# "Mineral Sands - doing it better"

Mineral Sands Working Group

A report to the Environmental Protection Authority



"Mineral Sands - doing it better"

Mineral Sands Working Group

A report to the Environmental Protection Authority

# Contents

F	Foreword				
1	Intr	oduc	tion	1	
	1.1	Back	ground	1	
	1.2	Proc	edures	2	
	1.3	Gath	ering information	2	
	1.4	The	education process	2	
	1.5	Deve	loping trust	3	
	1.6	The	objectives	3	
	1.7	Ackr	owledgements	3	
2	Issu	ies a	and recommendations	4	
	2.1	Understanding the industry			
		2.1.1	Availability of information about the industry	4	
		2.1.2	Understanding legislative controls	4	
		2.1.3	Availability of forums for community concern	4	
	2.2	Indu	stry performance	5	
		2.2.1	Identification and listing of problems stemming from earlier practices and addressing them	5	
		2.2.2	Performance bonds for rehabilitation and environmental management	5	
		2.2.3	Industry performance and rehabilitation	5	
	2.3	Moni	toring	6	
		2.3.1	Monitoring information	6	
		2.3.2	The perception that the monitoring agency is too close to industry	6	
		2.3.3	Environmental Protection Authority standards	6	
	2.4	2.4 Policies and strategies			
		2.4.1	Clear statements of policies - some may be presently unclear or do not exist	6	
		242	Improved land use planning and management	-	

2.5	Improving the environmental impact assessment process	7		
	2.5.1 Flexibility of the environmental impact assessment process	7		
	2.5.2 Appeals process	8		
	2.5.3 The technical quality of proposal documents	8		
	2.5.4 The adequacy of resources for the Environmental Protection Authority	8		
	2.5.5 In the process of assessing project proposals, change of ownership	8		
	may lead to changes in the project			
	2.5.6 How to deal with non-environmental aspects of development proposals	8		
2.6	Role of local government	9		
	2.6.1 Lack of local government involvement and participation in processes	9		
	2.6.2 Agreement acts	9		
	2.6.3 The role of the Social Impact Unit	10		
2.7	Means of sustainable development	10		
	2.7.1 What is "sustainable" for the mineral sands industry	10		
	2.7.2 The rate of development and resource use	10		
	2.7.3 Effects on resource use such as energy and water	10		
	2.7.4 Relationships with other industries	11		
	2.7.5 Increased efficiency and greenhouse audit	11		
3. Summary of recommendations				
3.1	Understanding the industry			
3.2	Industry performance			
3.3	Monitoring Policies and strategies			
3.4				
3.5	Improving the environmental impact assessment process			
3.6	Role of local government	13		
3.7	Means of sustainable development	13		

# **Foreword**

The mineral sands industry is expanding. Exploration continues throughout the State,hile past areas of mining are being remined and waste material reprocessed. Communities with established mineral sands industries are accommodating increased "value adding" mineral sands processing, while others with no exposure to the industry are being affected by new mining proposals.

The environmental effects of these developments are assessed by the Environmental Protection Authority. Past events in this process have not always pleased affected communities, conservation groups nor industry.

Towards "doing it better", the Environmental Protection Authority established a Working Group comprising representatives of government, industry and the community under section 25 of the Environmental Protection Act to debate, discuss and make recommendations to it on how the mineral sands industry, the statutory processes associated with developments, and community perceptions and interactions might be improved.

This is the Working Group's report to the Environmental Protection Authority, brought together after many meetings, field trips and debates. The process was characterised by an increased level of trust between members. It is recommended that this report be made public by the Environmental Protection Authority and that action plans for the implementation of recommendations are developed by "stakeholders".

The recommendations of this report are grouped under the main headings in Section 2 under issues and in the Summary.

# 1 Introduction

# 1.1 Background

The mineral sands industry in Western Australia has grown in value from \$15,000 in 1956 to \$328 million in 1988. During this time it has changed - through an expansion of areas mined, to more diverse locations and in the degree to which the mined ore is processed. Inevitably a greater part of the community has been influenced by the industry; more people are employed, more roads are used, and more resources utilised. There is also a legacy of practices which although accepted in the past, are now looked at with concern. For the future, the industry seems set for more expansion as product prices continue to be favourable and demand increases. Matching this future is an increased demand from communities that different values need to be observed and accepted. Foremost are better environmental management, "sustainable development", a net benefit to communities within which developments are proposed, sometimes complete scepticism of the market demand system and a call for economic reforms including economic changes to patterns of consumption.

Mineral sands developments like most others go through many review and "approval" processes; some are at local government level, some at State government level and some at the level of Federal government.

The processes cover economic, infrastructure, social, environmental and other areas. The Environmental Protection Authority in Western Australia makes recommendations to the State Government on the environmental impacts of development proposals and suggests ways of managing them so that the effect on the environment may be accepted by the community. At times the Environmental Protection Authority recommends that developments cannot be accommodated.

Some recent reviews of mineral sands developments have pleased neither industry nor the community. With this background, the Chairman of the Environmental Protection Authority asked members of the mineral sands industry and community to come together as a working group to review past practices and processes and recommend to the Authority ways of "doing it better". The invitation is in the appendix.

Members of the Working Group were:

Michael Ashford

Social Impact Unit

Neil Blake

Australian Conservation Foundation

Denis Brooks

The Chamber of Mines and Energy

John Clarke

Department of Mines

Margaret Fewster

Community Groups

Mike Fraser

The Chamber of Mines and Energy

Jim Limerick

Department of Resources Development

Mike James (alternate)

John Koeyers

Conservation Council of WA (Inc)

Lyn Serventy

**Community Groups** 

Tim Shanahan

Country Shire Councils Association

Chris Berry (alternate)

Warren Tacev

**Environmental Protection Authority** 

Don Viol

Environmental Protection Authority (Chairman)

While giving a guide, or basic outline, the Authority's expectation was that the group would develop its own detailed terms of reference and ways of working so as to foster a sense of ownership. The group did this, and the objectives are listed in section 1.6.

#### 1.2 Procedures

The Working Group agreed to work toward consensus on issues - "An agreement whereby all parties can be satisfied". If consensus could not be reached, the issue was to be followed up with further action.

Providing a record of the development of the group's own terms of reference, expressed as objectives, and ways of working together was seen as a valuable part of this report. Initially, members were asked to express their expectations. There was of course, some spirited early interaction between members and the chairman during clarification of the Environmental Protection Authority's expectations. Essentially, this was the beginning of a "scoping" process in which each member advised their objectives and expectations which were recorded, revised by each member, discussed, aggregated and agreed to in subsequent meetings.

The scoping process was, importantly, one also of members getting to say where they came from, who they represented and why (usually historically) they held particular views. It was a valuable educative process, and one which was enhanced by subsequent process developments, the beginning of which was a conscious effort to establish a working plan and stick to it.

One real benefit of the working plan was a commitment by the group that members would provide written and oral information and that where information was available from organisations not represented or from particular individuals, invitations to address the Working Group would be made. Presentations were made by the President of the Country Shire Councils Association, a representative of the Department of Planning and Urban Development, and a member of the Environmental Protection Authority. Adopting a work plan for each objective gave both a structured approach to gathering information and the means of reaching a stage where issues could be identified, ordered, agreed on, and recommendations made.

The working plan placed an obligation on members of the group to gather information, usually written, about processes, community attitudes, past events in the industry and an example of an environmental impact assessment. This information is scheduled in the Appendix.

# 1.3 Gathering information

As well as the presentations mentioned above an invitation was made to representatives of the industry Workforce Committee to advise about its function and views. Two field trips, to the southern and northern mineral sands producing areas were also conducted. During the first of these a site meeting with representatives of the Scott River community interest groups hosted by Barbara Thompson and Vicki Hart was held.

The two field trips covered the following operations;

- In its South West Tour the Working Group visited Cable Sands Minninup mine site and rehabilitation areas, Westralian Sands North Capel mine site, separation plant and synthetic rutile plant and Capel oval rehabilitation. The Working Group also visited Westralian Sands Yoganup extended mine site and rehabilitation areas and the old Yoganup mine site and rehabilitated areas. It also inspected AMC's synthetic rutile plant minesite, and wetland rehabilitation areas. The final stage of the tour was taken up in inspecting BHP's Beenup site and Cable Sands Jangardup site.
- During its Mid-West Tour the Working Group visited the TiWest Joint Venture operations at Chandala siding located five kilometres north of Muchea, and mine site at Cooljarloo, followed by inspections of AMC's Narngulu synthetic rutile plant and dry mill, then finally AMC's mine site and rehabilitation areas at Eneabba.

The Working Group acknowledges the Mineral Sands Industry's organisation and hosting during these visits.

# 1.4 The education process

A major outcome of the process the Working Group adopted was one of education of the members. Not only did Working Group members learn about processes such as those in the mineral sands industry, and in Government, in addition we began to understand more about community attitudes to the industry, attitudes and philosophies of industry and community groups, market forces and economics.

# 1.5 Developing trust

The education/learning process crystalised by the work plan and the search for common, agreed objectives increased the level of trust.

The concept of trust became a key issue for the Working Group - it was a major factor in firstly getting the group together and in working together, then resolving issues and recommendations between group representatives. By trying to find ways of "doing it better" the level of trust between the mineral sands industry and the community will be further raised.

# 1.6 The objectives

The final objectives of the Working Group were to:

- Identify the means for improving community communications and understanding
  of the mineral sands industry, address public concerns about it, and develop
  the level of trust across the community.
- II. Examine and clarify the processes for Government assessment of mineral sands projects and identify the means of:
  - · improving the processes; and
  - Improving community understanding of those processes and the standards applied to the industry.
- III Investigate the means by which a sustainable direction for the mineral sands industry could be developed.

# 1.7 Acknowledgements

The Working Group acknowledges the assistance given to it by Environmental Protection Authority staff, Karen Brock and Debra Balasubramaniam. The Group's appreciation is due to the companies which allowed the Group to tour their operations. Detailed reference is made to the field trips in section 1.3. The Group also wishes to thank the community groups who were also hosts during trips. Finally thanks to those who came to address the Working Group about issues and areas of interest where more information was needed.

# 2 Issues and recommmendations

Although the working plan followed closely the objectives, and discussions were structured as tightly as possible, common threads and issues were found through the three objectives. The Working Group members believe that the grouping of recommendations under the major issues below, rather than under each objective, emphasises the direction of the report. We have been mindful of the Authority's recommendation that the Group should consider "what things need to be done better", and how to achieve them so as to meet the needs of "stakeholders".

# 2.1 Understanding the industry

As part of the overall objective of ensuring that the community has sufficient knowledge about the mineral sands industry and that communications and levels of understanding are improved, the Group identified three issues.

#### 2.1.1 Availability of Information about the Industry

Although the Environmental Impact Assessment process provides a statutory means of giving information about a project, there was a need for a great deal more to be made available about the industry as a whole. It was felt that there was a degree of trust necessary to ensure that information was factual.

#### Recommendation 1

Industry should continue to develop the means of providing factual and comprehensive information about the industry - at industry, company and project levels.

#### 2.1.2 Understanding legislative controls

Particularly from the industry viewpoint, many legislative controls are either not well understood or there are controls which are not known. However the Group found that the community was also unaware of the scope of legislative controls. The catalyst for understanding seems to be through the development of specific project proposals.

#### Recommendation 2

Direct public information processes and programmes about legislative controls should be developed in conjunction with industry. These should be targeted toward proposed developments and potentially affected communities.

There is another aspect of understanding, and that is, industry educating (and re-educating) itself. Relatively rapid change in industry and in controls really demands that industry sets up the means of educating its members about both the current state of affairs and future changes.

#### Recommendation 3

Government and Industry should develop further information about legislative controls, with EPA endorsement.

#### 2.1.3 Availability of forums for community concern

Throughout discussions about Objective 1, and especially toward the conclusion of the group's interaction, there was support for continued opportunities for different interest groups to meet with industry and exchange information and views. While the emphasis at times was toward specific projects, a much broader level of information was sought. Of particular importance was the observation that the mineral sands industry operated both in areas of high population and in some areas which had previously not experienced mining operations on a significant scale. For these reasons alone every opportunity for getting interested groups together should be taken. It was thought that a consultative group could be formed using section 25 of the Environmental Protection Act.

#### Recommendation 4

A consultative group should be established to provide information and discuss issues about the industry.

# 2.2 Industry performance

There is a perception that problems still exist in the mineral sands industry. The major areas of concern discussed in the group relate to some past mining practices on old mining areas which are being held over for further future development, and in some parts of the processing industry. Specific issues and recommendations follow, including a suggestion that industry achievements should be recognised.

# 2.2.1 Identification and listing of problems stemming from earlier practices and addressing them

Reference was made in our meetings to the report of the Playford Committee which detailed areas of past mining which it said required further attention. Although an update of action in these areas was made to the Environmental Protection Authority at the time of the Jangardup decision many members of the group came away from some operations with the feeling that more could be done. It was resolved that the industry should initiate an action plan for industry and make public their actions.

#### Recommendation 5

An industry action plan should be developed to address problems arising from earlier practices.

#### 2.2.2 Performance bonds for rehabilitation and environmental management

When industry performance was further discussed, the question was raised as to whether performance bonds might be a useful way of guaranteeing good rehabilitation and management practices. It was made clear that while performance bonds for the mining industry already exist not a great deal is known about them. However the concept was extended to discussions about specific bonds for environmental management taking into account existing regulations.

#### Recommendation 6

Performance bonds for rehabilitation already exist, but more information needs to be given to the public about them.

#### Recommendation 7

The EPA and other appropriate agencies should review the need for environmental management performance bonds, taking into account industry performance and the provisions of existing regulations.

#### 2.2.3 Industry performance and rehabilitation

The issues of industry performance and rehabilitation were discussed by the group under the heading of sustainable development.

Rather than fragment them it was thought desirable to keep them together in this section. The issues are related to the group's feeling that a continued commitment by industry to Government objectives and standards would reinforce, in industry and the community, a feeling that it was serious about a high level of performance.

#### Recommendation 8

The Industry should continue its commitment to Government objectives, standards, on-going research and to achieving high standards.

#### Recommendation 9

The industry should publish its commitment to and progress in environmental management.

# 2.3 Monitoring

#### 2.3.1 Monitoring information

Monitoring information was a significant issue during the group's discussion of Objective 1. Perhaps it was significant because it was one of the earliest issues discussed, at a time when a degree of trust between members was being first developed. Basically the monitoring issue was perceived as one which ensured the community was informed about the industry's activities and level of environmental performance. However it was recognised that the provision of "raw" monitoring results could be confusing and therefore monitoring results should be provided in report form.

#### Recommendation 10

Reported monitoring information should be made freely available to the public. This could be achieved by the EPA taking an active role in making monitoring reports available to the public.

#### Recommendation 11

Information on licencing and Ministerial conditions and reporting should be available to the public. Consideration could be given by the EPA as to whether this level of information should be provided on a statutory basis under the Environmental Protection Act.

To ensure that information is in a useful form a further recommendation is made.

#### Recommendation 12

The EPA should consult with industry to determine what additional monitoring information needs to be available to the public.

#### 2.3.2 The perception that the monitoring agency is too close to industry

Information gathering and dissemination to the community was seen as vital. Again the question of how the community obtained information about the operations of industry was discussed at length. The issue expresses some members concerns that either not enough information was being passed on or that new mechanisms were needed. A recent initiative by the Department of Mines has been the proposed establishment of an environmental liaison committee. The aim of the committee is to bring together industry, government, conservation and workforce representatives to review the environmental performance of the mining industry and the Department of Mines.

#### Recommendation 13

The EPA should support initiatives for mining environmental liaison committees and community involvement in monitoring.

#### 2.3.3 Environmental Protection Authority standards

The Group addressed the following questions: Against what standards should monitoring information be set and how should both the standards and information about the industry be communicated? Are all standards equally applicable to each location? The Group was concerned that this issue should be further examined.

#### Recommendation 14

The EPA should set appropriate local standards, explain their derivation and application and make them available to the public at an early stage.

# 2.4 Policies and strategies

# 2.4.1 Clear statements of policies - some may be presently unclear or do not exist In discussing improvements in information flows and awareness of Government intentions, the Group wanted to emphasise that basic frameworks which guided both industry development and community expectations are either unknown or missing. These could be policies, frameworks or strategies.

Without them, misconceptions and mistrust are difficult to dispel. The same problem was reflected in the absence of regional strategies.

#### Recommendation 15

Government should be encouraged to identify, and make public its policies relating to the mineral sands industry and develop and make public new policies where deficiencies have been identified.

Discussions on the need or otherwise for an Environmental Protection Policy (EPP) for the mineral sands industry captured, in essence, much of the Group's early talks on trust, communication and responsibility. It was felt by some that such a policy could take from industry the right or initiative to develop a level of responsibility for the environment which may meet the expectations of the conservation movement. The question of whether an EPP was an appropriate means of developing industry standards and guiding where the industry should operate was also raised. The Group was divided on these issues to the extent that it agreed to defer making further recommendations for six months. Much that was happening, including the development of regional strategies and in particular the recommendations of the group, may hold the answer.

#### Recommendation 16

The need for an Environmental Protection Policy for the mineral sands industry should be reviewed by the Group in six months taking into account these recommendations made to the EPA.

#### 2.4.2 Improved land use planning and management

The nature of mineral sands mining, and consequent impacts on local communities was emphasised in discussions about sustainable pathways for the industry. A regional context, it was thought by some members, would enable a rational view of how resources in national parks, nature reserves and other environmentally sensitive areas might be treated. Community representatives believe that the issue needed to be dealt with immediately. The industry emphasised the need for these strategies to be flexible and dynamic to take account of changing circumstances.

#### Recommendation 17

It is recommended that Government in consultation with the community and industry, develop regional strategies. The strategies should be in the form of a dynamic framework which also recognises the role for regional authorities and local government.

# 2.5 Improving the environmental impact assessment process

Much discussion under Objective II, although dealing with Government processes, the need for improving them, and improving community (and industry) understanding of them, concentrated on the environmental impact assessment process. The issues and recommendations follow. Issues such as participation by Local Government are included in further discussions about government, industry and the community. The Group recognised that the process had many strengths, but was attempting to build on those strengths.

#### 2.5.1 Flexibility of the environmental impact assessment process

Recent experience in the assessment of mineral sands projects leads us to emphasise the need to "fine tune" details of the process. Without going into detail here the Working Group strongly felt that the process, while appearing to lead the field in Australia, is still evolving. The main recommendation is that it should retain flexibility and that fundamentally important procedures such as the appeals process should not be compromised. However, conservation group members felt a need for the Appeals process to be more responsive and independent. The Group saw problems in appeals being captured by the adversarial process of the courts as has happened in New South Wales and overseas.

#### Recommendation 18

The EPA should ensure the continued flexibility of the environmental impact assessment process, and review and refine the condition setting process without affecting appeals provisions.

#### 2.5.2 Appeals process

A further recommendation on the appeals process follows from dissatisfaction about financial charges associated with it and the apparent lack of understanding and information the community has about it.

#### Recommendation 19

The EPA should review the need for the appeals charge, and ensure the community is better educated on the use of this process and other avenues for comment or appeal.

#### 2.5.3 The technical quality of proposal documents

Continued dissatisfaction with some proposal documents was felt by many members, to the extent that inadequate documentation should be rejected by the Environmental Protection Authority and that desire to "fast track" a proposal should not compromise adequate documentation. Again, concern was expressed about poor performance by some consultants - either by inadequate guidelines or instructions by proponents.

#### Recommendation 20

There should be specific guidelines for proponents and consultants.

Additionally the Group recommends on-going consultation with proponents,
Government agencies and the community. Information/education seminars
should be promoted.

#### 2.5.4 The adequacy of resources for the Environmental Protection Authority

The Industry submitted its concerns that the workload of the EPA assessment staff by virtue of the number and variety of proposals coupled with the requirements to attend to community concerns and administrative detail, were "onerous" and that the Government should ensure that staff resources are maintained at acceptable levels.

#### Recommendation 21

The Working Group supports increased resources for the Environmental Protection Authority to enable it to efficiently and effectively carry out its responsibilities.

# 2.5.5 In the process of assessing project proposals, change of ownership may lead to changes in a project

Community representatives on the Working Group were particularly concerned with the implications of change of ownership of a project proposal. It was felt that the assessment process did not adequately provide a review mechanism nor did it consequently provide the community with the knowledge of potential changes and impacts.

#### Recommendation 22

The EPA should seek out and develop mechanisms for community interaction when significant changes to the nature or scope of projects arise from change of ownership.

#### 2.5.6 How to deal with non-environmental aspects of development proposals

Some members of the group felt a need for economic assessment and evaluation, especially at the local level. They felt there was no process to which they had access. Whereas the environmental impact assessment process appeared to encourage proponents to describe the economic background to decision-making, and economic benefits, the Environmental Protection Authority was not able to assess these nor was the public able to use the process to comment on them.

Industry representatives were keen to have the Environmental Protection Authority's role well defined, particularly in relationship to those who make recommendations to Government on economic issues.

#### Recommendation 23

The public should be made aware of, and have access to non-environmental assessment processes such as economic, social and others.

#### Recommendation 24

There should be better definition between EPA and other agencies as to their roles in project development and assessment.

#### Recommendation 25

There is a need to improve and encourage close liaison and interaction between the EPA and other Government agencies associated with the development, assessment and management of mineral sands projects.

### 2.6 Role of local government

#### 2.6.1 Lack of local government involvement and participation in processes

The limited amount of local government involvement in the environmental impact assessment process and in community interaction during the assessment process, and earlier, concerned some members of the Group. It was of particular concern to the Country Shire Councils Association, emphasised by an address by the President who pointed out that the processes in the TiWest Development at Muchea were a recent catalyst to such concern. Beyond this however, future developments in the South West already highlighted inadequate Local Government resources, further confusion in its statutory role in relation to the Environmental Impact Assessment process and in mechanisms for early community consultation.

Concern was expressed that the statutory role of Local Government was being overridden and that the "approvals" processes were seen as being imposed on Local Authority planning and development statutes.

#### Recommendation 26

Local government should be involved early in the assessment process, especially at the guidelines stage.

#### Recommendation 27

Local government should facilitate community involvement and education of the community.

#### Recommendation 28

Local government should be provided with the resources to achieve better involvement in the development of mineral sands projects.

#### 2.6.2 Agreement acts

Local government has been concerned about the development of Agreement Acts for major resource projects for some time. Consultation with local government and community at the earliest stage of consideration of an Agreement Act and in interaction with a developer is essential. Doing this will mean that in mineral sands developments conflicts which have arisen in the past, will be avoided in the future, local communities will know what is proposed, and the level of trust should improve.

#### Recommendation 29

There should be better, and earlier consultation with the community, including local government, before the application of the Agreement Act process. Efforts should be made to educate the community about the role Agreement Acts play in the development of some resource projects.

#### 2.6.3 The role of the Social Impact Unit

A significant improvement has already been seen in the interaction between Local Government, industry, Government and local communities likely to be affected by mineral sands projects since the Social Impact Unit began operating. The Group believes that this unit can not only facilitate these relationships, but help local government play a greater role in processes, both statutorily and in the development of better non-statutory mechanisms to involve and advise local communities.

#### Recommendation 30

The Social Impact Unit should assist and advise in consultations between the industry, government and communities including local government.

#### Recommendation 31

Sufficient resources should be provided to the Social Impact Unit to achieve these consultative and advisory functions.

# 2.7 Means of sustainable development

One of the most difficult to define yet important issues discussed was sustainable development. The Group suffered from not being able to find a description which necessarily tallied with the diverse interpretations raised. Yet there was surprising agreement in the Group that sustainability was an issue needing prominent consideration by all sectors of the community. At the least it is meant that in considering a sustainable pathway for the mineral sands industry, any development should not adversely affect the sustained, long term future for other, nearby resources, whether purely land use, water and energy resources or the culture of local communities.

Conservation group representatives were strongly of the view that attempts should be made to influence consumption economics and patterns of behaviour. They were also concerned about the rate of extraction and felt that mining of discrete finite deposits of mineral sands, in itself, was not a sustainable use of the resource.

Industry representatives on the other hand held the view that mineral sands mining companies were not consumption influencers - rather they were merely reflecting market demand at an international level and that the industry itself needed a sustainable pathway if the State were to benefit economically.

Many of the issues and recommendations which follow can be brought together in summary form - they are some of many steps which can be taken to ensure at least the first steps to a sustainable pathway for the mineral sands industry are taken.

#### 2.7.1 What is "sustainable" for the mineral sands industry

Recommendation 32

Evolving information should be used by Government to define "sustainability" for resource industries.

#### 2.7.2 The rate of development and resource use

Recommendation 33

Data on rates of development of the mineral sands industry should be gathered so that the community may be advised on present and future trends.

#### 2.7.3 Effects on resource use such as energy and water

Recommendation 34

It should be recognised that industry has a role in resource use efficiency.

#### 2.7.4 Relationships with other industries

Recommendation 35

Data should be gathered about the influence of the mineral sands industry on other industries.

#### 2.7.5 Increased efficiency and greenhouse audit

Recommendation 36

There should be a continued industry commitment to efficiency and to Government objectives for decreased output of greenhouse gases.

Recommendation 37

The EPA should prepare greenhouse gas audit procedures.

# 3 Summary of recommmendations

# 3.1 Understanding the industry

- Industry should continue to develop the means of providing factual and comprehensive information about the industry - at industry, company and project levels.
- Direct public information processes and programmes about legislative controls should be developed in conjunction with industry. These should be targeted toward proposed developments and potentially affected communities.
- Government and industry should develop further information about legislative controls, with EPA endorsement.
- A consultative group should be established to provide information and discuss issues about the industry.

# 3.2 Industry performance

- 5. An industry action plan should be developed to address problems arising from earlier practices.
- Performance bonds for rehabilitation already exist, but more information needs to be given to the public about them.
- The EPA and other appropriate agencies should review the need for environmental management performance bonds, taking into account industry performance and the provisions of existing regulations.
- 8. The industry should be encouraged to continue its commitment to Government objectives, standards, on-going research and to achieving high standards.
- 9. The industry should publish its commitment to and progress in environmental management.

# 3.3 Monitoring

- Reported monitoring information should be made freely available to the public. This could be achieved by the EPA taking an active role in making monitoring reports available to the public.
- 11. Information on licensing and Ministerial conditions and reporting should be available to the public. Consideration could be given by the EPA as to whether this level of information should be provided on a statutory basis under the Environmental Protection Act.
- 12. The EPA should consult with industry to determine what additional monitoring information needs to be available to the public.
- 13. The EPA should support initiatives for mining environmental liaison committees and community involvement in monitoring.
- 14. The EPA should set appropriate local standards, explain their derivation and application and make them available to the public at an early stage.

# 3.4 Policies and strategies

- 15. Government should be encouraged to identify, and make public its policies relating to the mineral sands industry and develop and make public new policies where deficiencies have been identified.
- 16. The need for an Environmental Protection Policy for the mineral sands industry should be reviewed by the Group in six months taking into account these recommendations made to the EPA
- 17. It is recommended that Government in consultation with the community and industry, develop regional strategies. The strategies should be in the form of a dynamic framework which also recognises the role for regional authorities and local government.

# 3.5 Improving the environmental impact assessment process

- 18. The EPA should ensure the continued flexibility of the environmental impact assessment process, and review and refine the condition setting part of the process without affecting appeals provisions.
- 19. The EPA should review the need for the appeals charge, and ensure the community is better educated on the use of this process and other avenues for comment or appeal.
- 20. There should be specific guidelines for proponents and consultants. Additionally the Group recommends on-going consultation with proponents, government agencies and the community. Information/education seminars should be promoted.
- 21. The Working Group supports increased resources for the EPA to enable it to efficiently and effectively carry out its responsibilities.
- 22. The EPA should seek out and develop mechanisms for community interaction when significant changes to the nature or scope of projects arise from change of ownership.
- 23. The public should be made aware of and have access to non environmental assessment processes such as economic, social and others.
- 24. There should be better definition between EPA and other agencies as to their roles in project development and assessment.
- 25. There is a need to improve and encourage close liaison and interaction between the EPA and other Government agencies associated with the development, assessment and management of mineral sands projects.

# 3.6 Role of local government

- 26. Local government should be involved early in the assessment process, especially at the guidelines stage.
- 27. Local government should facilitate community involvement and education of the community.
- Local government should be provided with the resources to achieve better involvement in the development of mineral sands projects.
- 29. There should be better, and earlier consultation with the community, including local government, before the application of the Agreement Act process. Efforts should be made to educate the community about the role Agreement Acts play in the development of some resource projects.
- The Social Impact Unit should assist and advise in consultations between the industry, government and communities including local government.
- Sufficient resources should be provided to the Social Impact Unit to achieve these consultative and advisory functions.

# 3.7 Means of sustainable development

- 32. Evolving information should be used by Government to define "sustainability" for resource industries.
- 33. Data on rates of development of the mineral sands industry should be gathered so that the community may be advised on present and future trends.
- 34. It should be recognised that industry has a role in resource use efficiency.
- 35. Data should be gathered about the influence of the mineral sands industry on other industries.
- 36. There should be a continued industry commitment to efficiency and to Government objectives for decreased output of greenhouse gases.
- 37. The EPA should prepare greenhouse gas audit procedures.

# **Appendices**

### The following information was provided to the working group

- Letter from the Environmental Protection Authority inviting membership and setting out the task.
- Chamber of Mines and Energy Heavy Mineral Sands Committee "Outline of a Heavy Mineral Sands Project".
- · Mines Department of WA
  - Private Land Provisions Mining Act 1978
  - Information Series No 4.
- South West Development Authority South West Mineral Sands Industry Report.
- Chamber of Mines and Energy Submission to the Environmental Protection Authority Working Group "Mineral Sands - Doing it Better" on the Environmental Impact Assessment Process.
- Social Impact Unit Mineral Sands In the South West, Concerns Raised by the Community.
- Community Representatives.
  - Kemerton: The People Speak, Report of October 1989.
  - Report on the Cooljarloo Development at Muchea.
- Mines Department AMIC Report, Papers to the Environmental Workshop of 1986.
- Government of Western Australia Investing for the Future, Financial Guidelines for Development, a White Paper.
- Environmental Protection Authority
  - A Guide to the Environmental Protection Act 1986.
  - Review of Environmental Impact Assessment Administrative Procedures, Report of the Environmental Protection Authority, Bulletin No 402, September 1989.
- Potential for the 1990s. Chamber of Mines and Energy.
- Prospects Autumn, 1989. Department of Resources Development.
- Minninup Beach. Westralian Sands Ltd & Cable Sands Pty Ltd.
- The Rural and Mining Industries Working Together. Chamber of Mines.
- The Carroll Tree Tube Westralian Sands Ltd.
- WA Mineral Sands. Chamber of Mines and Energy Heavy Minerals Committee
- AMC Wetlands Centre, AMC.
- RGC Associated Minerals Division. RGC.
- Radiation Protection. Department of Mines
- Westralian Sands Ltd. Westralian Sands Ltd.
- WA Mineral Sands Building a Brighter Future. WA Mineral Sands Industry.
- The Ilmenite Story. Westralian Sands.

- The World's First Fully Integrated Mineral Sands and Titanium Pigment Project. Cooljarloo Joint Venture.
- · Mining And The Return of The Living Environment. Australian Mining Council.
- Mining And The Return of The Living Environment., (Vol 2) Australian Mining Council.
- · What Mining Means to Australians. Australian Mining Council.
- · The Key Messages In Mineral Sands Education Programmes. WA Mineral Sands Industry.
- Six New Projects Planned for WA. WA Mineral Sands Industry.
- The Battle of Ludlow Pines. South West Mineral Sands.
- The Mineral Sands Industry of Western Australia. A position paper by J.E. Koeyers, 1989



Г

# ENVIRONMENTAL PROTECTION AUTHORITY

I MOUNT STREET, PERTH, WESTERN AUSTRALIA 6000

Telephone (09) 222 7000

Your Ref:
Our Ref:
Enquiries:

I am inviting you to nominate a representative to join an ad hoc Working Group reporting to the Environmental Protection Authority on the topic 'Mineral Sands - doing it better'.

The objective of the Group will be to examine the recent history in the planning and assessment of mineral sands projects from mining through to processing. The combined experience of the Group will be pooled to find ways of 'doing it better'. One likely outcome of the Working Group will be the organisation of a managed publicseminar/symposium which will elicit inputs from the various publics

I anticipate that the Working Group may meet 5 to 10 times over the next 3 to 6 months. The Group will be chaired by Mr Don Viol, General Manager, Environmental Protection Authority, and meetings will be held in the 7th Floor Board Room, EPA, 1 Mount Street, Perth.

Yours sincerely

BARRY/CARBON CHAIRMAN

23 August 1989