur close to market sources. The establishment of quarries close to urban settlements can cause social and environmental impacts on the community. Elimination or minimisation of these impacts is a key issue for the industry and for the community.

With good quality stone resources being located close to market sources, Melbourne has traditionally enjoyed and continues to enjoy the availability of highly competitively priced rock products compared to Sydney and other capital cities. Annually, the industry produces around 20 million tonnes of hard rock products, 9 million tonnes of sand and gravel product, and 2 million tonnes of clay products. It has an annual turnover valued at $300 million and employs approximately 1500 people. Table 1.1 shows the actual production rates for the industry since 1995 and the number of work authorities.

Table 1.1

Victorian Extractive Industry
Production data 1995-99

Year	No. of sites with Work Authority	Total production (tonnes)
1995	646	33,159,136
1996	606	34,298,848
1997	543	29,727,926
1998	604	35,278,774
1999	502	30,098,502

Source: Compiled from information provided by DNRE.

The industry is characterised by relatively few large operators and many medium and small operations. Many small-scale extractive industries have developed in rural and regional areas to satisfy local demand.

The extractive industry market therefore is defined as comprising all activities and operations associated with the removal of stone from the ground for commercial purposes. These activities are often described as rock quarries, and sand, gravel and clay pits.

2. THE LEGISLATIVE FRAMEWORK & RESTRICTIONS ON COMPETITION

2.1 The New Extractive Industries System – Brief Outline of the Act

Following the then Government's consideration of a report by the Parliamentary Environment and Natural Resources Committee (ENRC) on planning issues for the extractive industry in May 1994, a new Extractive Industries Development Act was passed in the Victorian Parliament and received Royal Assent on 17 October 1995.

The extractive industry covered by the Extractive Industries Development Act is concerned with the extraction or removal of stone from land for commercial purposes. Stone is defined in the Act as meaning:

(a) sandstone, freestone or other building stone; or
(b) basalt, granite, limestone or rock of any kind ordinarily used for building, manufacturing, road making or construction purposes; or
(c) quartz (other than quartz crystals); or
(d) slate or gravel; or
(e) clay (other than fine clay, bentonite or kaolin); or
(f) sand, earth or soil; or
(g) other similar materials[1].

It is of interest that the definition of a mineral, and therefore the distinction between a mineral and other materials including extractives, is not uniform in jurisdictions in Australia. For example, stone is regarded as a mineral and regulated under the *Mining Act 1978* in Western Australia. In New South Wales some dimension stone is defined as a mineral. In Queensland, of the extractives only clay is regarded as a mineral under the *Mineral Resources Act 1989*. In South Australia all extractive materials are considered minerals under *the Mining Act 1971* while in Tasmania the *Mineral Resources Development Act 1995* excludes all extractive materials from its definition of minerals.

Work authority holders with operations in more than one State have revealed that this lack of uniform definition in Australian jurisdictions has cost impacts in terms of initial administrative and technical set-up and in ongoing compliance. A uniform definition would reduce these unnecessary costs of compliance for industry.

The Act provides that ownership of stone is retained by landowners and the consent of the landowner must be obtained in order to establish an extractive industry. In the case of Crown land, the Minister for Environment and Conservation is deemed to be the relevant landowner. Where Crown land exists below freehold land (ie where the land has only been alienated from the Crown to a limited depth below the surface, normally 15 metres) no further consents and approvals are required if they are in place for the freehold land above. In this case royalties continue to be payable.

[1] Section 3, *Extractive Industries Development Act 1995*.

Search permits can be granted over Crown land. Areas such as national parks, state parks, wilderness areas and reference areas are excluded from permitting. It is an offence to search for stone on Crown land without a permit. On private land, the matter becomes one of negotiation between the landowner and the proponent seeking to search for stone.

Applications to undertake extractive industry operations are through the planning process. The Act abolished the former Extractive Industries Board and the review and appeal of planning permit decisions are through the Victorian Civil and Administrative Tribunal (VCAT).

Since the introduction of the Act it has been Government policy that planning schemes not prohibit extractive industry other than in urban zones. At the outset this was reflected in the State Chapter of all Planning Schemes. Currently, the same position is reflected in the State Planning Policy Framework that provides that "Planning Schemes must not prohibit extractive industry in non-urban zones except if it is prohibited by an Act of Parliament." The Act empowers the Minister for Planning to undertake planning scheme amendments to change a provision of a planning scheme which prohibits the use of land for extractive industry. This provision was used early in the term of the Act in order to give effect to the policy.

Under the Act, the Department of Natural Resources and Environment (DNRE) is a referral authority which advises the planning authority whether a satisfactory Work Plan has been lodged. The Department also recommends to the responsible authority any conditions that should be placed on the planning permit, if it is granted.

Also, to provide an integrated single approval process for all developments, the *Planning and Environment Act 1987* provides powers to call in planning permit applications when Environment Effects Statements are required. These powers can be used in the case of major extractive industry proposals.

In some cases stone resources have been identified in locations where extractive industry is prohibited under local planning schemes. The Act empowers the Minister for Planning to undertake planning scheme amendments to change a provision of a planning scheme which prohibits the use of land for extractive industry. This enables the extractive industry to become a "permit required" use. This provision is used to amend planning schemes in the case of urban areas where it was previously not practical to establish an extractive industry. In other cases it enables extractive industry applications to be considered through the normal planning approvals process.

The requirements that must be satisfied before quarrying can commence include the consent of the landowner, planning approval, lodgement of an approved Work Plan including rehabilitation provisions, lodgement of a rehabilitation bond and where relevant, the consent of a holder of a licence under the *Mineral Resources Development Act 1990* (MRD Act). Once these requirements are satisfied the Minister must grant a Work Authority so that quarrying can commence.

The Work Plan that must be approved prior to the grant of a Work Authority must also contain a rehabilitation plan that must be approved. The extensive periods of time involved in the completion of quarrying operations usually mean it is not feasible to state at the application stage what the end use of a particular site may be. An approved Work Plan specifies a range of end use options. At completion of quarrying operations the end use proposed for the site including the landfill operation is subject to the planning process.

The Act introduced a system of quarry infringement penalties for less serious breaches of the Act.

The Act abolished the previous provisions whereby mineral development under the MRD Act could be frustrated by competing extractive industry operators or applicants. Holders of a licence under the MRD Act are able to refuse consent to a Work Authority for extractive industry proposals. However, in the case of exploration licence holders a decision by the holder of the licence to refuse consent can be overturned by the Minister where such consent is unreasonably withheld.

Should a licence holder wish to access the area of an extractive industry operation, that licence holder must compensate the extractive industry operator as they would any other occupier of land under the MRD Act.

In order to effectively control and regulate the more significant sized operations, extractions not exceeding 2000 square metres in area and 2 metres in depth have been exempted from the application of the Act.

Objectives

The Act does not identify with any precision its specific objectives. Section 1 sets out the purposes of the Act as being to-

(a) provide a co-ordinated assessment and approvals process for extractive industries[2];
(b) ensure that extractive industry operations are carried out with safe operating standards and in a manner that ensures the rehabilitation of quarried land to a safe and stable landform;
(c) provide a procedure for notification of proposed extractive industries to licence holders under the *Mineral Resources Development Act 1990* ;
(d) provide for payment of royalties for stone extracted from Crown land.

[2] An extractive industry is defined in the Act as meaning *the extraction or removal of stone from land if the primary purpose of the extraction or removal is the sale or commercial use of the stone or the use of stone in construction, building, road or manufacturing works and includes –*
(a) the treatment of stone or the manufacture of bricks, tiles, pottery or cement products on or adjacent to land from which the stone is extracted; and
(b) any place, operation or class of operation declared by the Minister, by notice published in the Government Gazette, to be an extractive industry for the purposes of the Act.

Following consultation with the DNRE, reference to the Parliamentary Environment and Natural Resources Committee's report, *Planning Issues for Extractive Industries*[3], the second reading of the Extractive Industries Development Bill in June, 1995 and considering the contents of the Act itself, the Review Team considers the objectives of the EID Act are as follows:

"to encourage an efficient extractive industry sector which makes the best use of stone resources in a way that is compatible with the economic, social and environmental objectives of the State'.

2.2 Extractive Industries Development Regulations 1996

These regulations provide the administrative provisions to support the operation of the Act and specify:

- various fees, forms, procedures and other requirements relating to search permits, work authorities and quarry managers' certificates for extractive industries;
- the payment of royalties for the extraction of stone from Crown land; and
- penalties for infringement notices provided under the Act and the Regulations and other administrative processes associated with the infringement scheme.

2.3 The Planning System

The Planning and Environment Act establishes the framework for planning in Victoria. The Act defines a system of planning schemes based on municipal districts, which set out the objectives, policies and controls for the use, development and protection of land.

Planning schemes are administered by municipal councils. Typically, planning schemes divide the land into zones and set out how the land may be used and developed.

The extractive industry is a land use which, depending on the type of planning zone, will be either prohibited, allowed subject to the granting of a planing permit issued by the local council, or be allowed without the need for a permit as long as certain conditions are met. The planning permit requires the applicant to prepare a complete description of the proposal including plans and supporting information. The council may be required to refer the application to other agencies. As indicated the DNRE is a referral agency for extractive industry applications.

The council considers all submissions, objections and referral agency comments before deciding whether to grant or refuse a planning permit. Objectors have the right to appeal to VCAT against a decision to grant a permit and the applicant has the right to appeal to VCAT against the decisions to refuse to grant a permit or against the permit conditions.

[3] *Planning Issues for Extractive Industries*, Environment and Natural Resources Committee, Parliament of Victoria, May 1994.

2.4 Catchment and Land Management Act 1994 (C&LM Act)

The C&LM Act establishes a framework for the integrated and coordinated management of catchments[4] which will:

(1) maintain and enhance long-term land productivity while also conserving the environment; and

(ii) aim to ensure that the quality of the State's land and water resources and their associated plant and animal life are maintained and enhanced.

The Act also establishes processes that can be used to assess the condition of the State's land and water resources and the effectiveness of land protection measures.

Section 33 of the Act empowers the Secretary (DNRE) to, in accordance with a special area plan, impose certain land use conditions on land. Following amendment in 1995 the Act provides that any land use conditions must not prohibit or restrict 'exploration for or extraction of stone within the meaning of the *Extractive Industries Development Act 1995'* or 'the carrying out of an activity in accordance with a lease, licence, permit or authority under the *Mineral Resources Development Act 1990*, the *Petroleum Act 1998* or the *Extractive Industries Development Act 1995'*.

2.5 Administration of the Legislation

Administration and enforcement of the Act and Regulations is assigned to the Minerals and Petroleum Regulation Branch, Minerals and Petroleum Victoria, (MPV) Department of Natural Resources and Environment.

The branch comprises five inspectorate regions (southwest, northwest, northeast, metropolitan and Gippsland) with inspectors appointed under the *Mineral Resources Development Act 1990* and the EID Act in each of the regions. The costs associated with administration of the EID Act and Regulations including salaries and capital for the current year are $2.1 million.

2.5.1 Memorandum of Understanding (DNRE and WorkCover Corporation)

In response to concerns raised by the industry about overlap and duplication of the EID Act and Regulations with OHS legislation, a Memorandum of Understanding (MOU) was entered into between the Victorian WorkCover Authority (VWA) and the Department of Natural Resources and Environment concerning the jurisdiction in quarries in Victoria.

In summary the MOU agreed that:

- There will be no duplication or overlap of VWA and (Minerals and Petroleum Victoria MPV) inspections of quarry sites;
- MPV inspectors have responsibility for the actual quarry and associated plant;

[4] The Act defines a catchment as meaning 'an area which, through run-off or percolation, contributes to the water is a stream or stream system.

- If there is a secondary operation on the extractive site, such as a brick works or cement works, that will be covered by VWA inspectors;
- VWA will continue to administer licensing of the *Dangerous Goods Act 1985* on quarry sites;
- MPV will continue to have jurisdiction over explosives in quarries;
- Where serious workplace accidents occur, each party will notify the other immediately and investigations will be conducted jointly with consultation regarding whether and under which Act prosecution would occur;
- MPV inspectors will be trained to a level considered appropriate by VWA to carry out their role in administering the OHS Act;
- There will be a sharing and cooperative effort in relation to codes and guidelines under both Acts.

2.6 Reason for Specific Government Intervention in the Extractive Industry

Government intervention in the extractive industry has primarily been due to the failure of the industry to adequately control environmental and safety issues. Major environmental problems associated with the industry as identified in the ENRC report referred to earlier, are in:

Amenity effects:
- truck traffic
- noise from plant and equipment
- dust
- noise, ground vibration, and air blast from rock blasting

Physical environment effects:
- visual amenity disruption – a visible scar on a hill or range side
- impacts on ground water and surface water
- disruption to wildlife habitats and movement corridors
- destruction of native flora
- introduction of weeds
- ground sterilisation by clay slimes

End-use effects.
- odours
- vermin
- leachates
- truck and traffic movement
- noise
- disruption of visual amenity

The results of quarrying operations, that is, where quarrying has been completed and in particular where benching has occurred, have some safety implications for the community as well.

For all these reasons the Government for more than forty years has intervened in the industry and regulated activities in order to maintain necessary standards of environmental protection and safety.

It can be argued that due to the presence of these market failures, quarrying, like some other industries, is vulnerable to community reaction. This vulnerability may mean that if the industry was not specifically regulated and was left to the planning and development processes, the weight of community reaction may see only few applications for the establishment of extractive industries being successful and perhaps these would be confined to rural areas.

While this is the democratic process at work there may be significant disadvantages. Restrictions on the location of quarrying operations restricts the availability of the product and of product types (some product types are only found in certain areas of the State). It also imposes additional costs associated with transporting quarry products and in turn the costs of maintaining the public road system. Typically extractive industries are developed either close to the demand source, for example, near new roads or freeways, or for larger operations with a wider range of product types, as close as possible to the transport hub for distribution. For example, some use is made of rail transport to carry product from the site to a more central location and/or port.

Transport costs are a major consideration in setting competitive prices. Industry transport rates for the country, for example, are currently calculated at approximately $1.20 per tonne loading fee plus $0.10 cents per tonne per kilometre (exclusive of GST).

If extractive industries were only located in, say, rural areas, the impact for the industry may be significant. The economic benefits derived from the industry including competitive prices of the product, availability to required use, and employment, would be put at risk.

For these reasons also a State-wide process for management of the extractive industry has been considered appropriate in Victoria[5]. The process however has had to take due account of community concerns about the negative effects of the industry especially in relation to the primary areas of concern, namely the impacts of operations on neighbours and the unsightly result of unrestored quarrying.

[5] As will be discussed later in this report in Queensland extractive industries (excluding clay) are dealt with under the local planning development processes and industry operators are licensed under the environment protection legislation, the *Integrated Planning Act 1977*. Health and safety matters are covered under the *Mining and Quarrying Safety Act 2000*. Consideration is being given to the development of State planning principles which include maximising the use of resources. These principles would then be incorporated in individual council town planning schemes. A similar arrangement exists in Western Australia where extractive industry operations on private land are dealt with by local planning processes. Extractive industry operations on Crown land are subject to the mining lease arrangements under the *Mining Act 1978*.

2.7 Identified Restrictions on Competition in the EID Act and Regulations

The provisions of the EID Act identified as potentially restricting competition as defined in the NCP Agreement are those that:

- prescribe criteria governing the issue of permits to search for stone on Crown land;
- restrict the search for stone on certain land;
- prescribe criteria for the issue of work plans;
- prescribe criteria for the issue of work authorities;
- prescribe criteria for rehabilitation plans and rehabilitation bonds; and
- relate to the certification of quarry managers.

The Regulations also contain restrictions on competition. They deal with search permits, work plans, work authorities, royalties and quarry managers. These restrictions will be dealt with in the analysis of the Act's provisions.

An analysis of each of these restrictions is undertaken in the following sections of this report. An assessment of the costs and benefits of each restriction is undertaken. Where feasible alternatives to the restriction are available these are also discussed.

The Act also regulates the rate, method and timing of royalty payments. While these are not restrictions on competition there are implications for the market arising and these are discussed in Section 8.

3. SEARCH FOR STONE

3.1 Search Permit

3.1.1 Identified Restrictions on Search for Stone

The Act and the Regulations restrict the search for stone by:

- making it an offence for a person to search for stone on Crown land without a permit (Section 8);
- restricting the grant of a permit on certain land (Section 10);
- allowing a permit to be granted subject to conditions (Section 11);
- restricting the search for stone to a specific type of stone as identified by the permit (Section 14);
- requiring the permit holder to complete a return on work on any surveys and other operations authorised by the permit for every 6 months (Section 52 and Regulation 204);
- requiring that a person wishing to apply for a search permit must do so on the prescribed form, include a fee ($207) and lodge a map or plan showing the locality and extent of the land (Regulation 201);
- requiring a permit holder to:
    1. not commence any work until 7 days after notifying an inspector of quarries in writing of the holder's intention to commence work; and
    2. give at least 7 days notice to the nearest regional office of the Department of Natural Resources and Environment of the holder's intention to commence work and lodge a copy of the proposed work program with that office at the same time as the notice is given (Regulation 202).
- prescribing the fee for transfer of a search permit as $104 (Regulation 203).

These criteria restrict competition by affecting the ability of a person or business to enter the market and by increasing the costs of production by incurring compliance costs.

3.1.2 Assessment of Restriction

The Act ensures that persons wishing to search for stone may only do so if they have the express permission of the landowner. This is consistent with other enactments and the Common Law that covers trespass and the rights of landowners over their own property. Failure to obtain permission to enter private or public land, for example, is an offence under the *Summary Offences Act 1966*. In the case of Crown land this 'permission' is given in a formal way through a permit.

The permit to search for stone on Crown land was established as an alignment with controls in the mining industry where exploration licences are used. However, in practical terms these arrangements are only infrequently used because either information is readily available about the geology of the land, or access to the land is readily available or there is an absence of interest in certain Crown land. Moreover, stone is not regarded as a scarce resource with the possible exception of specialised dimension stone. Only five permits have been issued since 1995.

The administrative process required to obtain the permit may act to either deter prospective searches or result in searching being conducted without a permit.

The permit is quite clearly a separate approval to the work authority and possession of a search permit has no bearing on any subsequent consideration given to an application for a work authority.

The Act's provisions mean that the search permit is restricted to stone of a specific type. This may be an unnecessary restriction if the applicant is unfamiliar with the geology of the land and/or if the land has not been accurately assessed. Consultations have, however, not indicated this as an issue of concern.

The requirements relating to the provision of information via a work return are considered in the public interest as they contribute to the geological data-base of Crown land.

3.1.3 Assessment of Costs and Benefits

The benefits associated with the search permit are primarily that they provide for orderly entry and use of Crown land. Data extracted from surveys also contribute to general information concerning the geological significance of these lands. The costs imposed on the applicant are not substantial and include application preparation and submittal time. For the DNRE the requirement in the Act involves administrative procedures and records to be kept but these also are relatively minor.

3.2 Land not Available

3.2.1 Identified Restriction

Section 10 of the Act restricts the search for stone on the following land:

- land that is a reference area under the *Reference Areas Act 1978*;
- land that is a national park, wilderness park or State park under the *National Parks Act 1975*:
- land that is an archaeological area under the *Archaeological and Aboriginal Relics Preservation Act 1972* or that contains relics the occurrence of which is registered under section 10(a) of that Act*;*
- land that is an Aboriginal place, to the extent of any terms of a declaration of preservation in force under section 21C, 21D or 21E of the Commonwealth's *Aboriginal and Torres Strait Islander Heritage Protection Act 1984.*

This restricts the competitive search for stone by not allowing access to the land through the permit process.

3.2.2 Assessment of Restriction

This prohibition restricts competition for access to this land for extractive purposes. National, State and wilderness parks comprise approximately 13% of the State's land[6].

[6] Advice from the Department of Natural Resources and Environment, November 2000.

The *National Parks Act 1975* designates certain areas of land as national parks and state parks by virtue of their predominantly unspoilt landscape, flora, fauna or other species. The National Parks Act prohibits extractive industry in a national park as it is inconsistent with the objectives of the Act. It is therefore considered quite appropriate that the search for stone for extractive industry purposes in national parks be also restricted.

The Reference Areas Act allows the Minister of Conservation to recommend that any area of public land should be preserved in its natural state as far as is possible because the area is of ecological interest and significance. Again, it is entirely consistent with that Act that the search for stone be restricted from such areas.

Similar provisions apply in the Archaeological and Aboriginal Relics Preservation Act and the Aboriginal and Torres Islander Heritage Protection Act.

While access to these lands is denied to the extractive industry on the grounds that quarrying activities are likely to have an unacceptable and lasting impact on the environment of the area, good management of such resources demands a careful balance of competing land uses to ensure resources remain available for future generations at an affordable cost. Given stone resources are not scarce in Victoria at present the public good must be determined on the balance of the best interests for the community at large taking account of social and environmental trade-offs.

3.2.3 Assessment of Costs and Benefits

The measurement of costs and benefits associated with restricting land from quarrying involves subjective judgments to be made about the value of, for example, community enjoyment of land and the preservation of archaeological land in comparison to the potential damage caused by quarrying activities. Judgments are also required of the value of stone deposits which are yet to be discovered. No estimates in dollar terms have been made of these costs and benefits due to the lack of substantive data.

The restriction contained in Section 10 of the Act incurs the following unquantified costs:

- It has the potential to limit expansion and development of the extractive industry in Victoria.
- It restricts the potential for royalty from stone extraction in these areas.
- It "locks up" Crown stone resources from exploitation.

The following unquantified benefits are derived from the restriction:

- Land for community enjoyment is conserved.
- Land, flora and fauna are conserved against despoliation.
- Land of archaeological and aboriginal heritage significance is preserved.
- Key Government social and environmental objectives are met.
- The tourism industry benefits from the preservation of such areas.

3.3 Summary of Assessment

Permit to search

The permit to search for stone provides a method of seeking landowner permission to enter Crown land. The permit mechanism ensures that access and use of Crown land is in the public interest and provides for geological and other data obtained from surveys to be used for public purposes. The costs associated with obtaining a permit and in maintaining a recording system are not significant. The restriction on competition is therefore considered justified on public benefit grounds.

Restrictions on land

The benefits arising from the restrictions on access to certain land are substantial especially as they meet key Government social and environmental objectives. This is particularly relevant as one of the principles of the National Competition Policy is that it is not intended to override other key policy objectives.

The costs of the restriction are not significant especially considering stone resources are not scarce in Victoria.

The restriction on competition is therefore considered justified on public benefit grounds.

4. WORK PLAN

4.1 Identified Restrictions

The Act and the Regulations restrict the conduct of an extractive industry by:

- requiring a person intending to apply for a work authority to lodge a work plan which must include a rehabilitation plan (Section 17 and Part 3);
- setting conditions for a work plan (Section 17);
- requiring that a work plan lodged under section 17 of the Act contain prescribed information.

Regulation 301(2) requires that an application for variation of a work plan must contain the information that relates to the variation. Regulation 301(3) requires that an application for variation of a work plan must be accompanied by the prescribed fee ($259).

These criteria restrict competition by affecting the ability of a person or business to enter the market and increasing the costs of production by incurring compliance costs.

The work plan specifies the rehabilitation and certain safety related standards to be achieved in the operation of extractive industries and is therefore of crucial importance to the credibility of the legislation.

4.2 Work Plan Components (Section 17 and Regulation 301)

The Act requires a person proposing to apply for a work authority to lodge a work plan. The work plan must include prescribed information and a rehabilitation plan for the land (where the land exceeds 5 hectares and the work exceeds 2 metres in depth). The Act requires the Department Head (that is, the head of the DNRE) to, within one month:

- approve the work plan with or without conditions; and
- require the changes in the rehabilitation plan or work plan specified in any notice before the plan is approved; or
- refuse the application.

The requirements for information to be provided in a work plan vary according to the size of the proposed workings, that is, according to whether the site exceeds 5 hectares and the workings are intended to be greater than 2 metres.

The Regulations specify the components of a work plan covering an area exceeding 5 hectares and greater than 2 metres in depth as containing the following information:

- A general description of geological information including estimates of stone resources.
- A general location map at a scale of 1:100,000 or 1:50,000.

- A regional plan at a scale of 1:25,000 showing the extent of Crown lands, private lands, private land allotments, rivers and streams within the proposed work plan area, and, where possible, parks and reserves within 2 kms of the site. Certificates of Title must be submitted with respect to any private land allotments.
- A site plan at an appropriate scale including cross-sections, showing and describing existing surface contours and topographical features, drainage patterns, water courses, vegetation features and soil information. The plan must also show proposed buildings and surface facilities including location of crushing, screening and other processing plant, the anticipated extent of extraction with proposed bench heights, berm details and working batters, sequencing of extraction, location of topsoil and waste rock dumps and stockpile areas, location of proposed water dams and slime dams, and sediment retention systems and any measure for the diversion of water from the site, and access roads.
- A description of processing methods to be used including the proposed plant layout.
- An environmental management program setting out proposals for disposal of any effluents, protection of groundwater, and drainage and erosion control; proposals for suppression of noise, dust from any source, and vibrations from blasting operations; proposals for the effective monitoring of the operation.
- A rehabilitation plan. These matters are discussed in Section 6 (Regulation 301).

Where the work plan covers an area not exceeding 5 hectares and is less than 2 metres in depth the Regulations require lesser requirements. These include:

- a general description of any test work undertaken on the area;
- a general location plan at a scale of 1:25,000, together with certificates of title for any private land allotments;
- a plan of the area at an appropriate scale which shows the proposed buildings and surface facilities; access roads and tracks; and location of any settling dams or water dams;
- general drainage pattern of the area; and proposed sequencing and extent of extraction;
- if any treatment of excavated material is to occur on site, a description of the treatment plant;
- a description of rehabilitation proposals which takes into account section 32(a) of the Acts and includes – proposals for progressive rehabilitation and stabilisation of extractive areas; proposals to minimise the visual impact of the site; and proposals for removal of any plant or equipment.

For these operations no rehabilitation plan is required.

4.2.1 Assessment of Restrictions

4.2.1.1 General requirements

The detailed requirements of a work plan can impose significant costs for applicants. However, for most, if not all, operations the required information will be necessary for the proponent in evaluating the potential of the business.

It is likely also that a bank, on being asked for a bank guarantee to serve the rehabilitation bond requirement, will require details of the business plan and this will involve essentially all the information prescribed by the Regulations. Moreover, much of the information will be required by the local planning authority for the permit application.

The costs of compliance therefore only arise where the requirements go beyond normal business evaluation and other requirements. For small operations this might include the preparation of detailed plans.

The direct impact of this restriction is therefore considered minimal.

4.2.1.2 Work Plan Conditions (Section 17)
The Act allows the Department Head to approve a work plan with or without conditions. These are not specified in the Regulations nor is there any guidance for the Department Head and the industry as to the intentions of the Parliament in the determination of any conditions.

Conditions imposed on work plans have included limiting the hours of operation during a day and limiting the days on which work can be conducted – for example, some work plan conditions disallow work on Sundays, others involve limiting the number of truck movements during certain times. The impact of truck movements on local amenity is an issue of concern to neighbours as well as the planning authority in terms of road maintenance. For these reasons truck movements are also conditions applied by local councils on some planning permits.

As the work plan is arguably the central most important instrument in the Act and Regulations, the Review Team is concerned that its approval is delegated to the Department Head and not the Minister. A work authority must be approved by the Minister.

Also, it is concerning that the Act gives wide discretion to the Department Head in setting conditions. This gives no assurance for the industry or the landowner in their attempts to comply with the Act.

The result of these issues with the Act is that conditions for a work plan can be set at an administrative level. While it can be argued that this facilitates flexibility and allows each case to be considered on its merits, the lack of clear parameters with which these conditions can be set combined with the lack of transparency is cause for concern. For example, inconsistent setting of conditions or unnecessarily stringent conditions could have a direct impact on the competitive position of an extractive industry.

For all these reasons it is recommended that the Act be amended to allow the Minister to approve a work plan with or without conditions and that any conditions set by the Minister be appealable by the applicant to the Victorian Civil and Administrative Tribunal (VCAT).

4.2.2 Assessment of Costs and Benefits

The costs associated with preparation of a work plan vary significantly depending on the size and the complexity of the proposed operation. As indicated, the DNRE has produced Guidelines for the preparation of a work plan including a proforma work plan application that can be used by an applicant. In these cases the applicant is able to complete the proforma and attach copies of required plans. The preparation of these plans is likely to be undertaken professionally and for a small operation this is where most of the costs will be incurred. The main areas where costs arise are in the preparation of the geological and site plans. Estimates of these costs range up to $5,000.

For larger operations, the work plan will require far more detailed information to be provided and estimates provided by several industry representatives of the costs of their preparation range from $100,000 to $250,000. These costs, while significant, must be considered in the context of such an operation potentially having a life of 30 years with production of millions of tonnes per annum and turnover in the range $30-$50 million per annum.

Moreover, and as has been discussed earlier, the costs associated with the work plan should be considered in large part as a necessary part of initial set up costs for the operation and many of the components of the plan will be prepared irrespective of the regulatory requirements. For example, they will be part of initial feasibility and due diligence processes for the business where detailed proposals concerning processing and production will be prepared and these will also involve maps and plans of the proposed site.

The provision of a work plan provides the following benefits:

- it clearly identifies the nature of the proposed activity and all associated works;
- it ensures that the proponent gives due regard for rehabilitation of the site;
- it ensures the proponent gives due regard to the potential environmental effects of the workings;
- it provides the necessary information for the planning permit application; and
- as a business management tool it provides the basis for efficient and effective operations.

4.3 Variation of Work Plan (Section 18 and Regulation 301)

The Act allows a work authority holder to apply for a variation of an approved work plan. The Regulations require an application for variation of a work plan to contain almost identical information to that provided at the initial application for work plan stage.

The Act empowers the Department Head to determine that a work plan should be varied and following consultation with the work authority holder, may direct the holder to submit an application for approval of the variation.

The Act provides that on receipt of an application the Department Head must, within one month:

- approve the variation with or without conditions; or
- require the changes specified in any notice to the holder to be undertaken before approval is given; or
- refuse the application.

The Department Head must not approve a variation unless the relevant municipal council has been consulted.

4.3.1 Assessment of restriction

No clarification of what 'variation' means is provided in the Act or Regulations. Clearly, where the work plan is to be significantly altered by, for example, the addition of a new crushing plant, there is a need to evaluate in a commercial sense how the work will be done viably. This information can then be used as part of the variation application. Where a work plan is to be varied only marginally the requirement for a full application as required by the Regulations imposes costs on the work authority holder.

The objective in requiring variations to be formally approved relates to the integrity of the approval of the initial work plan. There is a need to define certain parameters within which certain minor changes can be made without the need to undergo formal approval. These changes would not relate to environmental nor safety issues and therefore would have no cost impacts for the community.

Within the context of the work plan arrangements it is appropriate that any substantive change to the approved work plan be subject to an approval. This restriction is in the overall interest of the public as it meets the objectives of the Act. However, the Review Team considers that minor variations should be allowed without the formal approval process and that the parameters beyond which a variation should be submitted should be prescribed in regulation.

The Act requires the Department Head not to approve a variation unless the local council is consulted. The Review Team considers that if the council's interests are outside the quarry, that is, the impacts of the operation on neighbours etc, it is only when the variation concerns these matters that the council needs to be involved.

4.3.2 Costs and benefits

Consultation with the industry reveals that most, if not all, applications for a variation of a work plan are prepared professionally, that is, by a person or organisation external to the quarry operation. Where a minor change is to be made the cost of a variation is approximately $3,000. An average change to a work plan will cost approximately $5,000 and more complex alterations involving new directions for the operation may cost in excess of $10,000. This typically would include an updated site plan ($1,500).

In these cases it is likely that a work authority holder will be required to re-apply for a planning permit from the council. This will involve a public consultation process and the estimates of the costs of this process range from $20,000 - $30,000 to in excess of $100,000 for proposals involving very large operations.

The costs associated with a variation to a work plan are not insignificant. However, as the work plan is the key instrument to demonstrate effective compliance with the Act and Regulations, it is essential and in the overall community interest that it reflect the actual operation of the extractive industry. The costs associated with the variation are therefore considered to be offset by the need to ensure the integrity of the work plan process.

4.4 Summary of Assessment

The work plan is the single most important instrument that provides the vehicle to achieve the Act's objectives. While it imposes costs in preparation, these costs of compliance are offset in large part as the components of the work plan will generally need to be prepared as part of normal business practice and for the permit application.

The Act delegates to the Department Head approval of a work plan and the setting of conditions attaching to a work plan. This allows a large degree of administrative discretion. The Review Team in no way suggests the administration has been undertaken in the past in anything other than propriety and in the public interest nor has there been any indication of this through consultations. However, as the work plan is the key instrument established under the Act it is considered appropriate for applications to be considered by the Minister. As inconsistent setting of conditions can have a significant effect on the competitive position of an extractive industry it is recommended that conditions be appealable by applicants to VCAT.

The Review Team considers that minor variations should be allowed without the formal approval process and that the parameters beyond which a variation should be submitted should also be prescribed in regulation.

5. WORK AUTHORITY

5.1 Identified Restrictions

The Act and the Regulations restrict the conduct of an extractive industry by:

- making it an offence for a person to carry out an extractive industry without a work authority (Section 9);
- setting conditions on a work authority including matters associated with rehabilitation of land, protection of the environment, amenity of the area, groundwater, safety of workers and the public, payment of royalties and fees (Section 20);
- allowing the Minister to vary and cancel a work authority (Sections 22 and 24);
- requiring the work authority holder to complete an annual return under the work authority including a return on all work done and a summary of all accidents requiring the absence of the injured person from work for a day or more (Section 52 and Regulation 305); and
- prescribing fees payable in connection with a work authority (Regulations 302 - 304).

These criteria restrict competition by affecting the ability of a person or business to enter the market and by increasing the costs of production by incurring compliance costs.

5.2 Assessment of Restrictions

5.2.1 Need for a Work Authority

The work authority is the final approval necessary to commence an extractive industry operation. Approval of a work authority is granted by the Minister for Energy and Resources over a defined piece of land. This is usually a far greater parcel of land than that which is initially proposed to work for many reasons including ensuring a 'buffer zone' between the workings and neighbours and allowing for future expansion of the workings.

The EID Act is primarily concerned with two matters; that extractive industries are conducted safely and rehabilitation of the land is undertaken. The Act also aims to provide an integrated assessment and approvals process. This means that, to the extent possible, a person desiring to undertake an extractive industry can be assured that the application is considered on the basis of its planning merits as well as its extractive industry operational merits. Notwithstanding this aim, the applicant still must make at least two separate applications – for a development application (permit) to the planning authority for approval under Section 47 of the *Planning and Environment Act 1987,* and for a work authority under the EID Act.

The permit application has as its primary focus environmental and land use considerations outside the quarry site whereas the work authority and work plan deal with operations within the site.

The Review Team has been advised that in practical terms because planning authorities in the State do not each have specific knowledge of the operations of extractive industries (and the DNRE has), the planning authority will generally not give final consideration of a development application without having advice from DNRE. As indicated earlier, the DNRE is a referral authority under the Act and this advice is in the form of an approved work plan. The work authority collects both the permit and work plan approvals and gives the final go-ahead for the applicant. This is how the approval is 'integrated'. The work authority is essentially a 'rubber stamp' process once the work plan and the planning application have been approved and consent has been obtained from the landowner.

The review is aware of cases where this apparently straightforward process fails in its aim for integration of approval and where each agency's jurisdiction is blurred.

Notwithstanding the primacy of the planning approval process in extractive industry matters, investing businesses (work authority holders) need assurance about all hurdles required to be scaled in proposing developments on existing sites. This is best achieved through close relations with each approving agency, municipal councils and DNRE, enabling efficient integration of approvals where the issues of concern to each are similar.

5.2.2 Assessment of Costs and Benefits

In competition policy terms any requirement that adds to the costs of entering a market or on production is regarded as restricting competition and must be assessed as to its public benefits.

The costs associated with applying for a work authority are incurred in presenting details of previously prepared information, the planning application and approval and the work plan. While these are not significant costs in themselves any process takes time and, should there be delays in the approval process, opportunity costs of lost time may also be incurred.

The benefits of the work authority system are that it provides:

- a process to draw together all necessary approvals;
- protection for the community from adverse impacts; and
- a mechanism for enforcement should conditions of the approval be breached.

5.2.3 Conditions of a work authority

Section 20 of the Act allows the Minister to impose conditions attaching to a work authority on any matter including matters associated with rehabilitation of land, protection of the environment, amenity of the area, groundwater, safety of workers and the public, and payment of royalties. Following the Act's introduction, conditions were applied to work authorities but more recently they have been attached to the work plan as this is where the essential issues are addressed.

An assessment of the rehabilitation and environmental requirements are contained in Sections 6 and 7 of this report. There are no prescribed conditions relating to the safety of workers. Section 8 of this report deals with requirements concerning royalties.

The powers conferred on the Minister under section 20 of the Act are very wide and allow for considerable discretion to be used. While this wide discretion has benefits the vagueness can have negative effects on public confidence in the administration of the industry because the conditions cannot be easily or readily identified. If applied inappropriately for example, they could have serious and deleterious effects on a work authority holder in terms of costs of compliance.

In order for transparency and accountability to be preserved it is suggested that, like the recommendations associated with the conditions of a work plan, conditions attaching to a work authority be appealable to VCAT.

5.2.4 Minister's power to vary and cancel an authority

The powers for the Minister to vary a work authority are considerable and while they require consultations with the holder (and the municipal council) it is curious that consultation is not required with the owner of the land for whom any change will presumably have a particular interest. Additional conditions, for example, may have a cost impact on the holder and this may bear on the consent arrangements between the landowner and the holder.

Within the framework of the work authority provisions however, powers to vary and cancel a work authority in the worst case scenario, are necessary for effective administration.

5.2.5 Annual and Quarterly Returns

The Act and the Regulations require:

- an annual return of all production, sales and volume of stone extracted; and
- quarterly returns of all accidents requiring a person's absence for a day or more.

<u>Annual production return</u>

Schedule 4 of the Regulations provides a sample of the annual production return. A signed statutory declaration that verifies the contents of the return must be included and the return must be provided within 4 weeks of completion of the 6 month period. The return requires a comprehensive report to be provided of all production showing rock type, quantity of sales, value of sales, dollar value of freight etc.

The return incurs compliance costs for each work authority holder and some of the information is likely to be commercially sensitive and any leak of information could have unnecessary ramifications. The DNRE summarises some of the data and reproduces it in the agency's Statistical Review in the form of annual production and sales by rock type and product. DNRE has advised that the data collected through this return is also used in determining royalties for stone extracted from Crown land and in land use planning.

The Australian Bureau of Statistics (ABS) collects data of this type across the range of industry groups in Australia including the extractive industry and it is regarded as a credible source of such data where it is needed. In order to avoid regulatory compliance costs of reporting separately it is recommended that this data be obtained from one government collection agency, either the DNRE or the ABS, and be made available by that agency to the other body.

Quarterly accident return

These returns are requested twice yearly but the figures are required to be provided in a quarterly format. The DNRE advise that the information is used to implement programs for safety improvement in the industry. Requiring summaries to be provided imposes additional costs on the industry.

A work authority holder (as an employer) must also notify the WorkCover Authority of all incidents under the Occupational Health and Safety (Incident Notification) Regulations 1997. Under these Regulations the employer must also provide a written record of the incident to the Authority within 48 hours of the incident (regulation 9).

It is a duplication for industry to notify two government bodies of the same incident. It is suggested that arrangements be made between the two bodies so that a reported incident to one body is notified to the other body.

Costs can be attributed to these requirements but they are of such a minor nature that quantification is considered unnecessary.

Industry benefits can accrue from these requirements from the development of a database of information from incident investigations of incidents. This information may suggest alternative methods of operations which, once followed, may reduce the incidence of lost time injuries.

The restriction on competition arising from the minor compliance costs being incurred are considered to be justified and in the public interest. The duplication of reporting, however, should be discontinued.

5.2.6 Fees

Fees associated with a work authority are as follows:

Application for a site in excess than 5 hectares and greater than 2 metres in depth	$414
Application for a site less than 5 hectares and less than 2 metres in depth	$104
Variation to a work authority	$259
Transfer of a work authority	$155

These fees were initially set on a cost recovery basis and as such are not considered a restriction on competition. It is noted that the fees were increased in July 2000 but prior to this had not been adjusted since 1996.

5.3 Alternatives – Options for Reform

The Act's purpose of an 'integrated assessment process' appears more to do with efficient government processing and coordinating of applications than achieving a 'one-stop-shop' for business. The Review Team has considered the potential benefits of simplifying the process further, for example, by abandoning the work authority and relying on the work plan as the primary tool to achieve the objectives. This would mean that the responsibility for ensuring the relevant approvals are in place, either planning or extractive industries approvals, would belong to the applicant and not be part of the work authority process which currently involves a check whether the planning approval has been obtained. This check puts some level of responsibility with the work authority approving mechanism, the DNRE.

As has been discussed in the last section, the work plan is arguably the most important document in the whole process of the EID Act as it provides all the required information in order for the proposed extractive industry to be considered. Also, as discussed, it is an important component of the process for local planning authorities. By abandoning the work authority the process will be simplified, at least by one step. The work plan would then cover the area of land presently described by the work authority.

As the permit issued by the local planning authority in most cases will be issued on the basis of an approved work plan it is suggested that a stronger link be established between the permit and the work plan. This might simply be achieved by the permit identifying the work plan number (as a work plan does not have a number at present it may be more convenient to retain the work authority system and incorporate the work plan requirements into it).

Providing a stronger link between the two approval mechanisms will have advantages for DNRE in managing and ensuring site restoration is carried out as it would be in a stronger negotiating position with the planning permit holder. This has been an area of weakness in the current arrangements when, for example, consent from the landowner is no longer given and the work authority is subsequently cancelled, the holder is unable to fulfil restoration obligations and, in turn, have the associated bond released.

5.4 Summary of Assessment

The Review Team considers the work authority process, as one of the two primary approval instruments under the EID Act (the other being the work plan), adds unnecessary costs for business and the regulating agency for little apparent benefit. It is recommended that the process be simplified by reducing to one these approvals. This can be done by abolishing the need for the work authority and relying on the Work Plan as the single approval instrument. As indicated, for convenience it may be appropriate for the numbering system of the work authority to be transferred to the work plan.

Should the work authority remain, it is recommended that:

- Conditions of a work authority be appealable by applicants to VCAT.
- Any variation to a work authority should include consultation with the landowner.

It is understood there may be some doubt as to whether there is adequate head of power in the Act for the Minister to impose conditions on a work plan. Any redrafting of the Act will need to clearly provide for this.

To ensure appropriate restoration of the site it is recommended that a stronger link be established with the planning permit and the EID Act approving mechanism. This can be achieved by a permit identifying the work authority number.

To further simplify the process and reduce compliance costs for industry and administration costs, without minimising achievement of objectives, it is recommended that the requirement for a work authority holder to submit annual production returns be amended so that the required data be obtained from one government agency, either the DNRE or the ABS, and be made available by that agency to the other body.

The duplication of reporting of accident data to two government bodies should be discontinued.

6. REHABILITATION PLAN

6.1 Identified Restrictions

Section 31 of the Act requires the holder of a work authority to rehabilitate land in accordance with the rehabilitation plan approved by the Department Head, the conditions in the authority and the requirements of the relevant planning scheme and any planning permit.

Section 32 of the Act requires that a rehabilitation plan be prepared following consultation with the landowner (if privately owned) and must take into account:

- any special characteristics of the land; and
- the surrounding environment; and
- the need to stabilise the land; and
- the desirability or otherwise of returning agricultural land to a state that is as close as is reasonably possible to its state before the work authority was granted; and
- the need to protect or conserve native vegetation and protected flora and fauna.

Section 34 of the Act requires the holder of a work authority to rehabilitate the land in the course of doing work (progressive rehabilitation) and must, as far as practicable, complete the rehabilitation of the land before the work authority ceases to apply to the land.

Regulation 301 and Schedule 3 of the Regulations requires a Rehabilitation Plan for a work plan which covers an area exceeding 5 hectares and more then 2 metres in depth to include;

- concepts for the possible end use of the site;
- proposals for progressive rehabilitation to a safe and stable landform of extraction areas including slope batters, road cuttings, and dumps;
- proposals for landscaping to minimise the visual impact of the site;
- proposals to protect and conserve native vegetation during the production phase of the operation;
- proposals for the final rehabilitation and vegetation of the site including final security of the site, securing of water dams and slime dams and removal of plant and equipment.

A rehabilitation plan is not required for sites not exceeding 5 hectares and less than 2 metres in depth. In identifying restrictions on competition the Review Team has accepted that it is unnecessary and impractical to apply the Act's provisions to very small operations. By virtue of their size these operations will typically not impose any environmental nor safety risks nor be of a commercial magnitude that would compete with larger operations. Consequently, this exemption is not considered a restriction on competition.

Guidelines provided by the DNRE for the preparation of rehabilitation plans reiterate the Act's and Regulations requirements.

6.2 Assessment of Restriction

6.2.1 End Use

It can be argued the eventual end-use of a quarry which is anticipated to last several decades is to some extent academic, certainly premature. Over the years, for example, due to new material demand, new techniques and technology for dealing with extraction materials, changed landowner attitudes etc., all may act to dramatically change initial conceptions of the end use of the quarry. The value of requiring these considerations to be made in a rehabilitation plan is therefore questionable. Also, the person/s mostly directly affected by the end use will be the landowner. The landowners consent is required for the continuing operation of the extractive industry.

On the other hand, the community in the vicinity of the quarry also has an interest in the end use of the quarry for aesthetic and land value considerations.

The requirement to consider possible end use of the site is probably the best method of dealing with this issue. It keeps the matter on the agenda by incorporating it as part of the work plan and it allows for flexibility by allowing initial considerations to be altered. These requirements are not therefore considered unreasonably restrictive and are in the overall public interest.

6.2.2 Progressive rehabilitation

The requirement for progressive rehabilitation of the site to a safe and stable landform accords with employers' responsibilities under the OHS Act to ensure safe working conditions for employees.

The Review Team is aware that for some quarries extracting certain materials (that is, stone types) ongoing restoration may not be practical due to competing demands for other materials at the time. In these cases a work authority holder may not complete working in a particular area or face and will leave it open for a period, possibly months.

This may also happen where a major construction project is planned such as a pipeline construction, and the extractive material, say sand, is ideally suited as bedding for the pipeline. It would be financially wasteful to undertake any restoration work in this area if the holder intends further extraction.

However, the Act is quite definite in requiring rehabilitation 'in the course of doing work' and although this is not defined it is recommended that the Act be framed to allow for circumstances as described above.

6.2.3 Landscaping

As has been discussed previously of crucial concern to the community in the vicinity of the quarry is its visual impact. Landscaping is a relatively inexpensive method to ameliorate these concerns. This requirement is therefore considered not overly restrictive and is in the public interest.

6.2.4 Native vegetation

The Rehabilitation Plan requires proposals to protect native vegetation and to conserve flora and fauna. These requirements are consistent with the *Flora and Fauna Guarantee Act 1998*, the *Wildlife Act 1975*, the *Catchment and Land Protection Act 1994* and the *Planning and Environment Act 1987* which in combination seek to protect native vegetation and flora and fauna from unnecessary clearing and eradication. These requirements are not considered onerous and are in the public interest.

6.2.5 Final rehabilitation and vegetation

Similar arguments are relevant for final rehabilitation and vegetation as were canvassed for end use above. Ultimately these requirements are not considered overly restrictive and are in the public interest.

6.3 Assessment of Costs and Benefits

This report has discussed the apparent need for legislative control over the extractive industry to ensure extractive industry sites are appropriately and safely restored. The rehabilitation plan, through the work plan, is the means to provide this assurance. It requires the proponent and subsequently the work authority holder to consider methods of restoring the site to a reasonable condition. The rehabilitation plan requires that these activities be undertaken throughout the working life of the site, that is, by progressive rehabilitation.

Rehabilitation of a site clearly imposes costs for a work authority holder. These costs will vary considerably depending on the extent of the workings and many other factors including of course, the anticipated end use. These costs add to the costs of production and ultimately are reflected in the unit price per tonne of material sold.

Consultation with operators reveals that rehabilitation is generally an accepted part of industry operations. Indeed, it is recognised by most that in reality were it not for strong regulatory requirements in this area that it would be very difficult to obtain a planning approval in some areas to operate in the first instance. The industry generally therefore considers the impact costs associated with the rehabilitation requirements are offset in large part by the benefits derived.

The degree to which there is any tension occurs when requirements go beyond what an operator might construe as fair and reasonable requirements. This, of course, is a matter of individual judgement. Operators must accept the need for adequate rehabilitation and regulators must understand that imposing greater demands in restoration increases costs of compliance which directly impacts on the competitive advantage of the industry. These costs will be passed on to supplier industries including the public itself. These costs must be balanced against the benefits derived from the protection of the local amenity.

6.4 Summary of Assessment

The rehabilitation plan is an important part of the work plan and requires, in a performance-based fashion, matters that proponents need to consider in the development of the work plan. The requirements are consistent with the objectives of the Act and allow for flexibility by proponents in meeting the objectives. The requirements are not considered overly restrictive and are in the public interest.

With respect to the Act's requirements for a work authority holder to rehabilitate the land in the course of doing work, it is considered that if applied rigidly in all cases this may have the effect of incurring unnecessary costs for a holder who intends to make further use of the previously used land. By rehabilitating the land it may also sterilise the land for further use. It is therefore recommended that the Act be framed to allow a flexible approach to progressive rehabilitation.

7. REHABILITATION BOND

7.1 Identified Restrictions

Section 33 of the Act requires that the applicant for a work authority enter into a rehabilitation bond for an amount determined by the Minister and a condition of the bond requires a work authority holder to rehabilitate the land in accordance with the rehabilitation plan. Where the land is private land, the Act requires the Minister to consult with the local council before determining the amount of the bond.

On completion of operations if the Minister considers the land has been rehabilitated successfully the Minister must return the bond to the holder.

The Act empowers the Minister to enter into a further rehabilitation bond if the Minister considers the existing bond is insufficient to rehabilitate the land.

Bonds are required in the form of a bank guarantee and these are provided by way of a Letter of Credit from the banking institution. For most operations the bank requires either cash or other liquidity to be presented in order to provide the guarantee. Effectively, the bond therefore requires the holder to provide an 'up-front' level of funds that cannot be drawn on or used for any other purpose. **This is a clear barrier to entry to the industry**.

7.2 Rationale for Rehabilitation Bonds

7.2.1 State's responsibility

The rationale for the rehabilitation bond as explained to the Review Team is to ensure that the State (the community) is not left with the cost of rehabilitating a quarry in the event it is abandoned in an un-rehabilitated state. That is, when a work authority holder perhaps has become bankrupt and has closed down the business or no longer has the landowner's consent to use the land.

In this event, however, it is not clear why the State would be held responsible for the clean-up costs for other than Crown land where it is the land manager. Where land is privately owned and a holder has an agreement with the landowner to use the land for an extractive industry, if the holder leaves the site un-rehabilitated the responsibility should fall on the landowner. This would be consistent with the Act which (as distinct from minerals) vests ownership of the stone resources with the landowner.

The Auditor-General[7] in a report in 1999 noted that during the 1997/98 and 1998/99 financial years, $148,000 of the DNRE's operating budget was allocated to meet the costs of rehabilitating unrestored sites. No recovery of these amounts had been initiated because the Department assessed the individual amounts involved were too small to justify the costs of recovery. Also, some companies had ceased to exist.

[7] The Victorian Auditor-General's Report on Ministerial Portfolios, May 1999.

The Review Team has assumed that the Department (and therefore the Government on behalf of the people of Victoria) has accepted responsibility to fund rehabilitation because the Act gives specific authority to the Minister to '*take any necessary action to rehabilitate land if he or she---*
(a) is not satisfied that the land has been rehabilitated as required by section 31; or
(b) is satisfied that further rehabilitation of the land is necessary; or
(c) is requested to do so by the owner of the land." (section 36)

The Act also empowers the Minister to recover any monies spent on rehabilitation and as the Minister is the administrator of the Act, in a default situation may be considered to have some responsibility arising from the default.

The Review Team understands that in at least one case in Victoria, a municipal council also has levied a bond on an extractive industry.

7.2.2 Work authority holder and landowner responsibility

Without the section 36 provision and certainly if the work authority holder's and the landowner's responsibility were made more explicit, it is questionable whether the Government would have legal responsibility for the restoration in the case of default. That is, the responsibility would fall on the work authority holder and in default, on the landowner.

This would be consistent with the *Environment Protection Act 1970* which provides that where the Environment Protection Authority has had to undertake clean-up operations, recovery action is taken, firstly from the person who caused the action to be taken or, secondly the occupier of the premises on which anything has occurred. Clean-up operations under the Environment Protection Act[8] cover circumstances where:
(a) pollutants have been or are being discharged;
(b) a condition of pollution is likely to arise;
(c) any substantial noise is being emitted;
(d) any industrial waste or potentially hazardous substance appears to have been abandoned or dumped; or
(e) any industrial waste or potentially hazardous substance is being handled in a manner which is likely to cause an environmental hazard.[9]

These matters have some relevance for the extractive industry.

Where a site is left un-rehabilitated the owner of the land will suffer:
- in the event that an accident occurs as a result of the site being left unsafe; and
- possibly in terms of the value of land where the market value falls.

[8] Section 62(A), *Environment Protection Act 1970*.

[9] It is noted that section 67 of the EP Act allows the EPA to levy a bond as a financial assurance when issuing a:
- licence or amending a licence; or
- pollution abatement notice; or
- transport permit.

7.2.3 Culpability in the case of an accident

In the case of an accident it is clear that a landowner would be held culpable if the landowner failed in identifying unsafe conditions on the property. Section 14B(3) of the *Wrongs Act 1958* provides:

An occupier of premises owes a duty to take such care as in all the circumstances of the case is reasonable to see that any person on the premises will not be injured or damaged by reason of the state of the premises or of things done or omitted to be done in relation to the state of the premises.

It is noted that Section 51 of the EID Act provides that the work authority holder is regarded as the 'occupier' of the premises. The Section also specifically excludes the duty of care arising from the Wrongs Act attaching to the occupier where the land is covered by a work authority.

The responsibility of the landowner may be put to question where the person injured did not have permission to enter the land. That is, where the person had trespassed. However, in terms of safety it may be sufficient for a landowner to simply erect suitable signs identifying the potentially unsafe site. This would not be consistent with the Act's objectives of ensuring sites are rehabilitated to a safe and stable condition.

However, the Act could be framed so that rather than being prescriptive about how the objective might be achieved it identified **who** has the obligations to ensure this. In this case it seems the landowner has the control. That is, the landowner has the discretion to allow the extractive industry to use the land and has the discretion how the land will be rehabilitated.

7.2.4 Impact on land value

In terms of impact on land value, it is anticipated that a prospective land purchaser will assess the relative impact of the extractive site in terms of his/her intended land use and purchase price. If the extractive site interferes with the intended use the value will fall. Equally, if the site in its condition is seen to add value, the value will rise. This is the normal operation of the market.

Also, a site may be abandoned for a variety of reasons but this drastic action presumably would be undertaken because:

- extraction of the readily available material of the site had been completed; and/or
- the operator's business had folded; and/or
- the landowner no longer gives consent.

There is every likelihood that an abandoned site would be attractive to another extractive industry operator and the Review Team has been told of examples where abandoned work authorities have been purchased and the sites re-commenced under a new work plan.

Restoring the land by way of filling the excavation can have negative impacts:

- It may act to retard the further extraction of material from the site, thereby sterilising available resources.
- It may restrict the ability of the excavation to be used for other purposes, for example, land fill. In these circumstances the excavated site is said to have 'air space' value.

The point here is that extractive industry sites have commercial value and this should act to assuage some concerns about abandoned sites being left to the Government to rehabilitate.

7.2.5 Interstate approaches

As discussed earlier the extractive industry in Queensland is regulated under local planning controls and the environment protection authority. It is understood neither of these regulatory mechanisms involves the payment of a rehabilitation bond. A similar situation exists in Western Australia where local planning processes deals with extractive industry operations on private land. Extractive industry operations on Crown land are subject to mining lease arrangements under the *Mining Act 1978*.

New South Wales has a similar system to that operating in Victoria. It requires a 'security deposit' to be lodged with the Minister of Mineral Resources. The size of the deposit is determined by the Minister and depends on the size of the proposed operation and the likely costs of rehabilitation.

The South Australian *Mining Act 1971* (section 63) sets up the 'Extractive Areas Rehabilitation Fund' to provide a mechanism for the rehabilitation of extractive mineral sites approved by the Minister through a levy placed on each tonne of quarry product. This 'user pays' arrangement is intended to spread rehabilitation funds amongst the end users of quarry products and allows the cost of rehabilitation to be spread across the extractive industry. In 1994 the levy was changed to a royalty and increased to 2.5% to conform to the royalty rates under the Mining Act. The assessed value of extractive minerals was set at $8.00 resulting in a royalty of 20 cents per tonne. This is split evenly between the fund and consolidated revenue.

The Tasmanian *Mineral Resources Development Act 1995* requires that operators of quarries hold mining leases to extract stone and other minerals from private or Crown land. As a condition of the licence a holder must pay a rehabilitation bond similar to the arrangements in Victoria and New South Wales.

7.3 Existing Bond Arrangements

7.3.1 Level of bond

The level of the bond is determined on the basis of the required works. This is identified in the work plan and in particular the rehabilitation plan. The bond is set to recover the costs of stabilising the works to a safe and visually acceptable state.

On this basis as the extractive industry is a dynamic operation that changes the site over a period it is necessary to review the bond at regular intervals. The review is intended to consider the next stage of the operation and what that will mean in terms of securement.

Where the rehabilitation plan has been very specific and adhered to, the bond should not be altered significantly (there may be a small adjustment for inflation). However if the operations have deviated or extended from the original plan, it will be necessary to re-consider whether the bond provides adequate resources to secure the site to the desired end use in the case of abandonment at that point.

The DNRE has developed guidelines it uses for the establishment of bonds in the mining and extractive industries. Costing calculations have been developed for various components of an extractive industry including:

- the type of extractive industry (hard rock, gravel, sand, and clay pits);
- machinery sites;
- tailings/slimes dams;
- waste dumps;
- leach vats;
- water dams, process ponds etc;
- shallow pits (gypsum etc); and
- roads and tracks.

The Guidelines include examples of costs for battering (hard and soft rock faces) by drilling and blasting on the basis of a cost per metre per face height. Also, rates of costs for earthworks and revegetation are established. Other costs included in the bond are removal of buildings and equipment, rubbish, contaminated material and the break-up and removal or burying of footings and slabs etc. The costs of drainage works and fencing may also be included.

Using the rates established, the guidelines also indicate bond levels for small sand, gravel and gypsum pits at, for example, $2,000 per hectare where only faces have to be rehabilitated and $3,000 per hectare where faces and floor have to be rehabilitated. On this basis a rehabilitation bond of $15,000 might be required for a small operation of approximately 5 hectares. On the other hand for a large, multi-bench operation a bond of up to $1,200,000 might be required.

7.3.2 Administration of bonds

The administration of rehabilitation bonds has not been without its difficulties. In his 1999 report the Auditor-General identified problems associated with restoration of mining sites (this reference includes extractive sites and no clarification of the break up of the findings for both industries was made). Problems identified included:

1. For bonds called-in over the past 3 years, the estimated costs of rehabilitation works exceeded or were likely to exceed the amount of the bonds received.
2. Bond reviews were outstanding for many sites.

3. The value of bonds held by the Department in respect of a number of sites was less than the amount estimated to rehabilitate these sites in the Department's bond review process.
4. The Department held bonds relating to expired licenses and that, in respect of some of these licenses, bonds had not been returned to licensees in accordance with legislative requirements.

7.3.3 Bond reviews

The Review Team was advised that typically bonds are reviewed every 3-5 years. A bond might also be reviewed at another time where there is a change in a work authority or where an inspector has made a judgement that the operation at a particular site has altered to the extent that would impact on the bond. Following the Auditor-General's' comments last year efforts have been made by the DNRE to review any overdue sites.

Information from DNRE reveals that the total amount of bonds guaranteed for the period 1996 to the present is as shown in Table 7.1 The Table shows the total production for the industry (tonnes) for the same period.

Table 7.1

Total bond guaranteed and production (tonnes) for the period 1995-2000

Year	Bonds $	Variation %	Production (tonnes)	Variation %
1995	n.a.	-	33,159,136	-
1996	14,443,350	-	34,298,848	+3.4%
1997	16,381,301	+13.4%	29,727,926	-13.3%
1998	18,344,753	+12.0%	35,278,774	+18.7%
1999	20,988,469	+14.4%	30,098,502	-14.7%
2000	23,504,919	+12.4%	36,312,222	+20%

From the Table it can be seen that since 1996 total bond guarantees have increased by 63% while for the same period production has only increased by 9.5%. This discrepancy is bought into sharp context by relating the industry dollar rate per tonne of product (as determined by total production divided by total sales) over recent years. In 1990 for example, the rate was $11.20 per tonne (total production 28 million tonnes and total sales $318 million). The rate had dropped to $8.51 per tonne by 1997/98 and had fallen further to $7.71 per tonne in 1998/99. This represents an overall decrease of 31% for the period at a time when costs, as represented by the Consumer Price Index, rose by 15.5%.

While the level of bonds is not set on the basis of production, clearly the ability of a work authority holder to either continue to not access bond moneys or most significantly, be able to fund increases in bonds is very much dependent on the production ability of the firm. If production levels are declining for the industry as a whole and prices are also in decline, the level of profitability of firms must also have been affected.

Table 7.2 shows the relative 'cost' of bonds as a unit of production for the industry. It can be seen that the impact of bonds as a unit cost of production has increased marginally greater than 50% for the period 1996 to 2000.

Table 7.2

Relative 'Cost' of Bonds as a Unit of Production

Year	Bonds $	Production (tonnes)	Bonds as a 'Cost' of Production - Cents per Tonne (cpt)
1995	n.a.	33,159,136	
1996	14,443,350	34,298,848	42 cpt
1997	16,381,301	29,727,926	55 cpt
1998	18,344,753	35,278,774	52 cpt
1999	20,988,469	30,098,502	70 cpt
2000	23,504,919	36,312,222	65 cpt

Clearly the quite significant increases in bonds over the last five years have come at a time of fluctuating levels of production in the industry. The ability for some, perhaps many, work authority holders to pay increased bonds must now be borderline. Increased bond levels clearly impact on the operational fluidity of the business. This in turn has a direct potential to reduce funds to be directed to all facets of business activities including progressive restoration and in ensuring safe working conditions. Even the incentive of a partial bond return following progressive rehabilitation may be insufficient assurance for those businesses facing these commercial risks.

Consultation with a banking institution reveals that where the bond level is a small proportion of the holder's overall credit exposure the bank is not concerned. However, where the bond becomes a significant proportion of the holder's exposure the bank may need to reconsider its own exposure levels associated with lending and guaranteeing funds for the holder.

It is apparent therefore, that on the available data, continuing significant increases in the level of bonds for work authorities is likely to result in a number of holders not being able to obtain bank guarantees. This is likely to involve the collapse of these businesses.

In its submission to the review the Construction Materials and Processors Association (CMPA) has provided data accumulated from a portion of its membership that shows:

- a steady increase in bonds for the period 1990 to 1997;
- a greater increase in bonds for the period of 1998 to 1999;
- a very significant increase for the current period (2000).

The submission claims that some bonds have been increased up to 400% in a single review and that 'numerous members have also indicated that the reviewed bond is far greater than their annual profit and seem bewildered as to how they will approach their next review, which is, in some cases, within 18 months of the last (review)'[10].

The level of increases claimed by the CMPA has been confirmed by records from the DNRE for the period 1999 to 2000. Increases beyond this level have also been applied. The Review Team has been advised of the following recent case.

A company purchased the lease of a property over which there are three work authorities. The bonds for the work authorities as at 29 September 1998 were $8,000 and $45,000 with the third one not being available as only an application had been made and no final conditions had been set. Recently the company had been advised that the bond levels for the work authorities had been adjusted to $218,000, $153,000 and $17,500. These adjustments reflect an increase of 2,725% and 340% respectively.

The original agreement for the purchase of the lease gave no indication of this level of liability which has now the potential to severely weaken the company's liquidity.

Consultation

Section 33(4)(b) of the Act requires the Minister to consult with the relevant Council before determining the amount of an initial bond or on a subsequent reviewed bond. The bond is set to allow sufficient funds to rehabilitate the land. It is surprising that the party most affected by the condition of the land, as previously argued, the landowner, is not required to be consulted.

It is considered the landowner is the party which has the primary right to determine the level of restoration of the land. The planning permit is sought and obtained by the landowner and accordingly the permit holder must ensure the council, as the approving authority for the permit, is satisfied with the restoration plan. To not be consulted when the Minister determines a bond which is set on the basis of the pre-determined, although this is fluid, end use is quite inappropriate and could be considered to usurp the rights of the landowner.

It is conceivable that the Minister may set a bond level on the basis of inaccurate knowledge of the desired end use of the land. In this case the bond level may be very high whereas the landowner's concept of the end use may involve a different level of restoration requiring a lower bond level.

7.3.4 Other legal enforcement remedies

As has been discussed earlier the work plan requires a rehabilitation plan that provides for progressive rehabilitation of the site. Section 9 of the Act makes it an offence for the holder of a work authority to not comply with the work authority.

[10] Submission by the Construction Materials Processors Association, 11 August 2000, page 6.

The Act provides a penalty of $10,000 in the case of an offence involving a breach of a condition of a work authority relating to the safety of workers or the public and $2,000 for all other cases. This offence may also be expiated through an infringement notice under the Regulations by the payment of a penalty of $500.

Section 24 of the Act empowers the Minister to cancel a work authority if the Minister considers the holder has not substantially complied with the Act and Regulations and any condition of the work authority (such as the rehabilitation plan).

Section 48 provides that the Minister may require remedial work or order cessation of work where there are breaches of the Act, Regulations, work authorities, planning schemes or planning permits. A review is to the Victorian Civil and Administration Tribunal. A penalty of $20,000 applies for a breach of this Section.

These are powerful enforcement tools that can be used to ensure ongoing rehabilitation of the work site. Data from DNRE reveals that the total number of infringement notices issued under the Act since their introduction are as follows:

1997	4
1998	10
1999	18
2000	36

Two stop work notices have been issued. It is noteworthy that both of these were not associated with safety breaches but were issued for non-lodgement of additional bonds.

7.4 Impact of Bond on Prospective Market Entrants

A person intending to apply for a work authority must enter into a rehabilitation bond. A bond is in the form of a bank guarantee for an amount of money. Advice from a large banking institution indicates that a guarantee can be provided on the basis of the applicant demonstrating adequate funds and equity. Usually this will be in the form of either deposit funds (cash) or a mortgage on real property.

Deposit funds, where available, will be used to cover the bank guarantee either in full or in part. The funds can be transferred into a term deposit account (unable to be drawn from by the owner). Bank charges for providing the service will generally be offset by the interest earned from the deposit account. Bank charges on mortgage arrangements will be marginally higher than through the deposit funds method.

While not corroborated by the banking institution, there is some anecdotal evidence from within the extractive industry that banks have required an amount greater than the desired level of bank guarantee (bond) for mortgage arrangements (figures up to 30% higher have been advanced to the Review Team).

This typically would apply to applicants entering the industry and proposing small operations rather than existing market participants. The latter are likely to have a credit rating and greater capital investment.

Irrespective of the way the funds are arranged, the impact of the requirement for a rehabilitation bond for a prospective industry entrant is that it reduces by the guaranteed amount the availability of working capital the business can draw on for normal business purposes, such as, purchasing plant and machinery. For small operators with limited availability of credit this can have a decisive impact. For a person desiring to enter the industry it can have the effect of making the proposition not viable. Equally it may also dissuade existing operators from expanding their operations to other sites.

The situation is not dramatically different for larger investors or large existing operations. While these operations may have greater credit purchasing power they still must be able to make the correct investment decisions that meet either shareholders or other business demands and priorities. Competition within the industry means that all businesses, irrespective of size, are affected by any increase in overhead costs.

Restoration of extractive sites is a pre-condition of approval and these costs however should be considered by a potential market entrant in any assessment of business viability.

There is currently in excess of $21 million tied up in bond money or up to $27 million if banks have required greater than the 1:1 security. This represents approximately 7% or up to 9% of annual industry turnover.

7.5 Assessment of Costs and Benefits

The benefits of the system for rehabilitation bonds include:

- it provides a sense of insurance for the Government (on behalf of the community) against unfinished restoration of an extractive industry site;
- it protects the land owner from any costs associated with restoration and making the site safe; and
- it serves to encourage ongoing rehabilitation of the site (so that the bond is ultimately returned).

A summary of the negative effects of the system are provided hereunder.

(1) It ties up capital that could be used for business or other purposes. According to DNRE records there is currently $21,394,718 in bond money being kept by bank guarantees from 637 sites at an average of $33,586 in bonds per site. These funds, if available to the industry have the potential to be used to develop existing businesses (with the resulting economic flow-on effects including on employment), shore up existing business financial arrangements, and/or invest in industry-wide research and new technology initiatives.

(2) It may act to provide a disincentive for new entrants to the industry, especially small operators with limited credit capacity.

(3) Notwithstanding the potential for bond returns and clearly bonds are re-assessed, consultations have revealed that industry believes it provides a disincentive for an operator to rehabilitate the site on an ongoing basis as the operator may consider the bond will provide for this. This is inconsistent with the provisions of the Act that require the work plan to provide for ongoing rehabilitation. Operators who comply with the Act and spend funds on ongoing rehabilitation are arguably doubly jeopardised by having the bond capital tied up **and** being in a less competitive position (by virtue of the costs of ongoing rehabilitation) than operators who do not rehabilitate on an ongoing basis.

(4) It interferes in the commercial relationship with the landowner and the operator. As has been argued, the landowner has responsibility to ensure the land (premises) is reasonably safe. Accepting this responsibility the landowner, in negotiations with a prospective work authority holder, will negotiate taking into account all factors involved such as, use of land, sale of extracted stone and end use of the land. The regulated bond interferes in this negotiation by allowing an outside party (the bond setting authority) to set the bond on the basis of its predetermined standards of rehabilitation. The landowner's freedom in the negotiation is restricted and perhaps, compromised, by the bond arrangement.

(5) It presumes operators will fail in their obligations and compliance with their work plans. Both the work plan and rehabilitation plan have clear requirements for ongoing rehabilitation of the site. This being the case the setting aside of bond funds assumes these requirements will fail.

It can be argued, and consultations with the industry have confirmed this, that bonds effectively provide a disincentive for some operators to undertake ongoing rehabilitation.

The number of failures of work authority holders in restoring their sites over the years is very small. Collective memory in the DNRE reveals only a handful of such cases over recent years. The Auditor-General's report referred to earlier indicated that for the two years 1997/8 and 1998/9 the DNRE had allocated $148,000 to meet the costs of unrestored sites[11]. These were both mining as well as extractive industry sites. Even if it is assumed that the costs were evenly spread, the Department may have spent approximately $37,000 per year on failed unrestored extractive operations. This represents 0.017% of total bond amounts held.

The Review Team considers the legislative requirement for a rehabilitation bond is a significant restriction on entry to the industry.

[11] Op Cit, page 36.

7.6 Options for Reform

7.6.1 No bond requirement

The Act's objective in this area is to 'ensure that extractive industry operations are carried out with safe operating standards and in a manner that ensures the rehabilitation of quarried land to a safe and stable landform'. It is a feasible option for this objective to be achieved without the need to require a bond.

As has been discussed previously, the work plan is the key instrument in ensuring compliance with the Act and Regulations. Rehabilitation of the site to a safe and stable landform is the aim of 'progressive rehabilitation' which is a central part of the rehabilitation plan and work plan.

This option relies on the administrative and enforcement provisions of the Act to ensure effective restoration.

At the administrative level a work authority cannot be approved unless there are adequate proposals for rehabilitation of the site. At the enforcement level the Act provides for:

- penalties for failure to comply with the work authority including progressive rehabilitation;
- penalties for not complying with orders from the Minister including orders dealing with progressive rehabilitation;
- infringements notices for failing to comply with a work authority including progressive rehabilitation;
- orders to cease work due to non-compliance with the Act and Regulations including progressive rehabilitation;
- orders for the work authority holder to undertake remedial action due to non-compliance with the Act and Regulations including progressive rehabilitation.

The Act also allows the Minister to take action to rehabilitate land and to recover the costs of associated works. Recovery of costs is through the court system. This has never been used as the time and associated costs of the process are considered by DNRE a major disincentive.

These administrative and enforcement powers can be used to ensure progressive rehabilitation of extractive industry sites.

Costs and benefits of the option

The benefits of the option are the inverse of the problems identified earlier (section 7.5) concerning the current bond system. These will not be repeated here.

Abolition of the system may have the following negative effects:

- It may give an inaccurate signal to the industry and the community of a relaxation in the policy approach to rehabilitation of extractive industry sites. This can be expected to lead to a reduced level of commitment by the industry to progressive rehabilitation and final restoration.

Also, as has been discussed, progressive rehabilitation is not always appropriate and therefore if, as recommended, the Act allows flexibility in this area, the assurance of final restoration would be severely diminished.

- It may not deal with sites that are owner-operated. That is, where a work authority holder owns the land and subsequently defaults and abandons the operation. In this case action will need to be taken to restore the land to a safe and stable landform and responsibility for this is likely to fall back on government as it has in the past.

- Abandonment of the bond system anticipates a greater level of enforcement than is available at present. The flexible approach currently applied by the DNRE inspectorate in dealing with the range of sites is likely to become more rigid as direct enforcement action would be the primary tool to ensure sites are restored. This is likely to also create an antagonistic relationship between the industry and the inspectorate which would not be either mutually beneficial or ultimately in the community's best interests in achieving the Act's objectives.

7.6.2 A comprehensive package of solutions

The identified impacts of the current use of the bond system especially the increases in bond levels are quite considerable and solutions need to be found to reduce the negative effects while maintaining the positive aspects of the bond system.

In this regard it is proposed that a comprehensive approach be taken. This option includes the following actions:

(1) The responsibilities of work authority holders and landowners in relation to the site should be clearly identified in the legislation. It must be clear that the first level of responsibility for restoration and compliance with the Act must be with the holder and in default, the second level of compliance must be with the landowner.

This will have the effect of placing the onus of responsibility for site restoration on the two key parties to the extractive industry operation – the operator and the landowner. This is likely to focus greater attention by the landowner on restoration matters, which is expected to result in improved levels of rehabilitation outcomes of extractive operations.

(2) An incentive system should be devised that in a tangible way rewards work authority holders who actively rehabilitate their sites in an ongoing manner.

(3) The industry associations should be encouraged to take a more active role in industry regulation matters. This can be achieved by the associations:

- developing appropriate codes of practice for good quarry practice including efficient and effective methods of site restoration;
- developing effective processes and procedures to deal with members who infringe the codes of practice; and

- developing close relations and protocols with MPV's inspectorate to ensure all sites are managed in accordance with the Act and Regulations.

(4) Enforcement of the Act and Regulations by MPV must continue to be undertaken in a fair, consistent and rigorous manner. It is suggested that the MPV, in consultation with the industry bodies, develop a system of regular audits of all sites and that such audits be conducted on a full cost recovery basis.

(5) A review should be conducted of the guidelines used in setting bonds to ensure that the application of the guidelines provide for the optimum level of outcome in terms of restoration while providing the least costs of compliance for industry.

In identifying appropriate guidelines for bond setting, the review should consider the potential risks (environmental and safety) associated with various types and sizes of quarry operations and determine a level of risk below which a bond is not required. The review should consider the equity of existing levels of bonds and recent increases relative to the reviewed guidelines.

The review should also consider the potential for independent assessments, against agreed guidelines, of restored sites and the provision of appeal rights for work authority holders following the determination of a bond level.

The review should be conducted by DNRE, with representation from the industry bodies, landowners and local government. For transparency reasons it is considered the guidelines for bond setting and to the extent appropriate, the process of bond setting and its exemption criteria, should be included in regulations.

(6) As the Auditor-General identified that the value of bonds held was less than the estimated funds required for rehabilitation, the exact nature of any liability in this area should be ascertained.

Costs and benefits of the option

Costs associated with the option will be incurred by:

- Industry associations in devising codes of practice and providing representation on the various panels and reviews. Industry will also fund regular audits of sites.
- DNRE in initiating and managing the incentive scheme, the management of the audit system and in reviewing the bond system. These costs are expected to come from within existing resources.

Benefits of the option are expected to be incurred as a result of:

- An increased focus on restoration of sites by landowners due to their explicit responsibility set out in the legislation.
- An increased focus on restoration by work authority holders due to the incentive for reduced bond levels.
- An increased opportunity for industry groups to participate in the regulation of the industry.

- An increased surveillance of sites to ensure, where appropriate, progressive rehabilitation and final safe and stable restoration.
- A more equitable approach to the use of the bond system.

7.7 Summary of Assessment

The requirement for a work authority holder to provide a bond is a restriction on entry to the industry with many negative effects. These include:

- it ties up capital – there is now between $21 and $27 million in bond moneys held;
- it acts as a disincentive for new entrants, especially small operators;
- it interferes with the commercial relationship between the work authority holder and the landowner;
- it presumes operators will fail;
- bond increases, which have run at 63% for the five years since 1996, have the potential to collapse businesses.

The corresponding benefits of the bond system include:

- it provides a sense of insurance for the Government (on behalf of the community) against unfinished restoration of an extractive industry site;
- it protects the land owner from any costs associated with restoration and making the site safe; and
- it serves to encourage ongoing rehabilitation of the site (so that the bond is ultimately returned).

Two options for improving processes were considered:

- Abandon the bond system and rely on the administrative and enforcement provisions of the Act to regulate restoration; and
- A comprehensive suite of actions aimed at maximising the restoration of sites at the least cost to industry.

Disbandment of the bond system altogether, while having many direct advantages for industry, has some ramifications in ensuring effective restoration of extractive industry sites. It also does not effectively deal with failed sites that are owner-operated and requires a greater level of enforcement than currently applies.

In themselves and collectively these are not compelling reasons to retain the current bond system in the face of the identified problems.

The Review Team considers however, that generically a bond system is an efficient method of dealing with the concerns of unrestored sites and is therefore in the public interest. Bonds should be set to simply cover the minimum level of restoration of the site to the end use agreed by the landowner.

The suite of actions option has few costs of compliance while providing a greater level of assurance of restoration of sites through a greater level of incentive by work authority holders and a broader surveillance of sites. Once the recommended review has been undertaken, the system will be more transparent, equitable, and conducive to industry operations and landowner and community expectations. The option also involves greater industry involvement in regulation matters which is expected to bring about more effective regulation and greater levels of compliance. This option is therefore recommended for adoption.

8. ROYALTIES

8.1 The Regulated Requirements

The Act and the Regulations require the holder of a work authority on Crown land to pay royalties. The current rate of royalty effective from 30 June 2000 is $1.43 per square metre or $0.87 per tonne for stone and $8.07 per square metre or $3.23 per tonne for dimension stone and marble. Section 28 of the Act provides discretion for determining the timing of royalty payments and provides the Minister with the power to waive or vary the payment of royalties. Royalties collected over the preceding three years are shown in Table 8.1.

Table 8.1

Royalty Payments received during the period 1997-99

Year	Number of Work Authorities	Value $
1999	52	$2,135,398.43
1998	70	$2,801,456.11
1997	61	$2,496,788.59

Source: Compiled from data supplied by DNRE.

8.2 Discussion

As discussed previously, the Act identifies that stone resources belong to the landowner as distinct from other minerals which, by virtue of the Mineral Resources Development Act, belong to the Crown (the people of the State). As part of normal market conditions an extractive industry operator will be required to pay an amount of money (royalty) to the landowner for the extraction of stone and other material as part of the agreement to use the land. In the same way royalty is payable for stone extracted from Crown land. The payment of a royalty from extraction from Crown land ensures that the landowner (the community) gains a return on the value of the extractive resources which it owns at the time the resource is extracted.

The Review Team has not been able to determine precisely the basis on which royalty was first determined. It is unknown therefore whether cost factors such as access, compensation and restoration were considered in the original formula to determine the royalty rate. No formula is included in the Regulations nor guidelines.

Section 7 (2) of the Act provides that where private land is alienated to a specific depth (usually 15 metres) rather than to the 'centre of the earth', the land beyond this depth is Crown land and any extraction of stone from this depth or greater is subject to payment of royalty.

The data provided in Table 8.1 shows the number of work authorities that are subject to payment of royalty under the Act (52 for 1999). These figures include all work authorities operating on Crown land as well as those operating on private land subject to royalty under the Act. It can be assumed that only few work authorities operating on private land are subject to royalty under the Act.

It could be argued that these holders are at a disadvantage compared with holders operating on titles with rights beyond 15 metres. However, it is expected that in these circumstances where the holder is working private land (that is, not owned by the holder) the owner will negotiate some form of 'royalty' for all extraction that is, irrespective of the depth of extraction. There are therefore no competition issues arising here.

8.3 Issues Arising

The imposition of royalties does not in itself impose costs of production nor restrict competition in the industry. However, setting of the rate in the Regulations or otherwise (it is recognised that the Regulations allow the rate to be set in the work authority) may have other unintended outcomes. For example;

- Because regulations are not usually changed quickly any change in the market value for stone types will not quickly be realised and therefore the beneficiaries (the community) of an increase in value will suffer a loss.
- In the same way, unless the regulations are changed regularly the rate will be eroded due to inflation and other factors. It is noted that until the current rate change, royalties had not been changed since 1996.
- Setting rates for categories of stone (dimension stone and marble and other stone) does not allow for a greater demand for a particular stone type which may realise a higher value.
- Across the board rates do not account for geographical differences which may impact on the value of the product. For example, the selling price per tonne of product in the country may be different (on average lower) than in the metropolitan area.
- Setting the rate of royalty payable on Crown land in the Regulations may set a benchmark for the extraction of stone from private land and in this sense may act to interfere in the commercial arrangements between the landowner and the operator.

For these reasons the Review Team considers that royalty rates for stone from Crown land should be set by the responsible land manager (Minister), possibly with advice from the DNRE. These rates should be reviewed on a regular basis, say each year, to ensure the beneficiaries obtain fair market value for the product.

If this is not accepted, or even if it is, it is suggested that a review of the setting of the rate be undertaken to provide advice about all the matters that should be considered in setting the rate. This may be provided in a formula.

9. CERTIFICATION OF QUARRY MANAGERS

9.1 Identified Restrictions

The Act and the Regulations restrict the conduct of an extractive industry by:

- requiring the holder of a work authority to appoint a quarry manager or a person to manage the extractive industry operation who possesses a quarry manager's certificate or is approved by the Departmental Head as having the appropriate qualifications, experience or training to manage the quarry (Section 38);
- setting entry qualifications and experience for appointment as a quarry manager including payment of the prescribed fee ($350), appropriate qualifications and experience in extractive industry operations, knowledge of the Act and Regulations, first-aid and the use of explosives (Section 39);
- enabling an Inquiry Panel to cancel, suspend or impose conditions on a quarry manager's certificate if the Panel finds the manager incapable, incompetent or unfit to manage a quarry or an extractive industry operation (Section 40);
- requiring that an application for a quarry manager's certificate must be in the required form containing details of education, experience and personal memberships etc and accompanied by the prescribed fee ($350)(Regulation 501);
- prescribing first-aid requirements that an applicant has successfully completed a course in first aid that has been approved as satisfying the objectives of a level 2 course contained in appendix 2 of the Code of Practice for First Aid in the Workplace, *Occupational Health and Safety Act 1985* (Regulation 502). The Regulation also prescribes the qualifications necessary for the use of explosives as requiring the applicant to hold a permit to use explosives issued by the Chief Inspector of Quarries under the regulations.

These criteria restrict competition by affecting the ability of a person or business to enter the market and increasing the costs of production by incurring compliance costs.

9.2 Assessment of Restrictions

9.2.1 Appointment of Quarry Manager

The legislative appointment of a Quarry Manager, like many other provisions of the Extractive Industries Act, derives from an alignment of the Act to the Mineral Resources Development Act that provides for the appointment of a 'mine manager'.

The regulation of quarry managers has changed considerably under the existing legislation by comparison with the *Extractive Industries Act 1966* when an Extractive Industries Board existed to grant Certificates of Competency as a quarry manager and the regulations prescribed in detail the experience and educational qualifications required for the certificate. The Board conducted examinations on quarry techniques and practices. There were four certificates and each was awarded depending on the size and complexity of the quarry being managed.

The current Act abolished the Board and the regulations reduced to one the number of certificates that can be awarded to a quarry manager. The only explicit training requirements for appointment are in first aid and in the use of explosives.

9.2.1.1 Rationale for statutory appointment

The historical rationale for the legislated appointment of a quarry manager appears to be that the industry, being aligned to the mining industry, is considered high risk in terms of accidents and injury and as a result, day-to-day managers of these risks need to be appropriately skilled and competent.

The regulation of this position also presumes that the industry, and the owner (as the work authority holder) of an extractive industry operation in particular, cannot adequately assure appropriate management of health and safety risks on the site without the statutory intervention.

Yet the OHS Act clearly places the responsibility for safety in a work site on the employer, not an employee of the employer, and provides strong penalties where breaches of the Act and Regulations are found. There is a clear separation here. By legislatively appointing a quarry manager and identifying specific training and experience required, and indeed, specific duties, the responsibility for site safety becomes blurred – does responsibility lie with the work authority holder or the quarry manager? Surprisingly, the Act does not identify responsibilities or experience for the work authority holder.

In the upshot it will be the owner of the business who must take the final responsibility: only the owner can allocate necessary funds to purchase required safety equipment, to pay for safety training and to instil safety awareness in the worksite. If these ingredients are absent, it will not matter how well intentioned or trained the quarry manager may be, the safety of the site cannot be assured.

These views are not universally shared by the industry. A common theme from the industry is that it is crucial for the safe operations of the site for there to be a person who has authority (and apparently this needs to go beyond the normal authority assumed by a person in charge of any operation) over both employees of the company and of persons including contractors who necessarily come into the site.

Another argument often used as a rationale for continued statutory recognition of this position is that it may act to ameliorate full liability of the work authority holder in the circumstances where a suit has been issued following an accident. This is a contentious area fraught with opinions for each side. It is of concern, however, that owners of businesses feel the necessity to shield themselves beyond normal business practices in this way. As this attitude appears to have some currency within the industry it would seem the issue is one of priority needing a more strategic approach. Sharing of liability in the case of legal challenge following an accident however, hardly seems a reasonable justification for certification of an employee.

Industry's arguments for a 'certified' quarry manager appear to also extend beyond the need for qualifications and experience in health and safety and good quarry practice. They include knowledge of sound business operations including financial and other business related qualities and experience. This will be discussed further in sub-section 9.2.2. Suffice to say here that any discussion with industry about certification of quarry managers includes their responsibilities in running the quarry's business.

The Act's objectives do not include facilitating extractive industry operations. It is noteworthy that as previously stated, the former Act did aim to '*ensure that the development of extractive industries is carried out to make the maximum possible beneficial use of sources of stone ...*'. It can be assumed that the Parliament's intention in 1995 was to reduce this intervention in the industry[12]. This is illustrated by the reduced direct controls over quarry managers as discussed earlier.

9.2.1.2 Interstate requirements

In New South Wales the general manager of a mine (this includes a quarry extracting certain, but not all, extractive material. For example, this does not include sand) has specific safety responsibilities set out in the regulations[13]. The *Mines Inspection Act 1901*[14] requires that the production manager of a mine possess a certificate of competency or service and a permit issued from the Department of Mineral Resources. This is a similar system to the quarry manager's certification.

An arrangement similar to the former Victorian Extractive Industries Act applies under the new legislation passed in Queensland where site senior executives are required to be competent and certificates of competency are issued by a Board of Examiners set up by the Act[15].

In Western Australia the appointment of a quarry manager is also required by statute. A quarry manager in an operation where 25 persons or more are employed must hold a 1st class mine manager's certificate of competency or a quarry manager's certificate of competency or, where no explosives are used, a restricted quarry manager's certificate.

However, in the case of a quarry where fewer than 25 persons are employed and no explosives are used the employer may seek exemption from the requirement for a quarry manager. Also, in a small quarry (undefined) where explosives are used the employer may seek the same exemption.

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12 The absence of an objective to maximise resources in an Act dealing with natural resources is interesting. Either this was not seen by the Parliament as a contemporary objective for the extractive industry or it was considered sufficiently well covered by other legislation or Government policy. It is noted that a recent report by the Geological Survey of Victoria promotes the designation of Extractive Industry Interest Areas to provide a mechanism for long term availability of stone resources.

13 NSW Mines Inspection General Rule 2000, Regulation 9.

14 Section 5B, *Mines Inspection Act 1901*.

15 *Mining and Quarrying Safety and Health Act 1999*, Section 51.

It is interesting to note that where these exemptions are provided the Act stipulates that the 'registered manager is responsible for the control and supervision of the quarry operation on a daily basis and for such duties as would otherwise have been performed by the quarry manager"[16].

In South Australia a quarry manager is also a statutory appointment for a quarry and a quarry manager's certificate or a permit is required for appointment[17].

In Tasmania safety requirements in quarries come under the control of the workplace safety legislation or the equivalent of the OHS Act in Victoria. This requires the employer to appoint a 'responsible officer' for each work site[18]. It is of interest that a quarry Code of Practice was released by the Department of Primary Industries, Water and Environment in June 1999 to, amongst other things, promote industry self-regulation.

9.2.2 Setting entry qualifications and experience for appointment as quarry manager

The Act and Regulations require that a person possess a quarry manager's certificate or is approved by the Department Head as having qualifications, experience or training to manage a quarry.

With the abandonment of the statutory Extractive Industries Board under the former Act, a Quarry Managers Advisory Panel (QMAP) was established to provide advice to the Department Head (DNRE) on matters relating to the certification of persons to manage extractive industry operations.

The Panel consists of representatives from:

- a Victorian tertiary institution (Box Hill Institute of TAFE);
- DNRE;
- Crushed Stone Association of Australia (Vic) inc;
- Sand Producers' Association;
- Clay Brick and Paver Association of Victoria; and
- The Institute of Quarrying (Victorian Branch)[19].

Guidelines prepared by the Panel[20] show that an application for a certificate must be accompanied by:

- the prescribed fee of $350;
- a copy of any relevant tertiary educational qualification held by the applicant;
- comprehensive details of the nature and extent of the applicant's practical experience and general good character and sober habits;

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16 Western Australia, *Mines Safety and Inspection Act 1994*, section 37.

17 Regulation 6, Mines and Works Inspection Regulations 1998.

18 Tasmanian *Workplace Health and Safety Act 1995*, sections 10-11.

19 Notwithstanding the recommendations of this report, with the amalgamation of associations to form the Extractive Industry Association and the formation of the Construction Materials Processors Association it is timely to reconsider the representation of this Panel.

20 Quarry Management Guidelines, Extractive Industries Development Act 1995, prepared by Quarry Managers Advisory Panel, March 1999.

- a copy of the applicant's current OHS approved Workplace First-Aid certificate – Level 2 – Basic First Aid;
- a copy of the Permit to Use Explosives in Quarries issued under the Extractive Industries Regulations 1989 (except in the case of a Certificate restricted to operations where no explosives are used).

An applicant is also required to sit an examination conducted by the QMAP.

National Competency Standards

A Quarry Manager's Certificate authorizes the person to whom it is granted to manage the quarry or class of quarry or extractive industry operation specified in the certificate. The class of Quarry Manager has been aligned to the Extractive Industries National Competence standards.

National Competency Standards were developed by the Institution of Quarrying Australia as part of the Extractive Industries Training Package. The package contains Australian National Training Authority endorsed components for:

- Competency standards;
- Qualifications; and
- Assessment guidelines.

Adequate qualifications for certification purposes can be demonstrated by the applicant possessing the qualifications indicated in Table 9.1 overleaf but even in these cases at present applicants still have to sit the examination conducted by the QMAP.

QMAP Examinations

As has been discussed an applicant for certification must possess 'adequate knowledge, training or experience in quarry practice or extractive industry operations' and 'adequate knowledge of the Act and Regulations'. This is currently assessed by the applicant sitting and satisfactorily passing an examination and interview set and conducted by the QMAP. The examinations, which are conducted at the Box Hill TAFE, are of 3 hours duration and are usually held in July and December each year.

Rather than sitting examinations conducted by the QMAP it is intended that in future an applicant's competency standard as related to the National Competency Standards will be assessed by a 'recognised' or 'accredited' private assessor. Satisfactory assessment would be subsequently accepted by the QMAP for certification purposes. This process is currently being developed and the examination system will continue until a pool of 'accredited' assessors is available.

Table 9.1

National Competency Standards - Quarry Manager's Certificates

Class of Quarry Manager	Class of Quarry	Qualifications	Quarry Manager's Certificate Required?	Explosives Permit Required?	First Aid Certificate Required?
1	Any quarry in Victoria.	Diploma of Extractive Industry Management	Yes	Yes	Yes
1 (Non blasting)	Any non-blasting quarry in Victoria.	Diploma of Extractive Industry Management	Yes	No	Yes
2	Small quarry. 6 or less persons employed in materials production.	Certificate IV in Extractive Industries Operations	Yes	Yes	Yes
2 (Non blasting)	Small quarry. 6 or less persons employed in materials production.	Certificate IV in Extractive Industries Operations	Yes	No	Yes
2 – Clay	Small non-blasting quarry. 10 or less persons employed in material production.	Certificate IV in Extractive Industries Operations	Yes	No	Yes
Shallow extraction	Shallow extraction (non-blasting) < 2m in depth < 5 ha area under extraction 2 or less employed in materials production.	Desirable but not mandatory competencies: • Implement, monitor, rectify and report statutory compliance • Implement, monitor and report on risk management processes associated with OHS & environment.	No	No	Yes

Source: QMAP Guidelines

The current examination is set to test the applicant's knowledge and experience of the following topics:

1. Quarrying;
2. Management:
3. Explosives and Blasting;
4. Materials Handling and Services; and
5. Materials Processing.

Items 1,3-5 are directly concerned with quarry operations and therefore are relevant to quarry safety and rehabilitation matters.

The Guidelines reveal that a candidate can expect questions in the management section on any of the following topics:

- general management of the operation;
- finance;
- accounting and costing;
- budget control;
- stores control;
- marketing reporting;
- records and statistics;
- book-keeping;
- supervision of personnel;
- safety practices; and
- public relations.

Requiring these skills and knowledge will ensure that the person has sound management skills and experience to operate a quarry. However, except for 'safety practices' it is unclear how any of the remaining topics relate to the Act's objectives. That is, requiring an applicant to demonstrate skills in management goes beyond the Act's objectives (for safe operation and rehabilitation of the site) and enters into the realm of business operations and, it could be argued, business viability.

While these skills and knowledge may be appropriate, and indeed they clearly would be beneficial for most businesses, the Act's objectives do not intend such intervention in the business affairs of each extractive industry in Victoria. Even Section 39 of the Act concerning the grant of a certificate refers only to 'adequate knowledge, training or experience in quarry practice or extractive industry operations'. The Review Team considers that while certification continues, applicants should only be assessed on matters pertinent to the Act's objectives.

<u>Certification for life</u>

At present a certificate as a quarry manager is for life or until it is cancelled following an Inquiry Panel's investigations. The rationale for the certification process requires that persons in this position are experienced and skilled in a range of quarry operations.

Ultimately, the Act and Regulations have safety and rehabilitation as objectives and these should be at the core of the certification assessment. New developments in quarry practice combined with the use of new technology and improved and new equipment means that safety in extractive industry operations is a constantly evolving issue requiring constant review and assessment. A certified quarry manager who continues to practise in the industry will generally update his/her skills to meet these new developments.

Where a quarry manager leaves the industry for a period and returns, the certification process cannot guarantee the competence of the person (if this can be guaranteed at any stage) in the range of skills required. Moreover, regulations over the industry are also not static and change from time to time.

There is a sound case therefore for certification, should it continue, to be issued either for a fixed term, say, five years, or for the period the person remains as a quarry manager.

9.2.3 Role of Inquiry Panel

Regulation 40(1) empowers an inspector to make an assessment of the capability, competence or fitness of a quarry manager to manage an extractive industry operation. This calls for a subjective judgement on the part of the inspector. Following this assessment the Department Head can appoint an Inquiry Panel to inquire into the matter. The panel can comprise only departmental staff (the two panels formed since the Act came into operation did, however, include an industry representative).

The panel is empowered to investigate the matter and without any further reference, decide the result and determine the penalty. A penalty can cancel, suspend, or impose conditions on the quarry manager's certificate. The two inquiries referred to resulted in no further action being taken.

These are quite draconian powers. Notwithstanding, the right of the quarry manager to appeal to VCAT, the fact that the inquiry has powers to investigate, determine a result and exact the penalty, rather than recommend it, is very unusual and arbitrary.

The results of an Inquiry Panel's decision may be very serious for an extractive industry operation. A decision to suspend, for example, would be very damaging to a company. The fact that experienced quarry managers are in short supply means that to appoint a replacement quarry manager will be time consuming and costly.

The procedure outlined in the Act requires no reference to the work authority holder – the quarry manager's employer and the person who, next to the quarry manager, is most affected by the inquiry's decision. This represents a serious flaw in the process.

9.2.4 First aid and explosives requirements

The requirement to provide a copy of the applicant's current OHS approved Workplace First-Aid Certificate is not onerous and is in the public interest.

In the same way the requirement to provide a copy of the Permit to Use Explosives is also not onerous and is in the public interest. This permit is now issued under the Dangerous Goods (Explosives) Regulations 2000.

9.3 Assessment of Costs and Benefits

9.*3.1 Costs*

All the direct costs associated with the certification of quarry manager's fall on the extractive industry as certification fees were set (originally) to recover the full costs of administering the certification scheme by the DNRE. As these fees have only been increased once (July 2000) since 1996 there is every likelihood that all costs are not now being fully recovered. However, on the basis that for all intents and purposes the fees recover most of the costs, the administration costs for the certification processing and approval incurred by the DNRE will, therefore, not be shown. The estimated direct and indirect costs of the process to industry are as follows:

9.3.1.1 Cost of Fees

The application fee for a quarry manager's certificate is $350. The number of persons applying for certification has declined from former years when at each examination up to 30 applicants were tested. In December 1999 ten (10) applicants sat the examinations (including the explosives test) and in July 2000 only four (4) applicants sat the examination.

A fee of $250 is payable for the examination for a permit to use explosives and a fee for the payment for a duplicate permit to use explosives is $35. Applications for a duplicate permit are rarely requested.

9.3.1.2 Examinations

As indicated, a knowledge of a range of quarry matters including quarry operations and relevant legislation and Regulations must be acquired in order to pass the examination. The estimated cost for a candidate, who is an experienced quarry employee, to study and sit the examination involves the costs in preparation and sitting the examination. This may consume approximately three person days. If all this time was undertaken during normal working hours and assuming a daily rate of $160, the costs associated with examinations can be estimated at $500 per applicant.

9.1.3.3 Academic training

Obtaining the necessary skills for certification can involve many years of experience in the industry or alternatively the possession of a course of study as offered at Box Hill. These courses are offered on a $1 per hour of contact time plus an amenities fee of $35 with a total fee estimated at $1,000. Both the Certificate and Diploma level courses can be undertaken either full time or part time depending on demand. Each involves approximately 925 contact hours. Block release delivery is also available.

If all modules are conducted in normal business hours, completion of the certificate level course will involve direct absence from employment for 925 hours plus travel time. Where an employee is paid whilst attending the course and assuming a $20 hourly rate, the direct costs of attendance is $18,500. Indirect costs including work required to be undertaken by others or by temporary employees, or not done at all, is assumed at 25% or equivalent to $4,625.

Only one person has completed the Certificate IV level course to date and none have completed the Diploma level course. Consultation with the industry reveals that the complexity of the courses (even at the Certificate level) is such that participants require significant after-hours time to fulfil the requirements. The course requires one week of full time contact time and the review has been advised that students require up to one full day per fortnight (paid) to complete projects and assignments in addition to the evening work.

9.3.1.4 Sharing of responsibility costs

The 'sharing of responsibility' for quarry operators as discussed in 9.2.1 may have unintended consequences (and therefore costs) including:

- by causing confusion as to who is responsible for a particular matter which may result in the matter not being attended to at all or inappropriately;
- by causing matters to be considered by both parties rather than being resolved by one party. This results in an inefficient use of resources;
- by creating an environment in which the direct input by a work authority holder to important matters at a quarry is discouraged.

The concept of sole responsibility for workplace safety was also identified by the Inquiry into Occupational Health and Safety conducted by the Federal Government's Industry Commission in 1995 which recommended that:

... the principal OHS legislation in each jurisdiction place a duty of care on all those who influence the risks to health and safety associated with work. The duty should be placed upon (amongst others): employers; and owners and occupiers of workplaces.[21]

These costs are not tangible and cannot be accurately quantified.

9.3.1.5 Employment Costs

From records of the DNRE there are 463 certificated quarry managers in Victoria. As certification is for life it is clear that many of these quarry managers have left the industry. Departmental records do not show the number of practising quarry managers in Victoria at present but clearly it is many fewer than certificated and may be as low as 100 (the Review Team is aware that several quarry managers are responsible for more than one site).

[21] Work, Health and Safety, *Inquiry into Occupational Health and Safety*, Report No. 47, Vol.1, Industry Commission, Commonwealth of Australia, September 1995, page xxxviii.

The actual costs in employing qualified (certified) quarry managers over non-certificated quarry managers cannot be estimated with any degree of accuracy. Clearly this depends on a range of factors including the adequacy of supply of suitable certificated persons. It is reasonable to assume, however, that certification provides a status beyond non-certification.

From discussions with industry representatives this status is estimated as equivalent to between $15,000 to $20,000 per annum in salary. Some operators are prepared to pay considerably more. This can be regarded as the market value of certification.

9.3.1.6 Total costs
The identified costs associated with the certification of quarry managers are:

Fees	$350
Examinations	$500
Academic costs	$24,000
Shared responsibility costs	not estimated

While a person may not have attended a course at Box Hill TAFE it is assumed that he/she will have attended a course of study at another institution (the application for certification specifically seeks this information). While these have not been assessed it is reasonable to assume that the costs would be at least similar to those estimated for the course at Box Hill.

The estimated costs involved in the certification process and its requirements are therefore $25,000 per applicant. This is higher that the estimated employment cost of a certificated quarry manager but is within reasonable bounds.

9.3.2 Benefits
The benefits of the certification scheme are identified in terms of industry efficiency, safety and community benefits.

9.3.2.1 Industry efficiency benefits
From discussions with the industry the certification of quarry managers provides for appropriately experienced and qualified people to be appointed to these positions. The qualifications and experience required of quarry managers reflect industry-wide standards around Australia and, it is argued, because of these requirements, improved efficiency in quarry operations are achieved. The value of any efficiency benefit can only be subjectively demonstrated. For example, efficiency benefits can be estimated as follows:

The current value of extractive industry output in Victoria is $300 million per annum. Some efficiency benefit might be claimed due to the employment of certified quarry managers. If voluntary compliance with the requirements of the Act and Regulations (that is, without the appointment of a statutory position of quarry manager) is assumed at 80% (by output) of the industry, efficiency gains can be claimed to result from the regulation for the remaining 20% of the industry.

An efficiency benefit of just 10% for this relatively small part of the industry (that is, the role of the quarry manager in the wider extractive industry operation's context) would be regarded as very conservative when compared with productivity improvements resulting from, for example, relatively minor changes in work practices in productivity and enterprise bargaining claims.

On this basis, a conservative estimate of the annual benefit of the certification might be 10% of output for 20% of the industry - or 2% of the total output - equal to $6 million. But these are total efficiency benefits. As has been argued, the regulation of quarry managers is aimed at safety matters and quarry operations associated with safety and rehabilitation and should not encompass other business matters. These are rightly the prerogative of the commercial enterprise. Safety benefits arising from the certification process that can be attributed to the efficiency factor are discussed in the following sub-section.

9.3.2.2 Safety Benefits

The commercial priority of owners and a lack of commitment to safety issues resulting in major loss of life inspired the original British mine and quarry safety legislation in the nineteenth century. The certification of quarry managers aims to ensure that quarries are managed by qualified and experienced people who are required to ensure the work practices in quarries are of at least the minimum safety standards.

In addition to the human loss of accidents in quarries and associated costs, the financial impact on quarrying operations resulting from inadequate safety practices involve:

- loss of revenue to the operation caused by delayed or lost production;
- loss of revenue to client companies awaiting product; and
- cost of rehabilitation of employees.

The certification process of quarry managers aims to ensure that safety issues are pre-eminent in all management decisions concerning quarry operations. The extent to which a quarry manager's certificate can be said to impact directly on safety is difficult to estimate. Clearly, if a person has a knowledge of the risks associated with quarry operations and is responsible to manage these risks the person will have a direct impact on the safety of all persons exposed to risk in the quarry.

As has been argued the work authority holder has the ultimate responsibility for safety in a worksite. The Occupational Health and Safety (Plant) Regulations 1995 (702) require an 'employer to ensure that all hazards associated with the installation, commissioning, erection and use of plant and the systems of work associated with the plant are identified, having regard to the state of knowledge of the hazards'. Significant penalties apply to a body corporate or otherwise for breaches of these regulations.

The Regulations also place specific responsibility on the employer (703-709) to:

- undertake a risk assessment;
- to control the risk;
- use appropriate guarding;
- adopt suitable practices and procedures for operators of plant;
- adopt suitable practices and procedures in relation to installation, erection and commissioning of plant; and
- in the use of plant.

Again, failure to comply involves significant penalties for the employer.

Where this responsibility is delegated to an on-site manager, say, the quarry manager, the responsibility remains with the employer. The value of a certificated quarry manager to an employer is the value the employer places on the certificate. That is, how well the certificate assesses the competence of the person in being able to effectively discharge duties and functions that the employer will delegate to him or her. This is a normal condition applying to the recruitment of any person.

It can be argued that a quarry manager, by virtue of his/her certification, may have minimised the risks in a quarry and therefore the certificate system is responsible for a reduced level of injuries. However, as the ultimate responsibility for safety rests with the employer, the extent to which the certificated quarry manager has ameliorated risks is to some extent irrelevant. Certification merely provides an independent measure of a person's general knowledge. In the absence of any other measure this is important to the employer. This independent measure could also be provided by an industry accreditation scheme or other accepted scheme.

In summary, the Review Team considers the safety benefits of the certification system are in providing a focus on safety in a quarry and by so doing, assisting the employer in fulfilling his/her responsibilities under the EID Act and the OHS Act.

9.3.2.3 Community Benefits

Benefits from the certification of quarry managers may accrue to the broader community in terms of an assurance that the quarry will be operated safely and in accordance with the work plan (as accepted in the development application process). These matters include ensuring the site is adequately rehabilitated. While these benefits are difficult to quantify, as appropriately qualified and experienced quarry managers contribute to the efficiency of quarry operations, the certification process confers some benefit to the community in ensuring the responsibilities of quarry operators with respect to safety of employees and other people entering the site, are properly discharged.

9.3.3 Summary of Costs and Benefits

Quantification of costs and benefits of the certification of quarry managers has not been undertaken given the many variables and many assumptions that would be necessary for that to occur.

The review has only identified areas where costs will arise and benefits are likely to accrue from the certification process. Costs of up to $25,000 per applicant have been estimated.

Overall efficiency benefits may be derived however the extent these can be claimed in terms of safety and relevant quarry operations is unclear. Any safety benefits appear to be in providing a focus on safety in a quarry and in assisting an employer fulfil his or her statutory responsibilities.

9.4 Summary of Assessment

The Review Team considers the statutory appointment of a quarry manager is a relic of early legislative enactment in an environment where little other safety or environmental law was in existence. While such a mechanism continues, the industry may continue to play a subservient role to the regulatory apparatus and consequently not focus on developing new strategies to deal with ensuring appropriate management of a work site.

The OHS legislation of 1985 introduced the concept of identifying responsibility for safety in all work sites. By adopting this concept, it would be appropriate to identify the roles and responsibilities of the work authority holder and, if necessary, the quarry manager as the on-site manager, in terms of safety. The industry, in conjunction with the regulating authority, should determine how these people can reasonably demonstrate that they can achieve their responsibilities. As indicated, the industry nationally has demonstrated it can devise competency standards for quarry managers. One of the next steps for the industry in achieving greater regulation of itself is likely to be in managing the process of accrediting people for appointment as quarry manager. The appointment of assessors for the competency standards will be a first step in this process.

The certification of quarry managers does not impose significant costs on the industry for experienced industry applicants. The flexibility of approach adopted through the QMAP and the range of classes of quarry manager now poses few barriers for genuine applicants. However, the limited number of persons attempting the courses offered at Box Hill TAFE and the apparent success rate is an area of considerable concern and one which the industry must devote time and energy in resolving. It is clear that courses offered should reflect industry's requirements. The existing courses appear to go considerably beyond basic requirements. It should be left to the industry organisations collectively to identify these requirements and engage the services of a training body to prepare a course syllabus. A suitable supplier can then arrange presentation of a course.

The benefits of the certification requirements for the industry appear to be in the package of competencies assessed for quarry managers – safety, quarry operations and business management. As a package these are required by the industry.

As the review has argued however, the Act's objectives are concerned with safety and site rehabilitation and not business management. It would be complex probably and perhaps of no great advantage to separate the safety and quarry operations components from the business management components in the examinations.

The industry nationally has taken the step to decide the competencies it wants in its quarry managers but has not as yet taken the next step in implementing the administration of these decisions. While the certification process remains in the Act and Regulations this next step may not take place quickly. Clearly, the changes to the former Act in the regulation of quarry managers signalled a less interventionist role by the Parliament.

It is the view of the Review Team that the industry is organised well enough to manage this process in the near future. This would continue the move from a very regulated and controlled industry to one that, with certain requirements for safety and rehabilitation, is free to determine its own destiny.

It is therefore recommended that the certification of quarry managers be discontinued. This should be done over a reasonable period (say, 2-3 years) to enable the industry time to develop its own accreditation or other similar process.

In the interim, or should the certification process continue in the same format, the Review Team recommends:

- Assessment for certification purposes only relate to the Act's objectives and not include other competencies.
- Certificates of quarry manager be issued for a fixed term, say, 5 years, or alternatively for the period the person remains as an operating quarry manager.
- That the inquiry process be reviewed to ensure:
  1. the work authority holder is consulted about the process; and
  2. the inquiry investigate and recommend appropriate action.

10. ALTERNATIVE MEANS TO REGULATE THE INDUSTRY

10.1 Administration of the Required Controls

At the specific regulation level the report to date has provided options for reform however it is appropriate to consider in the broader sense feasible alternatives for the regulation of the extractive industry in Victoria. Different approaches have already been identified in the report by references to interstate controls. These controls over the industry include:

- incorporating specific controls in mining legislation; or
- allowing planning controls to deal with the restoration and land use issues and the occupational health and safety legislation to deal with the safety matters.

If the recommendations contained in this report are accepted, the residual controls would be confined to the need for a work plan including a rehabilitation plan and rehabilitation bond. It is anticipated that operational safety matters would be covered by the OHS Act and Regulations combined with industry codes of practice.

Section 2 of this report has discussed the existing rationale for the EID Act. It is argued that the Act provides for a consistent State-wide approach to the assessment of extractive industry proposals and their operational management relevant to restoration.

It is noted that the States which leave extractive operations to be regulated by the planning process are generally geographically larger States where population is far less dense than is the case, for example, in Victoria.

It is a matter of legislative drafting whether the controls reside in a single extractive industry Act or become part of the Mineral Resources Development Act.

The Review Team favours the existing administration of the Act which provides experienced mining and extraction industry personnel from DNRE to be responsible for legislative enforcement. Benefits are derived by the industry and the community in having this centralised experience and expertise available in the regulation of the industry. As has been discussed previously, local councils cannot be expected to possess the range of experience required in each industry it has controls over. Where such experience exists, as is the case in the DNRE it should be utilised.

It is therefore recommended that administration of extractive industry controls remain with the DNRE and these controls be retained in the existing Act.

10.2 Objectives of the Act

One of the purposes of the Act not previously discussed is:
to provide a procedure for notification of proposed extraction industries to licence holders under the Mineral Resources Development Act 1990'.

The procedure is contained in Division 5 – Mineral Resources, of the Act which requires that the Department Head must not grant a work authority over land which is the subject of a licence under the MRD Act unless the licensee has consented. Notwithstanding this, the Minister may issue the work authority if after 28 days of notice, the exploration licensee has not given consent and the Minister considers this is unreasonable.

Consistent with the arguments presented earlier in this report concerning work authorities it is considered that this responsibility for advising a licensee should be with the applicant for a work authority rather than with the Minister.

The inclusion of this procedure is considered a relatively minor process and not one that would typically achieve 'objective' status.

It is therefore recommended that:

- The Act be amended to require the applicant for a work authority to obtain the consent of the MRD Act licensee; and
- consideration be given to abandoning the current purpose in the Act for the notification procedure.

11. COMPETITIVE NEUTRALITY

A key aspect of the National Competition Policy was the agreement by all Australian governments to apply principles of competitive neutrality to their business activities. The principle of 'competitive neutrality' aims to ensure that government businesses do not enjoy any net competitive advantage simply by virtue of their public sector ownership. Competitive neutrality is one of a range of policy tools designed to help governments achieve a more efficient allocation of society's resources.

Government-owned businesses may enjoy competitive advantages as a result of immunity from government taxes or charges, not being subject to commercial dividend or rate of return requirements, lower costs of capital due to government guarantees on their debt, or statutory immunity from regulations applicable to their private sector counterparts. Removing these cost advantages is important wherever government entities engage in significant business activities or compete directly with the private or non-government sector.

In the extractive industry many government entities operate quarries, for example, DNRE (Forestry Victoria) has twenty-three (23) work authorities for its quarries which source products for the construction of forestry roads. Twenty-nine (29) separate municipal councils have a total of fifty-one (51) work authorities. Other bodies include VicRoads and the North East Catchment Authority.

Data from the DNRE indicates that rehabilitation bonds for these sites have been determined. It is not clear how payment has been made nor whether the quarries are operating with any subsidising effect.

Councils operating quarries that compete in the market may place themselves in a position of a conflict of interest given their responsibilities under the Planning and Environment Act to consider applications for a permit for new extractive industries or indeed variations to existing work authorities under the EID Act.

From consultations with the industry the Review Team understands that several of these operating sites are, by the very nature of being in the industry, in competition with private quarries and some are selling directly to the market.

It is important that each participant in the industry competes on the same basis, (the *level playing field*) so that the benefits of competition can be realised. This review has not been charged with investigation of these issues but has canvassed the matter briefly because it has been an issue in consultations and has been raised in the submissions.

It is not clear whether there are any subsiding effects being derived by any government entity involved in trading in extractive material. However, as these matters are clearly of concern to the industry it is considered prudent that these operations are made transparent. In this vein it is recommended that a review be conducted of the operations of government quarries to establish whether any receive net competitive advantages and to provide options for establishing competitive neutrality in their operations.

APPENDIX 1

NATIONAL COMPETITION POLICY AND REQUIREMENTS

As part of the Competition Principles Agreement signed by the Council of Australian Governments (COAG) in April 1995 under the National Competition Policy, all governments agreed to adopt the following guiding legislative principles when considering new legislation or reviewing existing legislation:

that legislation (including Acts, enactment's, Ordinances or Regulations) should not restrict competition unless it can be demonstrated that:

- *the benefits of the restriction to the community as a whole outweigh the costs; and*
- *the objectives of the legislation can only be achieved by restricting competition.*[22]

The following General Principle for Reviewing Legislation also guide the review process:

- *There must be a presumption against statutory intervention and the onus should be on the proponent of intervention.*
- *The direct costs should be borne by the immediate beneficiaries of the regulation.*
- *Co-regulation, self-regulation and codes of practice are all valuable regulatory mechanisms but potentially subject to capture.*
- *There are models of regulation with minimal statute support which are very targeted and cost effective.*
- *Information is important and ordinary market mechanisms should generally not be inhibited, subject to active enforcement of the ordinary fair trading and other law.*

Restrictions on Competition

Legislation can restrict competition in many ways. For example, by:

- creating entry criteria which affects the ability of a person or business to enter the market;
- increasing costs of production by incurring compliance costs;
- limiting the number of firms allowed to participate in the industry, the locations in which they operate, or allow only one or a few suppliers;
- affecting the size distribution of firms in the industry;
- requiring extra functions to be performed by the business;
- providing market information only to market participants and not to potential entrants;
- limiting the ability of firms to innovate.

[22] Sub-cl 5(1), Competition Principles Agreement, Council of Australian Governments, April 1995.

It can be argued that a restriction applies equally to all firms in a jurisdiction and, therefore, the restriction does not impact on competition within the jurisdiction. However, as markets are continually increasing in breadth any legislative requirement or restriction which affects the cost of production or provision of services has the corresponding potential to impact on the competitiveness of firms against firms from other States/Territories or overseas operating in less restrictive jurisdictions.

The Public Benefit Test

In determining whether the benefits of a restriction on competition outweigh the costs an assessment is made of the public benefit of the legislative restriction. Legislative restrictions may be acceptable and in the public interest when they:

- restrict the supply of certain goods or services regarded as potentially hazardous to persons with appropriate credentials (licensing);
- facilitate the "signalling" of appropriately qualified suppliers without prohibiting others from supplying the good or service (accreditation);
- impose minimum standards on production;
- impose minimum information requirements (eg food and drug labelling); or
- encourage appropriate industry self-regulation.

APPENDIX 2

TERMS OF REFERENCE
REVIEW OF THE EXTRACTIVE INDUSTRIES DEVELOPMENT ACT 1995, AND REGULATIONS

The review of the Extractive Industries Development Act 1995 and subordinate legislation made under the Act, has been commissioned by the Minister of Energy and Resources in accordance with the Victorian Government Timetable for the Review and Reform of Legislation that Restricts Competition, determined in accordance with National Competition Policy.

The review will examine the case for reform of any legislative restrictions on competition contained in the legislation in accordance with the Victorian Government's Guidelines for the Review of Legislative Restrictions on Competition.

In particular, the review will:

- clarify the objectives of the legislation, and the market failure the regulation is intended to address;
- identify the nature of the restrictions on competition arising from the legislation or from its administration;
- analyse the likely effect of the restriction on competition and on the economy in general;
- analyse the costs and benefits of any identified restrictions and assess whether the benefits of the restrictions to the community as a whole outweigh the costs; and
- consider alternative means of achieving the same result including non-legislative means.

The review should specifically address the appropriateness of provisions:

- prescribing criteria governing the issue/revocation/suspension/cancellation of permits and work authorities;
- regulating the rate, method and timing of royalty payments; and
- relating to the certification of quarry managers.

This list of potential; restrictions on competition is not exhaustive. It is possible that the review will identify other restrictions contained either in the Act or in subordinate legislation.

The review is to be established and conducted in accordance with the Model 4 Review contained in the Victorian Guidelines. The review will involve the circulation of an issues paper to facilitate public and stakeholder consultation. A draft report will be considered by the Departmental Steering Committee.

APPENDIX 3

LIST OF SUBMISSIONS AND ORGANISATIONS CONSULTED

Submissions

Mr Paul Rainbow, Quarry Manager, DNRE.
Construction Materials Processors Association
Extractive Industries Council

Organisations Consulted

Victoria Department of Natural Resources and Environment –
Minerals and Petroleum Victoria; and
Forestry Victoria
Construction Materials Processors Association
Extractive Industry Association including Clay Brick and Paver Association of Victoria
Victorian National Parks Association
Department of Infrastructure
Municipal Association of Victoria
Victorian WorkCover Authority
City of Greater Geelong
Victorian Employers' Chamber of Commerce and Industry
Victorian Chamber of Mines
National Competition Council
South Australian Department of Primary Industries and Energy
Queensland Department of Mineral Resources and Energy
Western Australian Department of Mines and Energy
New South Wales Department of Mineral Resources
Tasmanian Department of Mineral Resources and Energy
Victorian Environment Protection Authority
Various individual industry companies.
Box Hill TAFE
National Australia Bank
Westpac Bank