

# Report 2002

Environment, Health, Safety and the Community



**Wesfarmers**

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## About us

We are one of Australia's largest public companies with operating revenue of \$7.4 billion in 2001/2002, profits after tax of \$414 million and a market value at 30 June 2002 of \$10.1 billion.

We employ about 29,000 people on a full, part-time or casual basis and have interests in home and garden improvement products and building materials; coal mining; gas processing and distribution; provision of rural merchandise, services and insurance; fertilisers and chemicals manufacture; industrial and safety product distribution; rail transport and forest products.

More details on the business units covered in this report can be found on page four.

Our business units have a high degree of operational independence but group-wide policies and standards apply in some areas. Those most relevant to this report include:

- a target of reducing the Lost Time Injury Frequency Rate by 50 per cent each year on the way to a zero outcome;
- a requirement for a programme to manage environmental, health and safety risk exposure and the development of systems to ensure compliance with licence conditions, notices, regulations or other statutory requirements;
- development of a crisis management plan;
- annual compliance reporting to subsidiary boards and, through them, to the Audit and Compliance Committee of the Board of Wesfarmers Limited on issues including environment, safety and health and crisis management.

While almost all of our employees work in the business units, we have a head office in Perth which employs about 100 people. They provide a range of services including:

- administration;
- accounting and treasury;
- legal;
- human resources;
- business development;
- risk management;
- information technology; and
- public affairs.

## Areas covered



Business management



Environment



Safety and health



Community/social

### Cover Photographs:

Left: Trevor Kent, Wesfarmers Premier Coal, in a mine rescue exercise at Collie, Western Australia.

Top right: Malcolm Hayley, Wesfarmers CSBP, water testing at the Preston River, Bunbury, Western Australia.

Bottom: Margaret-Anne Hummerston from the Cancer Foundation of Western Australia, promoting Daffodil Day at Bunnings' community fun day at Melville warehouse, Western Australia.



Since 1998 we have been publicly reporting on the environmental, safety and health performance of the businesses that make up the Wesfarmers group of companies.

We believe shareholders, employees and others who are directly or indirectly affected by what we do, or who take an interest in our operations, are entitled to a detailed explanation of how these issues have been handled.

This year we have broadened the scope of the report to include more information about the community interaction of our very diverse operations.

The diversification of our group, which operates in hundreds of locations and a wide variety of different businesses, presents a challenge in assessing social impacts and finding the best way of reporting on them. This aspect of corporate life – the so-called third bottom line after financial and environmental performance – is coming increasingly into focus.

As a first step this year we convened a stakeholder forum in the Rockingham/Kwinana region of Western Australia where we are involved in fertiliser and chemical manufacture, gas production and distribution and hardware retailing. That very useful exercise confirmed our view that stakeholder relations and consultation are best handled by each business and reported in their contributions to this document.

Looking specifically at the environment, initiatives during the year included Bunnings becoming a signatory to the National Used Packaging Covenant and the commissioning of a group-wide expert assessment of greenhouse gas emissions to enable us to better address this important issue.

Sustainable development continues to be an important issue locally, nationally and internationally. We are pleased to have been included in the Dow Jones Sustainability World Indexes (DJSI World) for 2003. This ranks Wesfarmers in the top 10 per cent of 2,500 companies from 23 countries. Selection is based on an assessment using economic, environmental and social criteria.

As mentioned last year, we place equal emphasis in this report on workplace safety. Too many of our businesses had disappointing safety records in the year under review. They know they have to do better. Others, such as the Premier and Curragh coal mines set new standards and Wesfarmers LPG maintained its impressive performance.

At Wesfarmers we aspire to be the best in the world at everything we do. Unquestionably, we still have a way to go to achieve best practice in some of the areas covered by this report.

An important part of that process is the public scrutiny we invite by publishing the document and by seeking comment from readers. You can make a valuable contribution by completing and returning the feedback form at the back of the report. We would really like to hear from you.

**Michael Chaney**  
Managing Director

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## About this report

### Timing

Welcome to our fifth report on environmental, safety, health and community issues for the financial year ended 30 June 2002. In a few cases, where there have been developments subsequent to the end of the reporting period, but prior to the printing deadline, we have included this information to make the report more time relevant.

### Coverage

The report covers all wholly-owned business units with the exception of Industrial and Safety which was formed following completion of the acquisition of Howard Smith Limited in August 2001. Last year we said we expected to include some form of report on this business in 2002. This has not proved possible as more work is required on data collection. Good progress has been made, however, in bringing the newly-acquired hardware stores under the Bunnings reporting framework and in increasing coverage of the former IAMA Limited business now merged into Wesfarmers Landmark.

### Safety performance data

Readers will notice on the safety performance graphs, at the start of each business unit section, a reference to statistics being for the year to 30 June but "as at 30 September 2002". This is because we adjust the numbers to take account of workers compensation claims lodged, or lost time that has occurred, up to 30 September relating to injuries sustained in the financial year under review, thus allowing for delayed impacts. This can mean that the numbers reported for a particular year have to be changed in subsequent reports.

The basis for calculating our main safety performance indicator – the Lost Time Injury Frequency Rate (LTIFR) – is outlined in the Glossary on the inside back cover. Unless otherwise indicated, LTIFR numbers in this report do not include contractors. Where it is possible to calculate an LTIFR for contractors – that is, where there is regular engagement and hours worked are available – the business is required to report the Lost Time rate.

Workers compensation claim statistics contained in this report are compiled by the Group Risk Management department at our Corporate Office. As a result of a review of those data and improvements to information systems, corrections have been made to previously-reported numbers. These corrections are reflected in changes to the historical figures in the charts at the beginning of each business unit section.

### Report preparation

Data collection and report drafting is the responsibility of business unit environmental and safety representatives who are part of a Working Group convened by the Corporate Office which provides legal, risk management and public affairs assistance. Drafts are reviewed by the Corporate Office prior to detailed discussions with the contributing authors. This process ensures that ultimate "ownership" of the report lies with the business units.

### Verification

The report's accuracy and completeness is critically important and every effort is made to ensure that all statements can be properly authenticated.

After the discussions referred to above are complete and a final draft agreed on, the business unit representatives are required to compile detailed checklists linking report content to documented source material or employee sign off.

Representatives from our Corporate Solicitors Office and Group Risk Management department then conduct sample verification checks through site visits and desktop audits. They later prepare reports for senior management.

The internally-verified reports are provided to independent assessors from the Snowy Mountains Engineering Corporation (SMEC). SMEC was engaged in 2000 to conduct the external verification process and to prepare a detailed report to business unit and Wesfarmers Limited management. A five year plan prepared by the Corporation in 2000/2001 was adopted and forms the basis of our commitment to the ongoing improvement of this publication. SMEC's findings on this report are published on page 72.

### Format

Again this year we have used a format suggested by SMEC which aims to increase the transparency of the document by requiring businesses to report under standardised headings. Occasionally items may not fit entirely logically under these classifications, but we have continued with the layout because we believe it enables readers to more easily make cross-business comparisons. Not all of the categories appear in all of the reports. This means either that the heading is simply not applicable to a specific operation or that a business is unable to supply the necessary data. Gaps are thus identified and the businesses concerned need to consider whether these can be closed.

An alternative to this approach, for the environmental sections, would be to group all information under subject headings relating to the issue – such as waste disposal or water use. That could be suitable for a single-focus business (such as a mining enterprise) but less so for a company such as ours which operates in a number of quite different business and industry sectors. We believe greater accountability is achieved by dealing with the issues on a business-to-business basis using the format referred to above.

### Completeness

We do not claim that this report provides 100 per cent coverage of our safety, environmental and community relations performance. There are gaps in our knowledge which will be reduced as our systems improve, particularly with respect to the newly-acquired or merged businesses. This document is a best endeavours attempt to report openly and honestly based on our current state of knowledge.

### Glossary

Within each separate report we aim to eliminate as much jargon and technical terminology as possible and to spell out the names of organisations when they are first mentioned. A general glossary can be found on the inside back cover.

### Website

The full report is available on our website at [www.wesfarmers.com.au](http://www.wesfarmers.com.au). Additional hard copies can be obtained from the Public Affairs department on (61 8) 9327 4251.

### Feedback

Please help us improve the report by sending us your comments on the form on the inside back cover.

Sublime: The 25th anniversary exhibition of the Wesfarmers Collection at the Art Gallery of Western Australia.



## Wesfarmers and the community

Community contact and involvement has been an essential part of our company since its formation in 1914 as a farmers' cooperative supplying services to rural and regional Western Australia.

While we are a vastly different entity today, a strong community ethic prevails within the organisation. This is evident in our approach to corporate governance and market disclosure (outlined in detail in the Annual Report) and includes a willingness to make direct contributions to community-benefiting organisations and causes.

In one sense, the most socially responsible behaviour to which we could aspire is to ensure the continued success of our business operations so that our shareholders, employees (now numbering about 29,000), customers and suppliers – and all those associated with them – can share the benefits.

Our primary objective is to provide a satisfactory return to shareholders. In trying to achieve this, we publicly commit to a number of principles, including workplace safety, environmental protection and by responding to the attitudes and expectations of the communities in which we operate.

In this report we describe management and safety systems and training and employee assistance programmes. These are aimed at ensuring the wellbeing of, perhaps, our most important "community" – the people who work for us.

Many of the businesses also include information about their community involvement. It is not possible to cover all these activities but these sections provide an insight into the vast range of community

contacts occurring across the group – especially for businesses with high public profiles such as Bunnings.

### Donations and sponsorships

Apart from business unit community involvement and significant direct monetary assistance from those businesses, our Board of directors each year provides major financial support based on criteria designed to maximise the benefit of these funds. The criteria include a preference for defined-term commitments; directing support to organisations rather than individuals; community-wide, rather than localised benefits; and contributions which are usually not part of broadly-based public fund raising appeals. The Board then considers requests for assistance within regularly-reviewed categories.

A major focus of our contribution has been the advancement of medical research. The Board committed \$5 million over five years to the Western Australian Institute for Medical Research which aims to develop a world-class centre of excellence focused on adult health issues. Other contributions benefit tertiary education, rural health, indigenous advancement and remedial health care for children.

Our major sponsorship involvement is through the award-winning Wesfarmers Arts programme which provides \$450,000 to support leading visual and performing arts companies and organisations. In late 2002, an exhibition drawn from our extensive collection of Australian art will begin a national tour, with assistance from the federal and state governments' touring exhibition agencies, Visions of Australia and Art On The Move. We have placed particular emphasis on having the works shown to people in rural and regional areas.

### Earthwatch

Both the broader community and employees benefit from our long partnership with the internationally-respected Earthwatch Institute. Each year we provide employee fellowships for participation in environmental research projects in Australia and overseas which help increase awareness of environmental issues and contribute to personal enrichment.

### Our commitment

The initiatives and activities outlined above are indicative of our wish to play a positive role in society. We do this by aiming to provide employees with a safe and rewarding working environment. Beyond this primary objective, we are committed to contributing in other ways to enhance the social fabric of the communities in which we operate.



Earthwatch Fellow Vincent Prasser at a research project on St Bee's Island off the central Queensland coast.

# Our businesses



**Bunnings**

We are Australia's leading specialist retailer of home and garden improvement products and building materials. About 75 per cent of our business is done with do-it-yourself customers and the balance with builders and contractors. At 30 June 2002 we had 111 warehouse superstores and 114 smaller traditional stores in Australia and New Zealand plus 18 WA Salvage discount variety stores in Western Australia. Between eight and 12 new warehouse stores are expected to be opened each year. We employ more than 19,500 people.



**Kleenheat**

We are a major distributor of liquefied petroleum gas (LPG) to a broad range of domestic, commercial, autogas and industrial customers. We operate in all mainland states through a comprehensive network of depots, company-operated branches, dealers and franchisees, servicing more than 22,000 bulk and 243,000 domestic customer installations. Other activities include a small liquefied natural gas (LNG) plant at Kwinana in Western Australia and an LPG distribution facility in Bangladesh. We employ more than 600 people.



**Wesfarmers LPG**

We own and operate a plant at Kwinana in Western Australia which extracts LPG from the natural gas stream in the Dampier to Bunbury pipeline. Our product supplies the domestic market with the balance exported to Japan. Production increased five per cent during the year and recent upgrades have taken plant capacity to about 350,000 tonnes per annum. We employ about 40 people.



**Premier Coal**

We mine coal at the Premier open cut in Collie, about 200 kilometres south of Perth in Western Australia. About 3.6 million tonnes of low sulfur, low ash steaming coal were sold during the year, primarily to major power generating stations. We also supply coal for a variety of industrial and agricultural applications. Sales were in line with 2000/2001, as was overburden removal of 29.5 million bank cubic metres. We employ almost 400 people engaged in overburden removal, coal production, plant maintenance and site rehabilitation.



WESFARMERS FEDERATION  
INSURANCE LIMITED



**Curragh**

We operate and market coal from the Curragh open cut mine near Blackwater, 200 kilometres west of Rockhampton, in Queensland's Bowen Basin. About six million tonnes of coal were sold during the year, an increase of about 20 per cent on 2000/20001. High quality coking coal is exported to steelmakers and steaming coal is supplied for domestic power generation. We employ about 240 people. During the year work began on the second stage of the Curragh East extension and our coal preparation plant was upgraded.



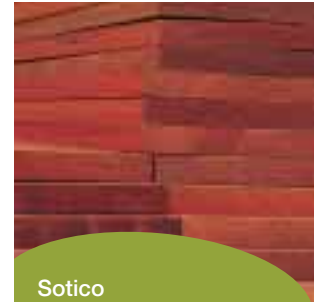
**CSBP**

We are a major manufacturer and supplier of fertilisers, chemicals and services to the agricultural, mining and processing industries. We have superphosphate plants at Kwinana, Bunbury (closing in March 2003) and Albany in Western Australia. We produce a range of chemicals at Kwinana, including ammonia, ammonium nitrate, chlorine, caustic soda, and sodium cyanide. A sodium cyanide solids plant was completed during the year. We employ almost 550 people. The 50 per cent-owned Queensland nitrates project is not included in this report.



**Landmark**

We are Australia's largest supplier of farm inputs to every major agricultural sector with significant market shares in wool, livestock and rural property marketing and we provide rural finance and insurance. By 30 June 2002, the integration of Wesfarmers Dalgety and IAMA Limited was almost complete. We now employ more than 3,000 people operating from more than 400 outlets across Australia. Our business also includes Wesfarmers Federation Insurance, a specialist insurer in rural and regional Australia represented at 79 locations around the country and employing more than 400 people.



**Sotico**

We produce hardwood sawn timber at Deanmill, Yarloop, Collie and Pemberton in Western Australia's south-west and operate timber processing and pine treatment plants. The sale of Pemberton karri mill is being negotiated and other parts of our business progressively restructured as we move towards exiting the forest products industry. We employ almost 500 people. Our joint venture Wespine plantation pine sawmill operation near Bunbury is not included in this report.



**BUNNINGS**  
warehouse

#### 2001 REPORT PRIORITIES

Continued implementation of our health and safety management systems to further increase safety awareness.

Train and develop our team members in environmental awareness.

Improvement in compliance levels for safety and environmental standards.

#### OUTCOMES

Completed review of occupational health and safety management systems and manuals. Commenced implementation of strategic action plans to address safety issues. Occupational health and safety system, safety committees, hazard assessments established in newly acquired stores.

Environmental and dangerous goods information page created on our intranet. Environmental and recycling articles included in our newsletter. Dangerous goods management training sessions conducted.

Internal audit compliance for Bunnings' retail outlets

- 90 per cent for occupational health and safety (compared to 84 per cent last year); and
- 91 per cent for dangerous goods (92 per cent last year).

Bunnings warehouse,  
Mindarie, Western Australia.

**BUNNINGS**  
warehouse

## Overview

This report covers the activities of Bunnings Building Supplies and WA Salvage, including former Hardwarehouse and BBC Hardware stores acquired as a result of the takeover of Howard Smith Limited. Initial data from our New Zealand operations, Benchmark Building Supplies, has been included. During the year we underwent massive growth with the integration of 225 stores and the closure of 31 retail sites and six manufacturing and wholesale outlets. The training and education of our new team members involved a team of five trainers for a period of six months.

Our overall safety performance was disappointing with the Lost Time Injury Frequency Rate increasing after a significant downward trend in previous years. Our goal of convincing the entire organisation of the prime importance of safety has not been fully achieved, reinforcing the need for us to focus on a behaviour-based safety awareness programme in the year ahead.

During the year we became a signatory to the National Used Packaging Covenant, demonstrating our commitment to reducing the impact of packaging waste on the environment by more effectively managing our waste streams.





## Business management



### Training

The continued development of our team members through ongoing training is one of the keys to our success. Training and development programmes place an equal emphasis on safety, health and the environment as well as the operational aspects of the programmes.

### Environmental

Environmental awareness training is delivered through a comprehensive internal programme covering dangerous goods, hazardous substance storage and use and waste disposal. This is part of the induction process for new team members and is presented to store management teams, safety committees and those involved in merchandising and fit-outs.

To increase access to training, information has been placed on our intranet and is accessible to team members in stores.

### Health and safety

Health and safety issues play a significant part in a three-day induction programme attended by all new team members. It covers areas such as manual handling, risk assessment and hazard identification, operating dangerous equipment and the handling of dangerous goods and hazardous substances.

A modified two-day orientation programme was provided for all new management and team members, as part of the integration process. Twenty-three management and 217 team member programmes were conducted by the end of 2001.

The induction booklet "Bunnings and You" provided to all team members, was updated to give more information on safety and health policies and procedures. A new customised induction video has also been created.

To reinforce safety issues, we have commenced a formal in-store induction module. This gives new team members practical application of safety theory to their workplace environment.

Manual handling training has been reviewed and improved to include hands-on training in lifting techniques and practical risk assessments. Store management are being trained in specific risk assessment techniques with emphasis on manual handling hazards.

Safety and health representatives at each store undergo a five-day external training course.

Training is provided to team members who perform specific hazardous tasks including gas decanting, forklift and power saw operation and the use of mini-platform lifting machines.

There is a strong emphasis on training in standard operating procedures for power saws. Lock-out devices and key controls restrict unauthorised access to machines.

### Emergency

Emergency Control Organisation members at each location undergo external training for fire warden and evacuation duties. Locations also have trained first aid officers present at all times. A programme was undertaken for the acquired stores to increase the number of trained first aid officers and fire wardens.

### Compliance

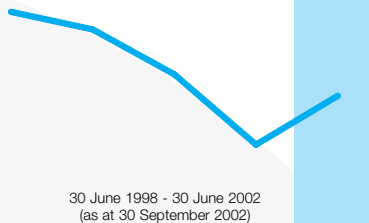
#### Environmental

To assist ongoing compliance we keep up to date with any changes in regulations by subscribing to a number of professional journals and Australian Standards. We also monitor websites of state and federal authorities.

We have established programmes to manage Red Imported Fire Ant (RIFA) compliance in Queensland and Victoria and the National Environmental Protection Measure (NEPM) on used packaging waste. Accredited RIFA compliance programmes are in place with the Department of Natural Resources and Environment in Victoria and the Department of Primary Industries in Queensland.

Lost Time Injury Frequency Rate

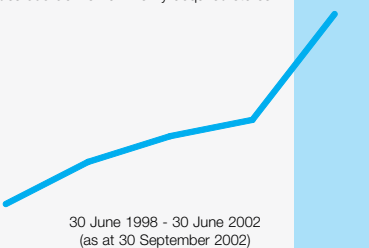
1998	1999	2000	2001	2002
12.7	11.8	9.5	5.9	8.4



No. of Workers Compensation Claims

1998	1999	2000	2001	2002
219	361	448	503	860*

\*Includes 359 claims from newly-acquired stores.





These aim to ensure that plant products sold from our stores located in Queensland's designated fire ant zone are fire ant free. In Victoria, all plant product coming in from Queensland is inspected prior to distribution to our stores.

We have become a signatory to the National Used Packaging Covenant assisting us to comply with the NEPM on packaging waste. This is a demonstration of our commitment to reducing the impact of packaging waste on the environment by managing our own waste streams more effectively. We will also promote product stewardship by working with our suppliers to improve packaging to reduce waste.

Our stores contain dangerous goods in small consumer-sized packages of 20 litres or kilograms or less. These include flammable liquids, flammable gas, pool chemicals, acids and garden chemicals.

We are pursuing a national best practice approach to dangerous goods storage and handling that meets or exceeds the standards in each jurisdiction in which we operate.

Our internal compliance programme is modelled on:

- National Occupational Health and Safety Commission Standard for control of workplace hazardous substances [NOHSC:3018(1994)];

- NOHSC Standard for Storage and Handling of Workplace Dangerous Goods [NOHSC:2017(2001)]; and
- Australian/New Zealand Standards AS/NZS 3833:1998 for Storage and Handling of mixed classes of dangerous goods in packages and intermediate bulk containers.

Improvements have been made to flammable liquids and pool chemical layouts in the acquired stores to improve safe storage and handling standards and comply with regulations. Controls are in place to manage quantity limits of certain volatile dangerous goods and ensure strict separation of reactive substances are maintained.

Liquefied petroleum gas (LPG) decanting equipment and 9kg exchange cylinders are also stored on sites with appropriate safe operating procedures and licensing as required.

#### Liaison with authorities

We seek to establish open working relationships with authorities that regulate our business and the non-government organisations who take an interest in our operations. We have received letters of appreciation from Victorian and Queensland authorities for RIFA management plans, a joint waste reduction initiative and supporting controls for the sale of volatile substances in Victoria.

#### Health and safety

We operate under a variety of health and safety legislation that varies between states. We endeavour to be proactive in complying with all the requirements of each jurisdiction and all areas of safety are under intensive continuous review to meet these standards.

Initiatives such as externally-conducted risk assessments, safety committees and hazard inspections assist us to identify and address any areas of risk or non-compliance.

There were no health and safety prosecutions during the year. We received 26 Safety Improvement Notices or Directions to Remedy from state authorities covering issues such as:

- forklift operations and traffic control;
- storage of dangerous goods and chemical usage;
- use of power saws;
- obstruction of aisles and exits;
- manual handling hazards;
- Dexion racking construction;
- water drainage overflow; and
- health risk from pigeon droppings.

Twenty-three notices were resolved by the specified date. We are working to resolve the three outstanding notices. Further time was required to resolve these notices to allow:

- re-engineering of display areas to reduce manual handling hazards;
- construction of a bund for an above-ground diesel tank in New Zealand; and
- stormwater drainage run-off improvements to a nursery area.

The following reportable events occurred during the year:

- a fatal accident involving a forklift in New South Wales;
- the amputation of a finger by a power saw in Western Australia; and
- an accidental release of about 20 litres of ready-to-use weed spray into a stormwater drain in Queensland.

A Workcover NSW investigation into the forklift fatality was still in progress at the time of reporting. The other two incidents were investigated by relevant state authorities with no enforcement action.

Health and safety committees meet monthly. Inaugural committees have been established in our acquired stores where they were not previously in place.

#### Licensing and approvals

Individual local government authority environmental requirements are addressed at the development application stage of each new site. Waste disposal permits are obtained for each warehouse site that operates a Hardware Cafe.

Dangerous goods storage licences or storage notifications are in place where required. In other cases we maintain compliance through our internal programme based on NOHSC: 2017(2001) and AS/NZS 3833.

#### Management systems

##### Integrated management system

We are continuing to enhance and integrate our environmental, health and safety management systems to suit the nature of our retail operation. A major review of our existing health and safety manual has been undertaken. We will fully integrate dangerous goods storage and handling standards into this manual.

The integration between environmental and safety systems is achieved by cross-referencing of procedure manuals, training programmes, hazard assessment checklists and audits. Store safety committees also have a dual function in monitoring environmental issues.

Standards are continually monitored through a multi-layered system of self-assessments and ongoing audit programmes, ensuring standards are maintained and exceptions remedied. Each month, minutes of safety committee meetings, injury registers and hazard inspection checklists are vetted and actioned by the complex manager, area manager and employee relations manager.

We continued a specific safety and environment internal audit programme in the Bunnings outlets with results forming part of the store bonus payments. This programme was introduced to the newly-acquired stores and the results will be reported and related to store bonuses next year. The audit programme demonstrated high levels of compliance: dangerous goods 91 per cent compliance (compared to 92 per cent last year); and occupational health and safety 90 per cent compliance (compared with 84 per cent last year).

Other personnel from human resources, store support and loss prevention areas also identify and report hazards evident during store visits. Area managers take note of safety issues as part of their store assessment visits.

In the event of any Lost Time Injury (LTI), store managers are required to conduct a full investigation and also notify their area manager and the employee relations manager.

Area managers review all current LTI's and report to executive meetings, ensuring accountability and that all parties have taken appropriate action.

## Policy

We have an Occupational Health and Safety policy titled "Success through Safety". This policy says that we will "actively pursue strategies to ensure that the company provides a safe environment for all who come in contact with our business" and that "the health and safety of our team members is our highest priority and is a responsibility of everyone who works within our company".

Our company credo, which is the statement of ethics that underpins our operation, refers to our duty to protect the environment and natural resources.

As part of our environmental strategy for the next reporting period we will develop a formal environmental policy and environmental management system based on ISO 14001.

This will include a timber and wood products procurement policy aimed at ensuring that supplies to our stores are derived from sustainably-managed forests.



## Environmental

### Air (atmospheric emissions)

#### Dust

Wood dust is produced at most stores as a result of sawing for customers who request cut-to-length timber. Power saws are fitted with dust extractors and team members are required to wear supplied protective equipment during their operation.

#### Odour

Odorous products such as manure, garden mixes and chemicals are contained in small consumer-sized sealed packages. External odour from these storage areas is minimal and ventilation systems reduce this to manageable levels inside stores for customer comfort.

#### Greenhouse emissions

We do not have an accurate measure of our emissions, but we do not believe this to be a major issue for our operations.

Such emissions mainly relate to electricity consumption, which is managed by efficient computer-controlled lighting systems and fuel usage in our fleet vehicles. All but a very few of our forklifts are now powered by LPG and batteries. As reported last year, we intend to replace the remaining diesel-powered units with more environmentally-friendly units.

#### Noise

Where a warehouse development is proposed, a generic warehouse environmental impact study is used to assess impacts such as noise, traffic and external lighting. This focuses on impacts to nearby residences. These studies show that noise from vehicles, power saws and public address systems has little or no impact on nearby residences.

In some instances, traffic management and public address system usage has been modified at individual stores to resolve concerns from neighbouring residential areas.

#### Lighting

Carpark and outdoor lighting is designed to all relevant Australian standards and to local authority requirements aimed at restricting "light spill" outside site boundaries.

# Making a Difference



Rhys Worth with the recently-installed plastics and cardboard bailing machine at the Joondalup warehouse, Western Australia.

In Victoria and Western Australia we have commenced a staged rollout of plastic and cardboard recycling, using new bailing machines. By removing plastic from our waste stream and optimising our cardboard recycling, we have further reduced the amount of waste going to landfill by 55 per cent.

The system at our Sunshine store has reduced its landfill waste from an average of 229 to 103 cubic metres a month.

Apart from the significant benefits for the environment, cost reductions and productivity increases have also been realised. We are planning to introduce plastic and cardboard baling machines in each state, such as the one pictured above at our Joondalup warehouse in Western Australia.



## Bunnings

### Water

#### Consumption

Each of our warehouse stores incorporates a nursery reticulation system from the main water supply that is controlled by an automated preset timer system. Reticulation cycles are programmed for early mornings to reduce waste from evaporation.

Four sites (Mile End in South Australia, Cannington in Western Australia, Minchinbury in New South Wales, and Mackay in Queensland) reuse storm water run off from the nursery to water landscape gardens or recycle back through the irrigation system.

We estimate that average annual water consumption for a warehouse store is 12,040 kilolitres. We are establishing an accurate recording and reporting system to be able to benchmark and improve our consumption of this precious resource.

#### Discharges to groundwater

We conform to all local council requirements for carpark, nursery and storm water drainage. This issue is addressed during the development and building approval process.

The Mile End store has installed large capacity separation tanks in the carpark to capture litter and oil run-off prior to discharging into storm water.

### Waste

We estimate that an average warehouse produces approximately 3,676 cubic metres of solid waste per year, 41 per cent of which is cardboard packaging which is recycled. The remainder is disposed of to landfill. Estimates of waste generated by non-warehouse stores have not been established.

Hazardous waste from spillage cleanups or returns of faulty products not suitable for landfill disposal are collected by suppliers or disposed of by contractors.

Waste disposal procedures and training are provided to locations to ensure that the correct process is followed.

We are currently working with the Queensland Environmental Protection Agency (EPA) on an industry "Waste Wise" pilot programme. Selected stores are conducting waste audits and setting up recycling programmes and waste reduction strategies.

Outcomes of this EPA review will be implemented at other stores where possible as part of our Packaging Covenant action plan.

### Liquid waste

Liquid waste is produced from food preparation in cafes, drainage from bin storage areas, infrequent wash downs of small hire equipment and rinsing of water-based paint stirrers. Our waste disposal guidelines do not permit any liquid waste being discharged to stormwater.

Where required by local authorities:

- wash down sumps or separation units are installed to capture hydrocarbon run-off from machinery wash downs;
- bin wash down areas are connected to sewerage systems instead of draining direct to storm water; and
- locations with a cafe have a grease trap installed to filter contaminants before drainage to sewer.

Mechanical paint mixing machines are in place at all locations, replacing use of manual stirrers and rinsing water. A minimal amount of rinsing water is still produced by cleaning paintbrushes from children's workshop activities. An analysis of this liquid shows it is non-hazardous and it is reused in garden beds with the suspended solids filtered out and disposed of in bulk refuse.

### Resource usage

#### Energy

The most significant energy resource used is electricity. High efficiency lamps and computer-controlled light switching systems are installed at warehouse stores to provide optimum performance with the use of ambient light via translucent roof sheeting to minimise electricity consumption.

A company-wide review of electricity usage and charges was due for completion in October 2002. We now have a system to record and monitor energy usage which will assist in identifying where further efficiencies can be achieved.

We estimate our total annual electricity use is 80 million kilowatt hours.



## Safety and health

### Lost time

Our safety performance over the last period has been of great concern with a disappointing increase in the Lost Time Injury Frequency Rate (LTIFR) for Bunnings and WA Salvage from 5.9 last year to 6.2.

The BBC Hardware and Hardwarehouse stores acquired from Howard Smith Limited reported an LTIFR of 10.8.

This escalation of LTI's has increased focus on safety as a key business issue. It is receiving continued emphasis from all levels of management on the importance safety plays in the growth and development of our business.

A number of major initiatives have been put in place to address this issue:

- introduction of our basic store level safety and health disciplines into the new stores;
- developing a comprehensive safety review action plan with the direct involvement of regional and area managers;
- creation of a new national position to provide specific expertise to manage these issues;
- reworking of the Occupational Health and Safety manual and its external review;
- development of new safety procedures for working at heights, traffic movement and machine guarding; and
- improvements to the newly-acquired stores where maintenance of equipment and working conditions were below the standard we require.

The Queensland Environmental Protection Agency WasteWise pilot programme at Bunnings in Cannon Hill, Queensland.





Neil Salter using a new flat bed trolley to lift and move 20 litre paint tins.

### Workers compensation

There were 860 workers compensation claims during the year from all Australian outlets. This includes 359 claims from the stores acquired in the Howard Smith takeover. Comparative numbers from the Bunnings stores were 501 this year as against 503 in 2000/2001.

Our injury management policy has been formally documented to guide management in our rehabilitation and return to work programme. This promotes early intervention and return to work by encouraging direct communication between store management, the injured team member and doctors.

This proactive approach has lead to greater communication between all parties and the opportunity to assess a range of alternative duties that injured team members are fit to perform. This means they can achieve earlier resettlement into the workplace after an injury, to the mutual benefit of both parties.

### Hazard and risk

#### Programmes

Workplace hazard identification and risk assessment methods are the mechanisms used to identify and control hazards throughout the business.

We have improved our management and safety committee training so that they are more able to apply practical and simple risk assessments to everyday workplace tasks.

Adjustments have been made to accident reporting procedures to ensure a quick resolution of existing hazards and the need for any new operating procedures are addressed.

Safety committee meetings are being attended by area managers, regional managers and human resources team members on a random basis so there is a broader understanding of the types of hazards across the group.

High-risk tasks such as operating forklifts and power saws each have a standard operating procedure developed and a coaching log book system for operators.

We undertook a review of all power saws to identify areas where further safety improvements may be possible to achieve safety best practice.

Reinforcement of our Standard Operating Procedures was made with each location through safety committees and hazard alerts. An audit of the standard safety features on all saws was conducted and optional safety features such as blade brakes and auto adjustable guards added where possible.

Other specific hazard controls include:

- dexion racking inspections to reduce the risk of collapse through damage, overloading or falling high-rise stock;
- pallet inspections to ensure soundness of any pallets used by forklifts;
- monthly hazard inspection checklists of entire store carried out by safety committees; and
- high housekeeping standards to reduce customer accidents on the premises.

We have updated our asbestos register to include all newly-acquired stores. Currently 30 sites in Australia and New Zealand contain asbestos material. More detailed inspections are scheduled for 14 of these sites.

### Emergency response

We have a crisis management plan in place to address a range of potential emergency situations. Contingency plans are provided to address major accidents or security breaches.

These procedures are readily accessible in the event that they are required and annual emergency evacuation drills are conducted every six months.

Post-incident debriefing is offered to those involved in a critical incident with trauma counselling made available on site.

### Materials handling and storage

Materials handling involves the unloading of deliveries and the stacking of merchandise on to shelves or high-rise storage areas at our stores and distribution centres.

A variety of material handling devices are provided to ensure this takes place safely and efficiently. The step-through design of our checkout counters and cordless handheld scanners at all points of sale, allow cashiers to scan heavy items in the trolley and avoid the risk of manual handling.



Ken Walters (right) training members of the Occupational, Health and Safety Committee on the safe use of equipment at the Mindarie warehouse.

## Bunnings

Ongoing reviews of the working environment are also introducing changes to systems of work, reducing the amount of manual handling involved through the use of new equipment. All stores have received adjustable hydraulic trolleys to handle movement of heavy 20 litre tins of paint.

A forklift curfew exists on the retail floor where safety spotters and aisle barriers are used to restrict pedestrian access into the loading areas.

Material Safety Data Sheets (MSDS) registers for hazardous substances used in the workplace are maintained at each store. An online database of MSDS is accessible by stores and can be printed out for customers on request.

The stores acquired from the Howard Smith takeover have been fitted out with a gas cylinder exchange programme, increasing the option for our customers. We encourage customers to use the convenient exchange cylinder service to reduce the frequency of LPG decanting required on site.

### Risk assessment

External consultants were contracted to perform detailed site risk assessments incorporating buildings, fixtures and fitting, plant and equipment, work processes, fit-for-use and assessment of yard areas. This was done by using a cross section of different environments, including distribution centres, truss plant manufacturing, major timber yards, older traditional stores and typical warehouse stores.

The consultants delivered benchmark OHS audits covering a range of typical site formats. These were used to conduct detailed analysis of the outcomes.

The follow-up process from the audits led to identification of risk elements common to all stores and each location conducted detailed checks on these areas.

Operations identified further high-risk environments to target other sites.

Reports were given direct to managers for all issues to be corrected urgently with executives monitoring outcomes.

### Employee wellbeing

The wellbeing and personal fitness of our team members is integral to their health and safety in the workplace.

A series of life skills workshops called "investment in excellence" are provided, where team members are encouraged to bring their partners along to share in the experience.

Stress management workshops are conducted for management teams to



Michael Franghis at the Kwik Gas cylinder exchange station at Mindarie.

encourage a healthy, balanced lifestyle. Annual flu injections are offered to every team member and we rigorously promote a non-smoking workplace.

We have commenced a pilot employee wellbeing programme in South Australia where team members are encouraged to take a more holistic approach to their health, safety and welfare, at work and at home.



## Community/social

### Complaints

Store management reported dealing with 24 informal complaints from neighbouring properties on minor issues related to lighting, traffic, noise, dust and odour. Our survey shows that these were resolved locally by managers working with neighbours and making changes to reduce impacts to acceptable levels.

### Communication

A wide variety of internal communication tools are used to ensure that safety and the environment remain front-of-mind workplace issues. These include:

- weekly store information bulletins;
- hazard alert bulletins;
- health and safety suggestion boxes at each location;

- the "Bunnings Banter" quarterly internal magazine; and
- safety committee minutes posted on internal notice boards.

Safety and community support features in comments by our general managers in "Bunnings Banter".

Our intranet is now operational and available in stores and is being developed to include on-line safety training modules, policy and procedures and risk assessments. It is an important tool in making information available to team members.

The "Bunnings and the Environment" page displays a statement on our commitment to the environment together with store environmental guidelines to reduce impact. An innovation feedback mailbox provides team members with an opportunity to share their ideas with an incentive reward offered.

In May 2002 we took part in a joint stakeholder consultation forum with three other Wesfarmers divisions at Rockingham, Western Australia. Community groups, government agencies, industry and contractors attended the forum.

The purpose was to conduct a presentation explaining our local warehouse's involvement in the community and to address environmental and safety issues. We engaged in discussion on how our performance and reporting could be enhanced.

The outcomes were very positive with useful feedback received.

### Community support

We demonstrate our strong commitment to the communities in which we operate through a National Community Involvement



Strategy focusing on local, state and national organisations.

We support many community groups active in health, youth development, the environment, education and community welfare.

During the year, we contributed almost \$1.5 million to various charities and community groups throughout Australia.

Community, health, safety and environment programmes of which we are major sponsors include the Juvenile Diabetes Research Foundation, Emergency Services Bluey Day, various children's hospital appeals, the Cancer Foundation, and the Australian Koala Foundation.

The team at every warehouse store supports their local community in many ways, including:

- providing expert advice or hands-on support to assist community groups with DIY projects;
- acting as collection points for various charities, such as the Salvation Army's "Red Shield Appeal";
- personally taking part in charitable events like the "Relay for Life" and Bluey Day national head shave; and
- participating in coordinated blood donations for the Red Cross.

One of our major projects for 2001 was the Juvenile Diabetes Research foundation "Walk to Cure Diabetes". This event saw 3,000 team members and family and friends from across Australia take part and we raised more than \$60,000 for the cause.

We receive hundreds of letters from community groups asking for our support with various community and environmental projects. Some of the projects where our

team members donated their time and skills included:

- delivering gifts and Christmas cheer to elderly patients at hospitals;
- Easter Bunny visits to children's hospital wards;
- building flower beds and vegetable gardens at primary schools;
- fixing up playgrounds and sandpits for community groups;
- recycling aluminium cans for children's hospital charities; and
- donations of plants to the "Arbor Day wish list" and local wetlands project.

Team members at Bunbury, Western Australia were approached to donate paint for the Milligan Child care facility. This developed into a major community project as the facility, the largest of its type in the region, needed an exterior makeover. With support from 21 team members, including horticulturists and

carpenters, a full day was spent cleaning, repairing painting and gardening with spectacular results.

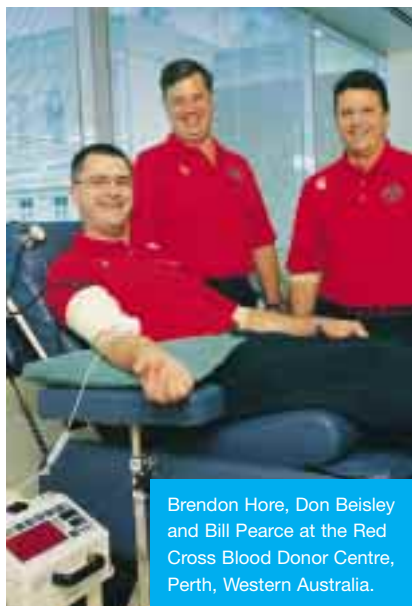
At warehouse stores free "how to" weekend workshops are offered to adults and children. Children get to experience basic skills in a safe and fun learning environment. During the year more than 50,000 adults and 150,000 children took part in these workshops across the country.

Children's workshops are also conducted at schools, community centres and major community events including special programmes for disabled children.

We will continue to devote our energy and expertise to identifying ways of adding value to the communities in which we operate and reducing our impact on the environment.

## Priorities for the Future

- > Improve safety performance by halving our LTIFR each year with zero lost time injuries our ultimate aim
- > Improve the safety culture by promoting safe behaviours and use of risk assessment and hazard identification in daily routines
- > Adopt a formal environmental policy and commence implementation of an Environmental Management System based on AS/NZS ISO 14001
- > Identify opportunities to improve the social and environmental wellbeing of the communities in which we operate



Brendon Hore, Don Beisley and Bill Pearce at the Red Cross Blood Donor Centre, Perth, Western Australia.



### 2001 REPORT PRIORITIES

Improve our safety performance. Zero Lost Time Injuries (LTIs) continues to be our target, with an annual reduction of 50 per cent in our LTIFR.

Implement strategies to improve our safety culture so that all employees contribute to our safety management system.

Increase the ability to have on-line training for all employees.

Develop environmental objectives and targets and seek opportunities to further enhance our environmental management system.

Further expand established initiatives such as the cylinder exchange and diesel fuel/gas substitution programmes.

Develop liquefied natural gas (LNG) markets.

### OUTCOMES

Eight LTI's, an LTIFR of 6.2 compared with 3.8 in the previous year.

Health, safety and environment improvement plan developed in December 2001 and currently being implemented.

Plans to develop an on-line training programme have been put on hold pending implementation of the mainframe Business Information System which will have an on-line learning component.

Objectives and targets have been set. Measurement of recovery of waste liquefied petroleum gas (LPG) has commenced. Waste generation and recycling has been surveyed at all sites. LPG substitution for petrol in fleet vehicles continues with environmental benefits from reduced greenhouse gas emissions.

As a result of our initiatives, the number of cylinders exchanged has doubled.

LNG production commenced, and currently used to fuel Kleenheat delivery vehicles and supply one customer.



## Overview

Despite an increase in the level of training and employee awareness on health, safety and environmental issues our Lost Time Injury Frequency Rate increased during the year making us more determined than ever to reduce workplace injuries and to improve injury management. During the year we developed a comprehensive Health, Safety and Environment Improvement Plan which will be the basis of our increased effort in this area.

Environmentally, we are continuing to promote the increased use of gas as a vehicle fuel given its benefits over petrol and diesel in terms of reduced greenhouse emissions. A highlight was the inclusion in our truck fleet of three heavy vehicles running on liquefied natural gas supplied from our plant - commissioned in August 2001 - replacing more than 1,000 litres a day of diesel fuel. We have also improved our monitoring processes to enable analysis and planning to help us achieve better environmental performance.

(This report does not cover the activities of our Unigas joint venture which operates on the east coast.)



## Business management

### Training

Training is a key factor in ensuring that employees carry out their duties safely, efficiently and enhance their skills and career prospects. During the year 285 employees attended internal and external training courses.

### Environmental

Environmental awareness training is delivered to new employees as part of the induction process. The training has been upgraded to include statutory obligations, key environmental management practices and environmental incident reporting requirements. A separate environmental awareness training package was developed and delivered to staff at the Pinkenba (Queensland) terminal to cover site-specific environmental management issues.

### Safety and health

Safety training for 201 employees Australia-wide has focused on manual handling. These courses concentrated on job-specific training related to our gas terminals and offices.

We have also supplied packages to our employees via the intranet dealing with how to run effective safety meetings, using the Operations Management System (OMS) and workplace noise and hearing protection.

### Emergency

We carried out an emergency call out exercise at the Swan Hill terminal as part of the Major Hazard Facilities compliance in Victoria. We also plan to conduct an emergency exercise at our Channel Island terminal in the Northern Territory. This terminal facility is the supply and distribution point for the Northern Territory, north-west Western Australia and north-east Queensland.

### Compliance

#### Environmental

An environmental engineer has been employed to advise on environmental matters and to manage compliance with legislative requirements. Any changes to environmental legislation, in the states and territories in which we operate, are monitored through a company that specialises in environmental law.

LPG ship tanker unloading gas at Kleenheat's Channel Island facility in Darwin, Northern Territory.



The company notifies us of any changes and has a website holding current environmental legislation. A desktop environmental survey was completed for each of the sites to determine key environmental management priorities across the organisation. This survey will be expanded to develop a comprehensive environmental management database.

### National Pollutant Inventory (NPI)

Liquefied petroleum gas (LPG) is a volatile organic compound which is one group of substances reportable under the NPI. The presence and use of all 90 substances listed under the NPI was reviewed at our operations. However, we did not trigger any thresholds and therefore are not required to report.

### Health and safety

We have maintained a working relationship with industry groups and state and federal regulatory authorities to maintain both statutory and industry compliance.

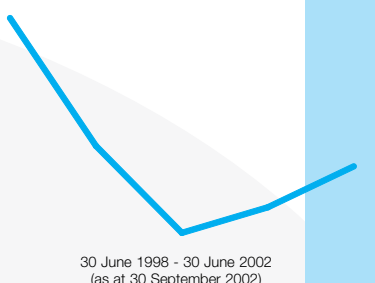
We submitted a safety case for the Swan Hill gas terminal to comply with Victorian Major Hazard facilities regulations. An Improvement Notice was issued in relation to this facility. This notice was in regard to gas hose inspections at the facility and has been complied with. Another notice, issued in June 2001 in relation to emergency training at the facility was progressed during the financial year. We are currently awaiting a response by the authority.

A further notice was issued in relation to traffic/pedestrian safety, forklift inspections and spare parts storage at our Deer Park terminal in Melbourne. This notice has been resolved with the exception of some minor work to the Deer Park workshop.

A revised safety report for the Kwinana gas terminal was submitted to the Western Australian Department of Minerals and Petroleum Resources (DMPR). We are working with the department to finalise the report.

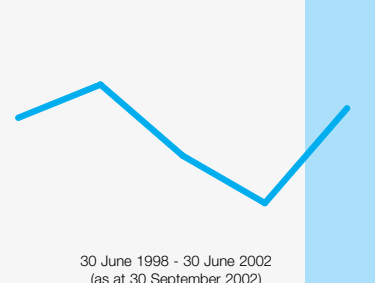
#### Lost Time Injury Frequency Rate

1998	1999	2000	2001	2002
14.9	7.4	2.3	3.8	6.2



#### No. of Workers Compensation Claims

1998	1999	2000	2001	2002
57	64	49	39	59





# Making a Difference



Mike Pedersen preparing to fuel an LNG powered truck at Sands Fridge Lines in Forrestfield, Western Australia.

We have commenced production of liquefied natural gas (LNG) for the larger end of the transport market such as buses, metropolitan-based trucks and long-haul transport.

Since commissioning the LNG liquefaction plant on the Wesfarmers LPG site at Kwinana in August 2001, three of our vehicles are now running on LNG and we are supplying one customer.

The LNG consumed by these vehicles replaces in excess of 1,000 litres per day of diesel fuel. Our challenge now is to expand the market for LNG by such means as marketing its benefits as a suitable replacement for diesel and developing public awareness of the environmental benefits of using LNG.

## Licensing and approvals

We hold four site-specific environmental licences. These are required by the relevant statutory authorities for the Pinkenba terminal, the Mongla terminal in Bangladesh, the LNG plant and the Myaree workshop in Western Australia. The Queensland Environmental Protection Agency issued a licence for the Pinkenba terminal in 1995. This year we met with the Queensland EPA to review the licence. The review involved updating the terminal's environmental monitoring schedule, environmental management operating procedures and the storm water management plan. These revisions were completed in February 2002.

## Management systems

### Integrated management system

The Operations Management System (OMS) is an intranet-based system covering safety, quality and environmental management requirements. It is a dynamic system that is regularly updated to give users access to current information. The OMS includes links to standards and codes of practice, links to regulators' home pages and health, safety and environment reference documents. The OMS is available to employees via our intranet system, both on the company-wide network and remotely through dial-in facilities.

### Environmental Management System (EMS)

The EMS is an integrated part of the OMS and is consistent with the principles of ISO 14001. We have maintained our third party certification to AS/NZS ISO 14001 (Environmental Management Systems) at our Myaree and Kwinana sites in Western Australia. Third party certification to AS/NZS ISO 14001 has not been sought at any other sites.

### Quality system

Third party certification to AS/NZS ISO 9002 was maintained for our national quality management system. The system will be upgraded to meet the requirements of AS/NZS ISO 9001 with a target date of compliance of December 2003.

### Safety management system

Our safety management system has been certified to AS/NZS 4801 (Occupational Health and Safety [OHS] Management Systems). The standard covers elements such as safety policy, hazard identification, risk assessment and control, incident investigation and OHS management system auditing. The certification process was conducted by Quality Assurance Services and our certification was achieved in

June 2002. Initially, the scope extends to the Kwinana and Myaree sites, and will progressively be expanded to other sites nationally.

### Other/internal management systems

We have developed a compliance database to capture information in regard to national driver and vehicle licensing, contractor agreements, contractor inductions, and terminals. This database now assists in meeting our compliance requirements.

### Policy

We have formal policies for quality, safety and the environment. Each policy has been developed in accordance with the relevant Australian Standard. Our policies are displayed on our intranet site.



## Environmental

### Air (atmospheric emissions)

#### Dust

Dust can create a safety hazard through poor visibility on unsealed roadways. Our sites are being assessed for dust concerns and upgrades are being undertaken where required. A natural dust suppressant is being used in trafficable areas at our Wingfield terminal in South Australia.

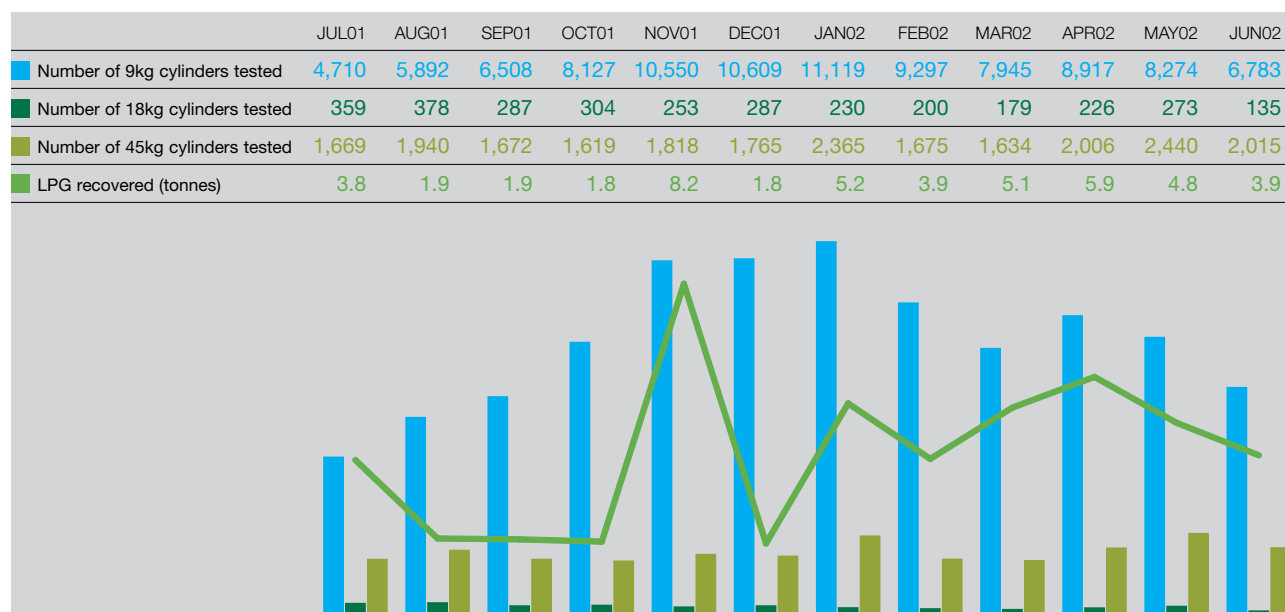
#### Odour

In its natural state, LPG is odourless. For safety reasons it is necessary to add a small amount of ethyl mercaptan to give the gas a distinctive smell and to allow its presence to be easily detected, should a leak occur. An odour release is associated with the venting of LPG to the atmosphere. LPG emissions are minimised through the cylinder exchange programme and remnant gas recovery. The recovered remnant gas is recorded at our Kwinana terminal (see Figure 1). Procedures have been established to enable measurement of recovered remnant gas amounts at the other terminals in the coming year.

#### Greenhouse emissions

Greenhouse gas emissions are generated from electricity consumption and vehicle usage. Electricity consumption has been monitored and energy use was greatest at the major office centres, Kwinana and

Figure 1: Gas recovery - Scavenger Unit - Kwinana Terminal



Mongla terminals and the largest reticulation site, Armidale in New South Wales. Measures for improving energy efficiency are included in our environmental awareness training.

More than 90 per cent of our passenger vehicle fleet is either dual-fuelled with LPG and petrol or dedicated LPG. LPG offers a reduction of up to 15 per cent in carbon dioxide emissions compared with the emissions of petrol-powered vehicles. During the year we replaced 16 petrol and dual-fuel vehicles with dedicated LPG vehicles. The majority of the heavy vehicle fleet is run on diesel. However, three of our newer vehicles are dual-fuelled for LNG and diesel and two vehicles are LNG-dedicated. LNG also has lower greenhouse gas emissions than diesel.

**Noise**

Noise monitoring was conducted at our Pinkenba terminal in accordance with our licence requirements. The results indicated that the premises complied with allowable noise emission levels. Noise monitoring was not required at any other sites.

**Water**

**Consumption**

Many of our sites are leased properties without a site-specific water meter. However, assessments undertaken at selected terminals and branches have determined that water usage is conservative and warranted. The key activities resulting in water consumption include truck washing, cylinder washing, use of deluge systems, toilets, bathrooms and kitchens.

**Reuse and discharges to surface and groundwater**

Fire deluge systems are erected above our bulk storage tanks where required. In some situations the released deluge water flows back into a storage dam for reuse, as happens at the Kwinana and Channel Island terminals. At other sites the deluge is fed by mains water which, once released, enters the storm water drainage system or drains through the natural ground surface.

**Waste**

**Solid waste**

We manage 58 sites. The type of waste generated varies depending on the nature and size of the operation. Unmanned depots do not produce any waste. Where solid waste is generated it includes paper, plastics, aluminum, metal cylinders and valves.

**Liquid waste**

Waste oil is produced at the workshop for heavy vehicle maintenance at the Myaree site. This is removed for recycling under a Department of Environmental Protection (DEP) licence.

**Recycling**

Recycling is undertaken at many of the sites generating waste. Paper waste is generated at most of our operations. However, waste paper recycling opportunities are limited at remote locations. All sites producing waste cylinders and oil recycle these materials. Eighty two per cent of sites producing waste aluminum recycle it and 89 per cent of sites producing waste valves recycle them. The low recycling rate for plastics is due to many plastics being non-recyclable (see Figure 2).



Fred Woller and John Hayden checking the storage vessel deluge system at the Channel Island terminal.



Ian Dalton using a purpose-built trolley to move 190kg gas cylinders at Myaree, Western Australia.

Figure 2: Generating and recycling of waste

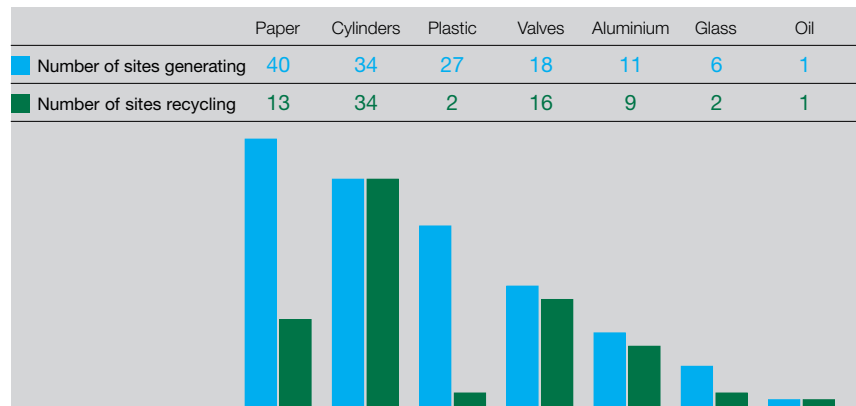
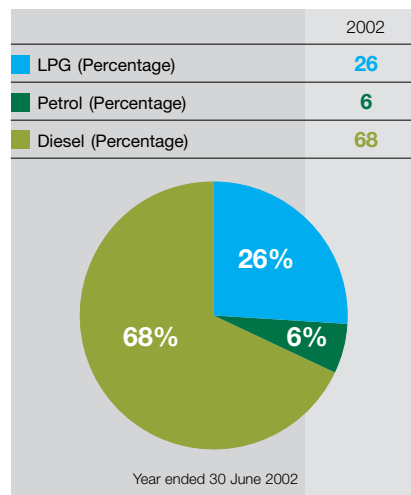


Figure 3: Fuel use

	2001	2002
LPG (Litres)	677,763	867,515
Petrol (Litres)	232,097	203,752
Diesel (Litres)	1,308,972	1,412,174
Year ended 30 June 2002		

Figure 4: Percentage fuel designations of KHG passenger vehicle fleet



Peter Pickering examining a puncture in a 45kg condemned cylinder using the new cylinder piercing unit at Kwinana, Western Australia.

## Land

### Contamination

We lease four sites in New South Wales with land contaminated from previous land uses. We are planning to discontinue leasing the Kiama site that was contaminated by a previous coal gas operation. At the other three sites we actively assist the property owners in their management and remediation of these contaminated sites. At our site in Camellia all incident rainwater is collected for monitoring and treatment by the landowner. We plan to adjust our operations at Nowra to accommodate upcoming remediation works. In Armidale, a new depot location has been leased to enable the remediation of the old site that is contaminated as a result of a coal gas operation.

### Resource use

#### Fuel

Most of the fuel we consume is used in transporting LPG. Total fuel usage, excluding contractors, is shown in Figure 3. The increased use of LPG and reduced consumption of petrol resulted from replacing 16 petrol and dual fuel passenger vehicles with dedicated LPG vehicles and educating dual-fuel vehicle drivers in the environmental and economic benefits of using LPG over petrol (see Figure 4). The increase in diesel usage can be attributed to our expanded LPG distribution network on the east coast of Australia.

#### Energy

Monitoring of electricity usage across the Australian operations has been undertaken for the first time this year. The major office centres, Myaree and Deer Park, along with the Mongla and Kwinana terminals and the Armidale reticulated gas system were the largest electricity consumers.





## Safety and health

### Lost time

Our Lost Time Injury Frequency Rate for employees increased from 3.8 in 2000/2001 to 6.2 in 2001/2002. This performance was disappointing, considering the efforts made to reduce the incidence of workplace injury. We sustained eight lost time injuries to employees and one injury to a contractor.

### Workers compensation

There was an increase in workers compensation injury claims during the year. We attribute this to a higher level of awareness of our employees to promptly report injuries and receive early intervention treatment to reduce the injury severity. Our contractors reported two compensation injuries in the same period.

### Hazard and risk

#### Programmes

During the year, we developed a comprehensive Health, Safety and Environment (HSE) Improvement Plan which is planned to be fully implemented by 2004. It includes strategies for improvement on issues such as leadership and commitment, risk management, training, emergency response, systems and procedures of work and HSE compliance.

#### Emergency response

To comply with requirements for major hazard facilities, we revised emergency response plans for our Kwinana and Swan Hill facilities. Our plan for Kwinana has been accepted by the Western Australian authority and our Swan Hill plan is currently being reviewed by the Victorian authority. We plan to revise our emergency plans for all other applicable locations by the end of the financial year.

#### Materials handling and storage

We have implemented a number of improvements to reduce the incidence of manual handling injuries. This includes the use of devices such as trolleys for 190kg cylinders, condemned cylinder puncturing tools and cylinder loading davits.

We participated, in conjunction with the Australian Liquefied Petroleum Gas Association, in a case study for manual

handling of gas cylinders (including 45kg LPG cylinders as well as oxygen, nitrogen and other cylinders supplied by non-LPG suppliers) in response to the proposed code of practice developed by the Victorian Workcover Authority. Forty-five kilogram cylinders were found not to pose an increased risk to handlers if training and correct handling techniques were employed.

#### Risk assessment

We recognise fatigue as a risk to our employees. We have completed a compliance plan for fatigue and maintenance management for Main Roads Western Australia and expect a successful audit and certification by August 2002. In addition to this, fatigue issues are currently being addressed in our Fitness for Work policy development.

During the 2001/2002 year, our heavy haulage vehicles were involved in 13 on-road accidents. One accident, near Warragul, Victoria, resulted in a tanker trailer becoming detached from the prime

mover. There was no release of LPG from the storage vessel and with the assistance of the country fire authority and other emergency services, the trailer was removed without incident.

During the same period, our passenger vehicle fleet was involved in 25 on-road accidents. We reported an accident occurring south of Nowra in last year's report. In October 2001 the driver was fined and had his licence suspended on a charge arising from the accident.

As part of our Health, Safety and Environment Improvement Plan, we hope to commence, in the course of 2002, defensive driver training with all our employees who drive company vehicles.

As part of the improvement to our safety management system we have revised our Master Risk Register to include additional hazards and risks associated with activities at our operating locations around Australia. The register is located on our intranet and is available for reference and addition by employees.

Jacqui Quinn operating a davit and winch system at the Albany Gas House, Western Australia.



# Making a Difference



Delivering LPG cylinders to outlets near Mongla, Bangladesh.

Our LPG import terminal, located at Mongla, in south-west Bangladesh, was commissioned in September 2001. The terminal currently has a capacity of 1,600 tonnes of gas and is used to supply a 12.5 kg gas cylinder market, as well as providing bulk gas transport via a road tanker imported from our Australian vehicle fleet.

We aim to expand the cylinder market through development of a dealer network to cover most parts of the country. By the end of June 2003 we hope that 10 cylinder trucks will be on the road to assist in the market expansion.

Some of the problems that have been encountered in Bangladesh have been the complex and at times difficult logistics arrangements due to numerous ferry crossings, unsealed roads, and the enormous amount of traffic.

Safety is our focus, especially in induction and training of employees.

Asbestos assessment resurveys and air monitoring were undertaken for the Myaree and Kwinana sites. Initial assessments by an external consultant were undertaken at the Pinkenba, Deer Park and Camellia terminals. We have commenced the implementation of management plans.

## Employee wellbeing

In June 2002, we commenced another voluntary health assessment programme for employees and contractors. As with the previous health assessment conducted in 2000, the issues arising will be examined and initiatives developed to address them.

Commencing in February 2002, we, along with other Wesfarmers Energy business units, began implementing a Fitness for Work programme, incorporating issues such as drug and alcohol use, smoking and fatigue. It is anticipated that the programme will be implemented by the end of June 2003.

We provide an Employee Assistance Programme which offers our employees and contractors an opportunity to discuss personal issues with an independent, qualified counsellor. The service is provided free of charge and is confidential.



## Community/social

We provided support to a diverse range of organisations and community groups during the year. One of our major sponsorships was to the Clontarf Football Academy, which included financial support, regional football tours, improvement of existing facilities and provision of training equipment and uniforms.

Other key sponsorships included the Regional Community of the Year sponsorships in Victoria and Western Australia and support for not-for-profit organisations such as the Juvenile Diabetes Research Foundation, Cancer Foundation and Australian Kidney Foundation.

Sponsorships also extended to community groups, sporting organisations and the performing arts.

## Complaints

Our Customer Service Centre (CSC) handles customer feedback in accordance with a procedure based on AS 4269.

Most customer issues are handled by first point of contact with our CSC officers. However, if an issue requires further attention, the matter is recorded and dealt with by the CSC manager, supervisor or other senior personnel. We handled 150 such issues during the year.

## Communication

### Newsletters and reports

We continue to publish quarterly both "Gas-Bagging" and "Safeside" newsletters to update employees on our activities. We also publish safety bulletins on our intranet to advise employees of topical safety and health-related matters.

We have commenced issuing "Well-at-Work", another quarterly publication which gives our employees a range of information relating to general health and wellbeing.

### Website

As part of our commitment to raising community awareness of LPG safety and environmental issues, we provide LPG training to any interested party or public group.

Our website ([Kleenheat.com.au](http://Kleenheat.com.au)) contains an area dedicated to safety and the environment, where the public can contact us in relation to these issues.

### Liaison groups

We remain an active member of the Australian Liquefied Petroleum Gas Association.



Members of the Clontarf Football Academy at training.

## Priorities for the Future

- > Improve our safety performance by further educating our employees. Zero Lost Time Injuries (LTIs) continues to be our target, with an annual reduction of 50 per cent in our LTIFR
- > To make progress with our Health, Safety and Environmental improvement plan
- > To introduce our Fitness for Work policy to Kleenheat employees through awareness training and implementation
- > To further develop our Liquefied Natural Gas (LNG) market
- > Develop an environmental management database
- > Improve monitoring and measurement of environmental performance





Dave Moore at the regeneration gas heater in the Liquid Extraction Plant (LEX), Kwinana, Western Australia.

### 2001 REPORT PRIORITIES

No workplace injuries and maintain Lost Time Injury Frequency Rate (LTIFR) at zero.

Ongoing identification and control of hazards.

No significant releases of hydrocarbons to the atmosphere.

Continued rollout of the noise reduction programme.

Progress environmental site assessment.

Implement site no smoking policy.

### OUTCOMES

No employee injuries and four contractor injuries requiring medical treatment, which led to three contractor LTI's. LTIFR of zero for employees.

Continued use of site Permit to Work system. Hazard and Operability Studies (HAZOPS) conducted for the LNG plant and fractionation upgrade.

No significant releases. One minor natural gas release following the operation of pressure safety valves with no threat to employees or the public.

Noise reduction on plant items progressed. Phase one completed and phase 2 and 3 in progress.

Issues identified in audit progressed.

Policy introduced in October 2001.



**WESFARMERS LPG**

## Overview

The continuation of our zero Lost Time Injury Frequency Rate for employees was a highlight of the year's safety performance with 434,564 workforce exposure hours free of lost time injuries. This included work associated with the Kleenheat Gas liquefied natural gas plant and the expansion of the fractionation section of our plant.

We made progress on specific projects to reduce the noise from major plant items and completed phase one, which included the installation of acoustic insulation on pipework and the fitting of motor silencers. Noise levels will be measured to assess the effectiveness of these treatments. Progress was made on issues identified in the stage one environmental assessment audit conducted in June 2001, including introduction of systems to further improve our existing maintenance of oil interceptors and hydrocarbon storage arrangements on site.



## Business management

### Training

#### Environmental

Our induction programme for all new employees and contractors addresses environmental awareness of their work area with emphasis on response to product spillage and general housekeeping. There were 311 inductions carried out this year associated with planned maintenance activities and new projects. Our training programme contains procedures for managing environmental licence conditions.

#### Health

Voluntary health and fitness assessments using the services of an independent consultant are conducted every two years. Health management plans are discussed with each participant following these assessments. The next series of assessments are scheduled for 2003.

#### Safety

All employees and contractors must attend a safety induction programme before being allowed access to the process area to ensure they are aware of hazards, work permit requirements, occupational health and safety and emergency response procedures.

All employees undergo vocational training to meet the requirements of their position, with competencies measured against national standards (where available). In addition, a comprehensive competency-based training programme is in place for all process operators, involving demonstration of acquired competencies against internal and national standards. A review of the internal competency standards commenced this year to ensure they match current plant status. This process will continue next year.

#### Emergency

A comprehensive emergency response training programme is in place relevant to each employee's position. This includes basic, intermediate and advanced fire fighting, breathing apparatus training, search and rescue and fire ground command programmes. Training under this programme is conducted annually. This year, 39 employees completed an advanced fire fighting course, 14 completed the fire ground command course and eight went through the fire awareness and control programme.



Propane and butane product treaters and hot oil surge tank at the LEX Plant.

### Compliance

#### Environmental

We continued implementing a noise management plan to address non-compliance issues with the Environmental Protection (Noise) Regulations, 1997. This is discussed in more detail later in the report.

#### National Pollutant Inventory (NPI)

Air emissions notifiable under the NPI were estimated for oxides of nitrogen, carbon monoxide, nickel carbonyl, heavy metals and associated compounds and particulate matter. Data for the 2000/2001 reporting period was submitted to the Department of Environmental Protection (DEP).

#### Licensing and approvals

The plant operates under licences issued from the DEP and the Department of Mineral and Petroleum Resources (DMPR). These licences are issued annually and include conditions, with which we comply.

We submitted a Works Approval Application to the DEP in August 2001 in order to increase liquefied petroleum gas (LPG) production capacity as part of the project to expand the fractionation section of the plant. The department issued a Works Approval for this upgrade in September 2001.

### Management systems

#### Environmental Management System (EMS)

No formal EMS is in place, however environmental policy and procedures are addressed in our Safety Report and our DEP licence conditions.

#### Quality system

We have a Quality Assurance system meeting the requirements of ISO 9001 for the testing, inspection and servicing of safety relief valves. These valves are tested at prescribed periods. An independent audit was undertaken in February 2002. The auditor concluded that our certification should continue.

#### Lost Time Injury Frequency Rate

1998	1999	2000	2001	2002
0	0	0	0	0

30 June 1998 - 30 June 2002  
(as at 30 September 2002)

#### No. of Workers Compensation Claims

1998	1999	2000	2001	2002
1	1	1	2	0

30 June 1998 - 30 June 2002  
(as at 30 September 2002)



Piping with noise reduction cladding at the residue gas coolers in the LEX Plant.

**Safety management system**

All health and safety policies and procedures are referred to in our Safety Report.

The report was revised in September 2001 prior to the fractionation upgrade.

It was further revised in June 2002 and issued to DMPR and key site personnel.

The report is subject to independent and regular audit and is overseen by DMPR.

A compliance audit was conducted in June 2002, but the report is yet to be provided. In conjunction with DMPR we will address recommendations arising from the resulting report.

Specific health and safety procedures cover working with high voltage electricity, accident and incident investigation, manual handling, working in confined places, height safety and job hazard analysis.

All modifications to the operating plant are reviewed and approved by senior plant management prior to implementation. Procedures ensure that all changes are fully documented to allow independent audit and review.

**Policy**

We are committed to providing a healthy and safe workplace for all employees and visitors to the Kwinana extraction plant and our gas export facilities. Identification and control of hazards and prevention of incidents and injury are of the highest priority. This is achieved through a consultative process, which defines and implements training, policies and procedures for the wellbeing of all employees. Four safety and health representatives were elected this year. They attended an introductory training course and will become more involved in the site occupational health and safety committee next year.



**Environmental**

**Air (atmospheric emissions)**

**Dust**

To control dust, large areas of grass have been planted and are maintained.

**Odour**

Propane and butane are naturally odourless. For safety reasons, we are required by legislation to inject low levels of ethyl mercaptan (odourant) into the gas. This gives it a distinctive odour allowing leaks to be detected. The injection system is closely monitored as even minor drips can give rise to offensive odours. Any leak is quickly repaired and spillage contained and neutralised. No odour complaints were referred to us by the DEP in 2001/2002. We are not aware of complaints from any other source.

**Greenhouse emissions**

During the year we released an estimated 342,800 tonnes of carbon dioxide equivalents. This is an increase on the estimated 290,000 tonnes released during the previous year due to the commissioning of the fractionation upgrade leading to increased production levels and higher fuel gas consumption.

**Noise**

The extraction plant operates 24 hours a day. There are numerous items of rotating equipment giving rise to a low level of background noise at the plant boundary.



We continued with the implementation of a noise reduction management plan aimed at reducing noise emissions from the plant as far as practicable.

Specific projects to reduce the noise from major plant items were progressed. Phase one, comprising modifications to two recompressors, two turbo expander/compressors, six process pumps and the regeneration gas compressor was completed. This work involved the installation of acoustic insulation on pipework and motor silencers. Noise measurements will be carried out to determine the effectiveness of the noise treatments completed. We will continue with phases two to five as recommended in the consultant's noise management report.

#### Other emissions

There have been no environmental incidents involving significant release (defined as a release which may affect areas outside the plant) of LPG, natural gas or condensate to the atmosphere since the commencement of plant operations in 1988. There have been occasional minor LPG releases (defined as those contained within the plant) that have been quickly brought under control.

There was a minor natural gas release, lasting about thirty seconds, during a plant start-up in June 2002, following the operation of pressure safety valves on the absorber. The release was safely dispersed and did not pose any threat to employees.

During plant shutdowns, or occasionally to control pressure in operating vessels, gas has to be released to the atmosphere. This gas is safely disposed of through combustion flares. The flare tips are continuously monitored in the control room via a closed circuit camera.

In the event of a high flaring rate, additional combustion air is fed to the flare tips to prevent the formation of black smoke.

There are minor emissions of LPG at the completion of loading of road tankers when the hoses are disconnected. There has been no further progress on the project referred to in last year's report to reduce the level of these emissions. The feasibility of completing this project will be determined next year.

#### Water

We consumed an estimated 10,560 kilolitres of scheme water during the year.

#### Groundwater

Three bores operating on the site provide water for garden reticulation and for emergency response.

#### Discharges to surface and groundwater

Storm water run-off from the paved sections of the processing areas is directed to oil/water interceptors where any oil present is skimmed off and recovered. A contract waste disposal firm removed all of this oily water waste, totalling 3,100 litres.

#### Reuse

Water used for deluge system testing purposes in both the domestic and export storage tank areas is returned to a storage pond for reuse.

#### Waste

##### Solid waste

A waste management contractor removed about 54 tonnes of solid waste (general site waste) during the year for offsite disposal. There is no landfill of waste on site.

##### Liquid waste

An oil-recycling contractor removed 19,350 litres of oil wastes (lubricating and seal oil) from the site during the year.

##### Recycling

Paper and cardboard recycling bins continue to be used as part of our Paper Products Recycling Policy and about 2.9 tonnes of paper and cardboard were removed by our solid waste contractor for recycling.

#### Land

##### Flora and fauna

Extensive landscaping including trees and shrubs is maintained to improve the appearance of the facility, while areas of remnant native vegetation are retained.

##### Contamination

Issues relating to the stage one environmental site assessment, including an asbestos audit (conducted in June 2001), were progressed this year. Such issues included the general maintenance of oil interceptors and temporary storage of drums and mobile tanks on site to avoid potential hydrocarbon ground contamination. Maintenance systems have been introduced to further improve our existing maintenance of oil interceptors and hydrocarbon storage arrangements on site.

Soil testing in May 2000 revealed the presence of elevated levels of zinc and lead at one location on our site. They do not exceed levels set by the National Environmental Protection Council for industrial and commercial land uses. Further investigation will be undertaken to determine the extent of this contamination.

#### Rehabilitation

After completion of the liquefied natural gas (LNG) plant and associated facilities, excavated areas were filled and paved with concrete. Adjacent areas were levelled and grassed.

#### Resource use

##### Fuel

During the year we used 36,459 tonnes of natural gas as fuel for the processing plant, 14,402 litres of diesel for vehicle and machinery fuel, 25,175 litres of autogas and 9,831 litres of petrol.

##### Energy

Electricity consumption for the year was 5,880,500 kilowatt hours.

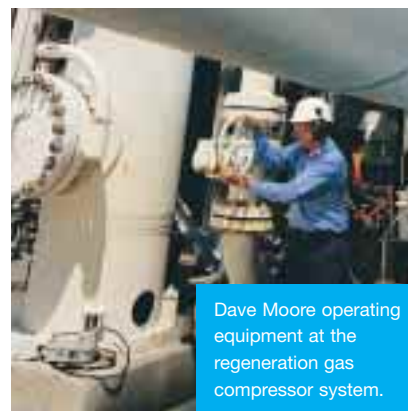


## Safety and health

#### Lost time

Lost Time Injury Frequency Rate (LTIFR) and the Average Time Lost Ratio (ATLR) are key performance indicators for employees that are calculated monthly and reported to our board every two months. We have not historically included contractor incidents in calculating our LTIFR. However, we will improve our recording systems next year to capture contractor safety statistics. This year we recorded three contractor LTI's.

There were no lost time injuries for employees during the year and workforce exposure hours without a Lost Time Injury (LTI) increased to a new record of 434,564. The last recorded LTI was in August 1996.



Dave Moore operating equipment at the regeneration gas compressor system.

There were eight employee first aid cases, none requiring medical treatment and eight contractor first aid cases, one requiring medical treatment.

We entered the Industrial Foundation for Accident Prevention (IFAP) Safe Way Awards for 2002 for the LTI performance category to achieve six months (1 January 2002 to 30 June 2002) without an LTI for employees. This target has been achieved and will be recognised by IFAP.

### Workers compensation

There were no workers compensation claims during the year. There have been a total of five claims over the past five years.

### Hazard and risk

Our plant has been designed to have a very low environmental risk. All products will evaporate if released to atmosphere, leaving no soil or water-contaminating residues.

### Emergency response

We have detailed emergency response procedures. They describe the organisation and training of employees and contractors to reduce the risk to personal safety and the surrounding environment in the event of an emergency.

Our procedures were revised in September 2001 and issued to the Fire & Emergency Services Authority of Western Australia

(FESA). In addition to this, a Special Risk Emergency Plan was developed in consultation with FESA which subsequently endorsed our procedures in February 2002 as part of our licensing requirements as a Major Hazard Facility.

One site emergency muster point exercise was successfully carried out to test employee understanding of and compliance with emergency response procedures.

### Materials handling and storage

We operate under an annual DMPR licence covering storage of dangerous goods. Our propane and butane products and condensate by-product are defined as "Dangerous Goods" under the Dangerous Goods Storage Regulations administered by the department. The products are stored in vessels which comply with both Australian and international engineering standards. Small quantities of diesel are stored on site within bunded areas. Backup supplies of lubricating oil and heat transfer fluid are kept in 200 litre drums in a bunded oil storage area.

Odourant is pumped directly from sealed iso-containers. The empty containers are returned to the supplier for re-use, eliminating any residual odourant disposal requirements.

Liquid nitrogen is stored in an insulated vessel and is used for clearing LPG from the export pipework following completion of exports. An additional liquid nitrogen vessel is located at the LNG plant for use in the production process. LNG product is stored in an insulated vessel at the plant.

All of these storage areas meet legislative requirements.

### Risk assessment

As part of the fractionation upgrade, the Quantitative Risk Assessment was updated and submitted to the DMPR and DEP and was accepted in August 2001.

### Employee wellbeing

As part of our initiative to ensure fitness for work we have set up an employee consultative committee to assist in the development of a fitness for work (alcohol and drugs) policy. The policy will be finalised and implemented next year. We continue to provide an employee assistance programme which offers independent professional and confidential counselling to all employees and their immediate families. We also have a childcare referral service to provide employees with advice about child care services.

Mike O'Keeffe and Steve McGee carrying out tests on high voltage switch equipment at the LEX Plant.





## Community/social

### Complaints

Senior management handles any complaints from the community. There have been no complaints received during the year from the community about the operations of the plant.

### Action groups

We are a full member of the Kwinana Industries Council (KIC) and its sub-committee the Kwinana Designated Industries Assistance Group, now known as the Kwinana Major Hazards Facilities Group.

Member companies maintain a management system for response within the Kwinana industrial area to control emergencies that may arise within the boundaries of a member company site. Member companies have a mutual aid plan to integrate emergency management where appropriate. This plan allows them to obtain assistance from neighbours in the event of an emergency.

### Communication

#### Newsletters and reports

Information is provided through the KIC as required. The 2001 Wesfarmers Environment, Safety and Health Report was distributed to all employees and circulated to stakeholders.

We participated in the Wesfarmers stakeholder forum in May 2002 which covered the company's business units operating in the Kwinana/Rockingham area.

#### Website

Our operations are referred to on the Wesfarmers Limited website at [www.wesfarmers.com.au](http://www.wesfarmers.com.au).

#### Liaison groups

Community representatives were invited by senior management during the year to come on site to view our operations as part of the fractionation upgrade project. Members of the community also visited the site to discuss progress of the noise reduction management plan.

We are involved in the Kwinana Industries Emergency Management Liaison Group which was formed in 2002. This group allows us to formally consult with state government departments and agencies, local government organisations and community interest groups in matters relating to our operations.



Work experience student Jason Harding, supervised by Tom Feutrill using a milling machine at the Kwinana Maintenance Workshop.

## Priorities for the Future

- > No workplace injuries and LTIFR at zero
- > Ongoing identification and control of hazards
- > No significant releases of hydrocarbons to the atmosphere
- > Continued rollout of the noise reduction programme
- > Progress environmental site assessment
- > Implement fitness for work (alcohol and drugs) policy
- > Develop formal environmental policy





Pit 4 overview, Premier Mine, Collie, Western Australia.

2001 REPORT PRIORITIES	OUTCOMES
An injury free workplace.	We had four Lost Time Injuries (LTIs) resulting in a Lost Time Injury Frequency Rate (LTIFR) of 6.4.
Routine environmental reviews and audits.	Showed a continual improvement in awareness and performance.
Full environmental compliance.	Achieved compliance for blasting, dust and water.
Maintain focus on noise management and associated community issues.	Community noise issues still being addressed.
Further reduction in greenhouse gas emissions through energy efficiency initiatives and reduction in spontaneous combustion of coal.	Net greenhouse gas emissions down eight per cent due to lower production. Lighting control system installed in workshop.
Complete rehabilitation of Western 5 mined-out areas.	Work advanced well with main void shaped and surrounds seeded.



**Premier Coal**

## Overview

A very big improvement in our safety performance was a highlight of the year with a record 177 days free of lost time injuries. The number of such injuries dropped from 14 to four and our Lost Time Injury Frequency Rate fell from 20.8 in 2000/2001 to 6.4.

We continue our focus on reducing greenhouse gas emissions. During the year we installed a lighting control system in the warehouse and workshop areas and introduced a diesel fuel additive system to improve fuel efficiency.

A research aquafarm has been established on the banks of one of our former open cut mine sites to develop value-added closure options for abandoned mine water bodies, such as aquaculture and recreation.



## Business management

### Training

#### Environmental

Our employees have undergone a five-hour environmental awareness training programme and have done other job-specific training. We have completed the annual review of our Environmental Management System Procedures. Employees assist in this review. Other environmental training is conducted on induction of new employees, visitors and contractors.

#### Health

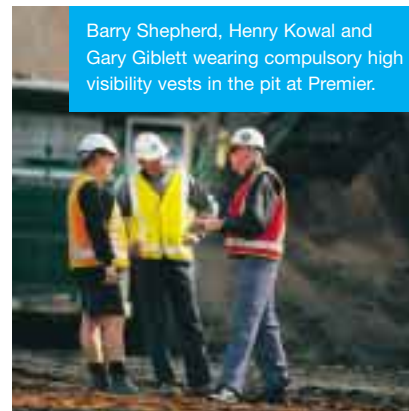
A survey was conducted covering types of equipment which produced noise, locations of hazardous noise and existing noise control measures, such as the use of personal protective equipment. All employees participated in feedback sessions reporting the results of the noise survey, and in an education programme on hearing conservation.

First aid training is focused on making basic workplace first aid training available to all our employees, ensuring there should always be personnel with first aid knowledge who can apply first-response techniques in an emergency. Depending on availability, St John Ambulance workplace first aid training courses are conducted monthly at our site.

We conducted an ergonomic risk assessment of workstations for each department to ensure our personnel were assessed and trained in the correct use and layout of computer workstations.

Training on strain injury prevention was conducted for apprentices in the maintenance department including various topics such as spine physiology, care of the musco-skeletal system and correct manual handling techniques.

We continue to run a monthly physiotherapy clinic as part of our injury management programme. This programme is aimed at musco-skeletal injuries incurred at work and offsite, ensuring these injuries are not aggravated by current activity. Assistance such as task modification and strengthening exercises are advised.



Barry Shepherd, Henry Kowal and Gary Giblett wearing compulsory high visibility vests in the pit at Premier.

Site managers attended a “fitness for work” workshop which preceded a workplace implementation programme. This programme includes fatigue management, physical and mental fitness, and the achievement of a site free of risk from the effects of alcohol and other drugs to maximise workplace safety.

Fatigue and shift work issues are a current focus and employees who did not attend the “fitness for work” training programme were sent to a “managing a shift work lifestyle” course.

#### Safety

Our frontline management training programme continued, with more supervisors undergoing training in seven units to achieve a certificate. The programme includes a specific core element on developing and maintaining a safe workplace and environment.

Each participant is also required to complete a department safety audit using the RiskMap auditing tool, conduct task observations and provide instructive feedback.

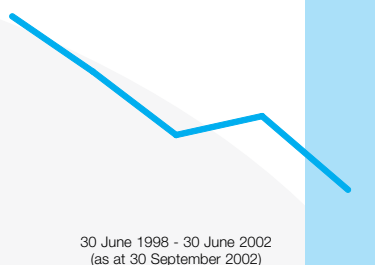
The maintenance department conducted training and follow-up in the care and use of personal protective equipment (PPE), covering responsibilities and consequences of not wearing PPE.

The production department implemented the wearing of high visibility clothing vests for anyone entering production areas. This is to ensure that all people, including employees, contractors and site visitors are visible to minesite traffic at all times.

Safety and health representatives, supervisors and managers attended workshops and conferences such as the WorkSafe 2002 conference to keep abreast of mining safety and health issues. Our Occupational Health Nurse attended the Trauma 2002 conference and also conducted a survey of health promotion and fitness for work practices at mines in the Kalgoorlie region of Western Australia.

#### Lost Time Injury Frequency Rate

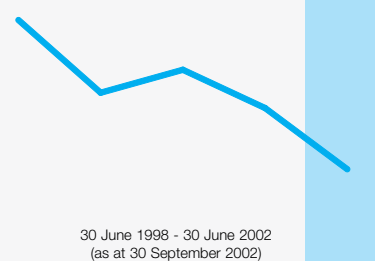
1998	1999	2000	2001	2002
40.3	29.5	17.1	20.8	6.4



30 June 1998 - 30 June 2002 (as at 30 September 2002)

#### No. of Workers Compensation Claims

1998	1999	2000	2001	2002
83	64	70	60	44



30 June 1998 - 30 June 2002 (as at 30 September 2002)



Trevor Kent checking rescue equipment with other members of the volunteer mine rescue team.



All existing and new mine rescue team members were medically and physically assessed and considered fit to continue as volunteer mine rescue team members to the requirements of the Department of Minerals and Petroleum Resources (DMPR).

**Safety**

We maintain communication and consultation through 12 elected safety and health representatives and the Occupational Health and Safety Committee.

We operate under the Mines Safety and Inspection Act 1994, and Mines Safety and Inspection Regulations 1995.

We comply with the revised DMPR incident notification procedures. The changes have been implemented and feedback given on the requirements through a presentation to the committee by an inspector from that department.

We review and comply with DMPR "Safety Bulletins" 62 and 63 relating to collapsing ground in mining operations and dozer safety in open cut operations. The bulletins were distributed to managers, supervisors, occupational health and safety representatives and notice boards.

**Emergency**

Mine rescue training was conducted on 12 occasions involving rescue from height and depth, fire fighting, hazardous chemical response, first aid, vehicle extrication and confined space rescue.

A revised monthly mine rescue training regime has been implemented to ensure skills are maintained. Instruction was also given in the use, care and maintenance of new breathing apparatus sets and hydraulic cutting equipment.

Our team was successful at the 2001 WA Chamber of Minerals and Energy south-west regional emergency skills competition, held as part of the Perth Royal Agricultural Show in October. The team was judged overall winner, as well as winning the fire fighting, team skills and confined space rescue events.

A programme was developed in conjunction with local companies for the purpose of training new industrial emergency team volunteers to a basic set of competencies aimed at reducing time and costs and developing common basic skills useful for mutual aid. Two consecutive five-day courses, based on the Australian Fire Authority Council competencies, are to be conducted annually at the participating company sites.

Basic fire training in the use of extinguishers and hose reels was conducted for our maintenance department work crews.

**Compliance**

**Environmental**

We again fully complied with licence conditions and management plans covering blasting, water, dust, forest management, clearing and rehabilitation. The management of noise remained a key focus area with compliance still difficult to quantify due to the nature of noise and the numerous other sources within the coal-mining basin. A Regulation 17 Application to modify the existing noise allowance is before the Department of Environmental Protection (DEP).

**National Pollutant Inventory (NPI)**

We submitted our third NPI report for year ending 30 June 2001. Levels of pollutants increased slightly, in line with the small increase in total material movement, and small rises in electricity and diesel use. Most emissions were either from the use of diesel or dust generated from wind, vehicle and overburden movement, coal processing and blasting.

Detailed information is available at: [www.npi.gov.au](http://www.npi.gov.au).

**Health**

In accordance with regulatory requirements, we continued our Mine Workers Health Surveillance programme and renewed certification of hearing testing equipment.

**Licensing and approvals**

Under the Explosives and Dangerous Goods Act 1961 we maintain a single licence for our storage of hazardous materials and dangerous goods. We have a comprehensive emergency management plan as required by this licence.

We maintain a compliance register of statutory approvals, appointments and licences for specific functions under various legislation covering our operations.

**Management systems**

**Environmental Management System (EMS)**

We have an operating ISO14000-standard EMS which is designed to manage any potential risks through procedures for key work activities and monitoring requirements. We have commenced the process of certification and a pre-certification audit has been carried out. We expect to complete certification by the end of 2002.

The EMS is designed to cover our government-approved Environmental Management Programme and extensive legislative and licence conditions. During the year, all procedures and management documents were reviewed and updated where necessary. At the same time, competency assessment was conducted for the key procedures.



We are committed to continued integration of environmental management with all business and operating management systems.

#### Safety management system

Our safety management system is the RiskMap Safety Management System made up of 67 standards.

Auditing instruments have been developed and trialled through our frontline management training, using a weighting and rating system to determine risks requiring priority focus.

#### Policy

Our Safety and Health Policy acknowledges our responsibility towards a safe and healthy workplace, consultation, training, goal setting and review of performance.

Environmental management is one of our highest priorities. We promote the development of policies, programmes and procedures for conducting operations in an environmentally-sound manner. Our environmental policy sets our management agenda through a broad statement of commitments and principles. It is reviewed regularly to ensure currency.

Our guiding policy principle is to take responsibility for minimising the impact of our operations on the environment. We acknowledge our accountability to employees, shareholders, government and the public. Performance information is made available to government and the public.



## Environmental

### Air (atmospheric emissions)

#### Dust

Dust can be a concern to residents – particularly its potential to affect drinking water and domestic activities.

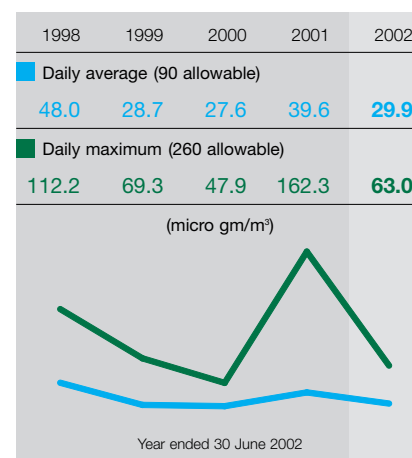
Dust at our mine is mainly generated on roads, dumps and cleared areas and is only a potential problem during the drier months of the year. Monitoring is only necessary at these times and annualised results are thus exaggerated, especially since they include dust from all sources (see Figure 1).

Dust levels were well within licence conditions with the daily average level at nearby Buckingham down 25 per cent on last year, to 29.9 micrograms per cubic metre (90 allowable), and a daily maximum of 63 micrograms per cubic metre (260 allowable). There was one dust complaint. Management strategies include minimised clearing and rapid rehabilitation when possible, tar sealing major road arteries and application of water to suppress dust on roads and operational areas.

#### Odour

During March, the mine experienced a substantial increase in spontaneous combustion associated with exposed historical underground workings and accelerated by warm, humid conditions, leading to one community complaint. We will consider the findings of a study into odour reduction strategies.

Figure 1: Dust in Premier Region



## Environmental Policy

Wesfarmers Premier Coal Limited is a mining company currently operating in the Collie Coal Basin of Western Australia. The Company seeks "best practice" in environmental management and is a signatory to the Australian Minerals Industry Code for Environmental Management. Premier Coal accepts and respects community and regulatory concern for the environment and shall make its Environmental Policy available to all interested parties, including the general public. To support its commitment, the Company:

1. Acknowledges responsibility to minimise and manage the environmental changes caused by its operations as a critical business function.
2. Shall, with the encouragement, participation and support of all employees and contractors, and through our Environmental Management System, maintain sound environmental practices, responding quickly and effectively to any environmental incidents arising from Premier Coal operations.
3. Shall include environmental management and rehabilitation considerations in all stages and aspects of our mining activities.
4. Shall strive to prevent pollution, minimise waste and conserve resources as we manage our environment. Major considerations include noise, water, dieback, clearing and burning, blasting, dust, energy, waste materials and land rehabilitation.
5. Shall set and strive to maintain standards to comply with all applicable legal requirements, government policies and agreements for the protection of the environment.
6. Shall promote environmental awareness and clear definition of individual responsibility, and further develop environmental expertise through relevant training of all employees.
7. Shall review, develop and strive to improve our practices through research as well as through consultation with employees, the community, government agencies and industry groups.
8. Will measure and audit our performance, reporting results to employees, government and the public. We shall also discuss openly and constructively issues of community concern.

S. Butel  
Managing Director  
July 2002

**Greenhouse emissions**

We are a participant in the Commonwealth Greenhouse Challenge Programme and have a signed Cooperative Agreement.

Our greenhouse emissions are largely due to use of diesel fuel and electricity with a smaller contribution from spontaneous combustion of coal. Collie coal has no associated methane emissions. The sources of emissions can be seen in Figure 2.

Net carbon dioxide (CO<sub>2</sub>) emissions per bank cubic metre equivalent (bcmeq) were down 52 per cent from 1994 levels, an increase of two per cent on 2001. Net emissions were 72,628 tonnes of CO<sub>2</sub> down eight per cent on last year due to lower production levels. In the last year, emissions increased from 2.45kg/bcmeq to 2.57kg/bcmeq (4.9 per cent) due to efficiency losses associated with the lower production level.

During the year we completed one Greenhouse Challenge commitment to install a lighting control system in the workshop and warehouse areas. This is expected to reduce CO<sub>2</sub> emissions by nearly 1,000 tonnes a year.

As well, we introduced a diesel fuel additive system. Since November 2001, fuel consumption has dropped nine per cent, equating to 1,730 tonnes of CO<sub>2</sub>.

A comprehensive in-house study was completed into greenhouse, climate change, global warming and the role of energy supplies with a particular emphasis on renewables, new high efficiency generation systems and low to zero emission technologies.

**Noise**

Our equipment noise levels have not increased, even though the operations have moved closer to our neighbours at Buckingham. Consultation continues with the DEP and the community.

Blasting improvement strategies, although offset by moving closer to residents, are delivering results and we have been able to maintain our low blasting level average [101dB(L)], with no blasts exceeding the legal limit of 125dB(L) (see Figures 3 and 4).

The highest recorded blast was 119dB(L) while 98.3 per cent were below 115dB(L). While there was a 25 per cent increase in the total number of blasts, we managed to improve the number not triggering the monitor, set at 115dB(L), by 12 per cent, a very positive trend.

There were nine complaints for blasting on our site for blast levels ranging from 94 dB(L) to 118dB(L) of which six were below 115dB(L).

Independent building condition surveys are on offer to all nearby neighbours but to date no survey has attributed structural defects to our blasting.

**Water**

**Abstraction**

Dewatering is required for safe and efficient mining in the Collie Basin. All groundwater abstraction, a part of the dewatering process, is licensed and monitored. During the year, 12.5ML/day were pumped with a total abstraction of 4,547ML (see Figure 5).



Figure 2: CO<sub>2</sub> Emissions by Source

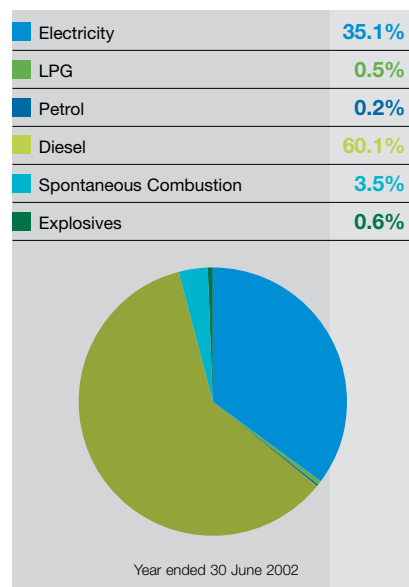


Figure 3: Premier Mine Blasting 2001/2002

Criteria	Buckingham	Griggs
<125dB(L)	100%	100%
<120dB(L)	100%	100%
<115dB(L)	98.3%	100%
Average dB(L) when triggered	101	108
Total Blasts	596	596
Not triggered	443	558

Year ended 30 June 2002

Figure 4: Premier Mine Blasting Buckingham Monitor

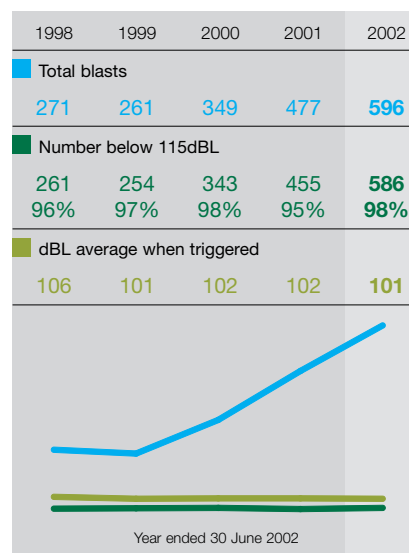


Figure 5: Water Abstraction

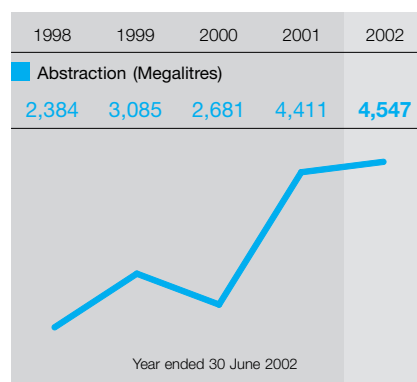
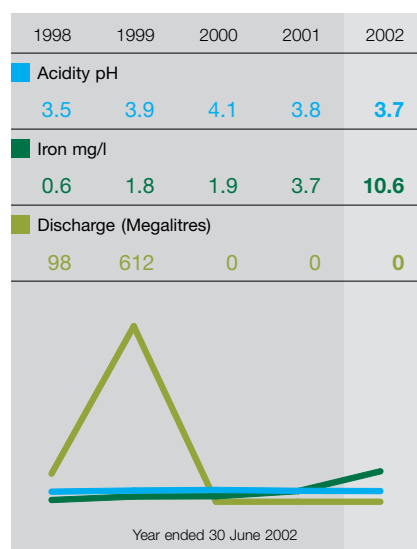


Figure 6: Water Quality



Patrick Ridley, Research Officer at Curtin University, measuring a marron for aquaculture research at Collie.

We are committed to making good any loss of water suffered by our neighbours. To date, dewatering has not affected groundwater levels near private land or dwellings in the area.

### Consumption

Part of the dewatering stream is utilised for dust suppression (12 per cent) and process water (two per cent). Process water is used for vehicle washdown, domestic and workshop requirements. Total consumption this year was 613ML representing 14 per cent of extraction.

### Reuse

Apart from the water used by the mining operation, 3,934ML was sent to local power stations – the major users in the area – thus helping to reduce overall abstraction in the Collie Basin.

In the maintenance and fuel bay area we have a Dissolved Air Flotation (DAF) plant available to treat runoff and vehicle washdown waters if required. Hydrocarbons are recovered from the water (and recycled with the other waste oils) and approximately

1.9ML of water was recycled to the washdown facility. Silt traps at the DAF remove the solids load prior to discharge to our main Sump A. The main infrastructure area is serviced for sewage by a treatment plant with treated water available for garden reticulation during drier periods.

### Discharge

We are licensed to discharge water off-site to the environment but again have not done so this year (see Figure 6). Despite the zero discharge, we continued to monitor adjacent river systems and maintained a computer database and management system for water quality, abstraction, discharge and regional waterway monitoring.

Overflow from Sump A was 745ML and this was captured in the WO-5H void as part of the rapid fill programme.

### Waste

#### Solid waste

Around 50 per cent of the solid general waste stream is disposed of as landfill amounting to 727 cubic metres prior to compaction.

#### Liquid waste

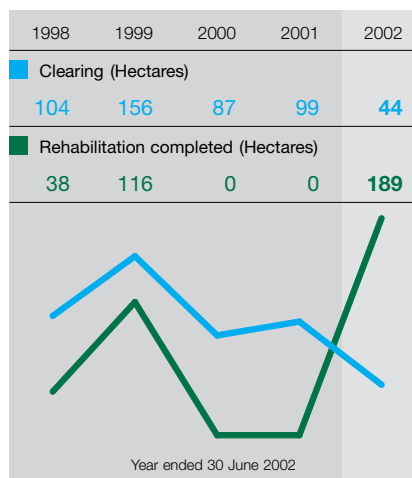
Hydrocarbons are our main liquid wastes and these are captured by evacuation systems or the DAF plant. This waste is transported to a local recycling plant where it is used mainly in the production of low-grade oils or fuel oil. A total of 220,300 litres was recycled.

#### Recycling

Our main waste streams – including used oils, metal scraps, cardboard, paper, tyres and batteries – are recycled. Of the solid general recyclables, (not including scrap metals and tyres) over 49 per cent were recycled, an increase of three per cent. Recycling efficiency for the general recyclable waste also improved by three per cent to more than 87 per cent, still short of our target of 90 per cent. Recycling is promoted through the provision of recycling bins at work for employees' domestic requirements. As well, we continued to sponsor and mentor local schools in waste management and helped drive the Collie Tidy Towns Programme.



Figure 7: Rehabilitation Statistics



## Land

### Flora and fauna

Protection of surrounding forests is a priority and clearing operations are minimised as much as possible. Prior to clearing, operational areas are mapped to determine dieback boundaries. Our procedures for clearing, topsoil removal/replacement and land rehabilitation minimise the risk of spreading jarrah dieback. Infected soils are kept separate for application only in areas with minimal risk of disease spread.

Disturbed land is returned to stable, compatible bushland by using local native seeds and trees. Habitat logs are placed in rehabilitation areas to promote recolonisation. Regular inspection and permanent monitoring plots identify improvement opportunities and ensure successful uptake.

Faunal surveys of our rehabilitation sites are designed to assess small to medium-sized mammals, frogs, reptiles and birds. The rehabilitation is showing good recolonisation providing habitat for a range of representative vertebrate species. Three species of native mammal of conservation significance have been recorded in the rehabilitation (Chuditch, Southern Brown Bandicoot and the Western Brush Wallaby). Four species of bird of conservation significance have also been observed (Square-tailed Kite, Forest Red-tailed Black-Cockatoo, Long-billed Black-Cockatoo and the Rainbow Bee-eater).

During the year we introduced a feral cat trapping programme around the mine.

### Contamination

No significant site contamination has been identified.

## Rehabilitation

Major open cut mining commenced in 1970 and since then 2,597 hectares of bushland have been disturbed by mining and associated activities. Revegetation commenced in 1975 and 1,023 hectares (39.4 per cent) have now been rehabilitated (see Figure 7).

Successful rehabilitation work requires the careful planning and interaction of numerous processes. A key to our success is correct waste rock management with materials likely to generate acidic conditions buried deep in the dump or backfill profile. Final dump surfaces are covered with a one-to-two metre blanket of inert material and spread with topsoil ready for revegetation.

Rehabilitation at the closed Western 5 mining area in the Cardiff Sub Basin progressed significantly with 165.7 hectares completed involving shaping to slopes of around 10 degrees, capping and topsoiling, installation of contour drainage and, finally, seeding.

Rapid fill of the WO-5B void was postponed due to the low winter flow in the Collie South Branch. The programme will recommence as soon as possible and is designed to increase safety and enhance the final rehabilitation outcome. Monitoring to date shows that the diversion has assisted pH control. The mining void will take a further two years to fill depending on rainfall, much less than the natural fill time of 100 years. This will expedite the availability of this area which has a high potential for other valuable purposes such as tourism, recreation and aquaculture. To this end, we participated in a detailed study, commissioned by the South West Development Commission, of future use options. The lake will have a

surface area of 103 hectares and should be well suited to water sports such as skiing and rowing.

Any recreational development in this area will complement the Collie Motorplex which is rapidly developing as a driver-training and club motor sports centre. This is on the former Western 2 underground mine site and has successfully built upon existing mine infrastructure including mine workshops, other buildings and an extensive road network suitable for racing and training.

Rapid fill of the WO-5H void also continued with the level raised a further 1.9 metres. Research into aquaculture as a relinquishment option continued at this site with seven dams stocked with silver perch and marron.

## Resource use

### Fuel

Our energy consumption is dominated by the diesel-powered fleet and accounts for around 86 per cent of all fuel by gigajoule. Other fuels used include liquefied petroleum gas and some petrol. The use of electric shovels, coal processing/handling, dewatering and maintenance workshops dominate electricity demand. Explosives are a major consumable requirement with 2,629 tonnes used during the year.

### Energy

Total energy consumption for 2001/2002 was 736,021 gigajoules, down 3.5 per cent from 763,076 gigajoules used during 2000/2001. Production decreased 12.6 per cent with 28.21 million bcm equivalent (Mbcmeq) mined in 2001/2002 compared with 32.26Mbcmeq in 2000/2001.



Reseeding Pit 1 as part of Premier's on-going rehabilitation programme.



## Safety and health

A safety perception survey was conducted sampling 65 per cent of our work force. The result indicated a significantly more positive response than a previous survey in 1999. The findings showed an improved safety culture through better perceptions of management, supervision and of our safety systems. The results were communicated back to each department and crew.

A Mines Occupational Safety and Health Advisory Board survey group conducted a safe behaviour survey of our workforce, as part of a statewide assessment covering up to 75 mines. The results will be available in September 2002.

### Lost time

During the year there were four Lost Time Injuries (LTIs) compared with 14 last year. The Lost Time Injury Frequency Rate has dropped to 6.4 compared with 20.8 last year.

The four people injured were away from work for only a brief time and have since returned to their normal duties.

We achieved a record 177 days free of LTIs. The maintenance department recorded 420 LTI-free days and the production department 212 days.

### Workers compensation

We had a significant reduction in the number of workers compensation claims. A regular review of all injury claims is conducted with our insurers to assess injury progress and rehabilitation plans. On-site injury management clinics are held to assess ongoing musco-skeletal injuries.

An injury management manual, which includes a CD-rom, has been completed covering injury management, rehabilitation, workers compensation and return to work procedures. The manual outlines task-specific physical requirements for each job description in the operations areas and has been distributed to local medical practitioners, specialists and our insurers.

We continued to use the services of rehabilitation and vocational service providers.

## Hazard and risk

### Programmes

Hazards and incidents are captured within our Hazard and Incident Reporting system. All hazards and incidents are reviewed with investigation outcomes and actions recorded in our Human Resources Information System. Any current reports and outstanding actions are reviewed weekly to monitor progress.

The RiskMap standards specify the minimum requirements of our safety systems. A risk register has been developed by a team using a rating system that identifies extreme and high rated risks and for control and reduction of each identified hazard.

Departmental safety audits are conducted on a regular basis. We updated our safety information procedures booklet as well as our operation traffic management booklet.

Our fire detection and suppression systems and equipment are regularly serviced, checked and maintained. During the year we installed an automatic fire suppression and evacuation system in our main incoming power supply switch room. The system includes automatic alarm indication back to our Pit Control fire systems monitoring system.

We have evacuation signalling systems in our main buildings and switch rooms. Procedures for raising the alarm are part of our induction and safety meetings feedback. We have an emergency preparedness plan and a crisis management plan. During the year we reviewed potential external threats and issued procedures to deal with suspected biological hazards received through incoming post and packages.

### Materials handling and storage

A register of hazardous substances and dangerous goods is maintained and audited annually. Any new chemicals are reviewed and assessed prior to being allowed on site. Material Safety Data Sheets for each of our hazardous substances and dangerous goods items are maintained and available through our ChemAlert Material Safety database.



Larry Audino attaching a lightweight nylon cable to a dozer.

# Making a Difference



Aquaculture research ponds at the Western 5H void.

We are well advanced in turning the abandoned Western 5B Mine void into a community asset. Partial diversion of peak winter flow water from the nearby Colлие River over the past four years has raised the lake level by 33m. There is now one winter required to fill the lake. This is a major bonus, as the void would have taken 100 years to fill naturally. With a final surface area of 103 hectares, the lake should be suitable for a range of recreational or aquacultural activities. These are already being researched at the Western 5H void. We have played a pivotal role in establishing the Centre of Excellence in Sustainable Mine Lakes in Colлие, which will include a study of the 5B lake area. The research centre is a collaboration between industry, WA universities, the community and government with the aim of better understanding mine lake evolution and developing appropriate amelioration and end use options.

### Risk assessment

A hazard register is maintained of risks identified in each operational area. The production department has implemented start-of-shift briefings to ensure a structured method of relaying information including hazards and safety alerts to the oncoming crews.

An insurance risk survey was conducted to examine our fire emergency response systems. The survey included the testing of hydrant systems for pressure and flow rates.

An annual service and inspection of all our fixed fire systems was conducted including alarms, detectors and fire suppression systems. All switch rooms and computer/communications rooms were tested to ensure gas suppression integrity.

Task observations were conducted in production areas and a risk assessment and review of pit permit access rules was carried out to reduce the number of people exposed to light vehicle and heavy vehicle interaction in-pit. Only operations personnel will maintain their pit permit status to enter haulage and mining areas.

A project to reduce strain injuries in the production department resulted in the purchase of a cable handling tractor for moving shovel cables. This should eliminate the need to manually lift heavy electric shovel cables.

### Employee wellbeing

We have health monitoring and promotion programmes in place to ensure our workforce is assessed and educated about health issues.

Our health promotion during the year focused on strain injury prevention, fitness for work, weight loss and a smoke-free environment.

The HealthMap medical and fitness assessment programme continues to be offered to employees involving local medical practitioners and a physiotherapist providing free confidential "snapshot" reports of health status. Employees can either attend the HealthMap sessions on site or visit their own doctor.

ACCESS Counselling conducts our Employee Assistance Programme which is available to employees or their immediate family. This is a confidential service aimed at resolving or assisting with personal issues that may have an impact on work.

Seven teams entered the annual National Heart Foundation stair climbing competition "Climb to the Top". We also participated in the QUIT anti-smoking campaign in May.



John McDermott climbing a retractable ladder on a D11R bulldozer.

Diabetic risk assessments were conducted for operators. Employees assessed as being overweight can participate in weight-loss group meetings at the Occupational Health Centre. We run both Gutbusters and Weight Watchers programmes with employees' partners and spouses welcome to participate.

allowing us to participate in discussion of issues concerning the mining industry in WA. An important aspect is participation in the Chamber's South West Regional Occupational Health and Safety Committee. This committee hosts educational conferences as well as emergency skills competitions between local and regional mining companies.

### Communication

#### Newsletters/reports

We report annually to a consortium of government departments through the Collie Coal Mines Environmental Committee.

Information on issues and achievements is distributed in our quarterly publication "Premier Post" which is sent to all employees and contractors and is widely distributed throughout the community.

We also distribute to all employees a summary of operations via e-mail or mail-out called the "Fortnightly Focus". This aims to keep employees and contractors up to date with key performance areas such as safety and the environment.

During the year, we hosted a Community Open Day as part of a statewide initiative by the Chamber of Minerals and Energy.

Our intranet site has greatly improved the communication and availability of information, including environmental and safety standards and procedures.

#### Liaison groups

Regular meetings are held with local residents at which we provide general information as well as detailed environmental performance data. The Buckingham community meetings provide a valuable opportunity to discuss their concerns and suggestions.



## Community/social

### Complaints

As mentioned earlier, we received nine complaints concerning blasting, one regarding dust and one related to odour. In addition, there were three complaints concerning general mining equipment noise.

### Liaison with authorities

We have an appointed a senior manager to liaise with all authorities to ensure government is kept informed of progress and any arising issues.

### Action groups

We are a member of the Local Emergency Management Action Committee (LEMAC), which is part of the Police and State Emergency Services plans. Each year, LEMAC reviews the emergency services plan for the Collie region.

We are represented on various committees of the Chamber of Minerals and Energy



## Community support

We assisted drought-stricken farmers from Wickepin by providing free agistment for their cattle on pastured properties on our mining leases.

We hosted a visit to site of first year medical and dental students from the University of Western Australia (UWA). The visit was part of Rural Week 2002, an initiative to familiarise future medical practitioners with the environment, facilities and benefits of country towns and locations. UWA students also visited schools, aged care centres and hospitals in the Collie district.

The Premier Coal Safety Voucher fund contributed \$52,899 to community projects through safe working achievement programmes of our various departments. Beneficiaries this year included youth support and tourism projects.

## Research

We sponsor a \$420,000 Australian Coal Association Research Programme (ACARP) in Collie. The work is based at the research aquafarm on the banks of our WO-5H void and is evaluating acidity treatments for abandoned mine water bodies with a view to value-added closure options such as aquaculture and recreation. It will also provide a long-term teaching centre for the local TAFE and the Curtin University of Technology.

We have a seven-year, \$100,000 a year commitment to the Cooperative Research Centre for "Coal in Sustainable Development". Work being done on this project by Curtin University will involve better environmental and greenhouse performance through efficiency and waste management improvements.

Our commitment to value-added rehabilitation has been strengthened through the establishment of a Centre of Excellence in Sustainable Mine Lakes, based in Collie. This Centre has been jointly funded by various bodies including Premier Coal, Griffin Coal, the coal industry through ACARP, WA universities and local interests such as the Collie Shire and Coal Mine Workers Welfare Fund. The state government has provided matching funds of \$1.67m for this project.

## Scholarships

We provide tertiary scholarships (J A Ellis Scholarships) each year and also student awards for the local high school. The company also sponsors the Joe Lord Memorial Scholarship being applied currently to research into mine site rehabilitation.

This year we introduced a PhD scholarship for study at Curtin University. Over two years, the successful applicant will undertake postgraduate research into birds as bio-

indicators in the jarrah forest in south-west Western Australia. The study will cover a range of forest including pristine, logged, burnt, dieback-infested and rehabilitation areas on our mine site.

In addition, we are supporting a research project by a fourth year student at the UWA into soil and plant factors which impact on rehabilitation success.

We provided work experience to high school students from the south-west region and paid vacation employment to 14 tertiary students.

## Awards

We are one of only five Gold Achiever Award recipients recognised in the 2001 Industrial Foundation for Accident Prevention/GIO Safe Way Awards. The Gold Achiever Award is the highest level of recognition for safety achievement under this scheme. In addition to the gold award, we received eight other achievement awards.

We entered the Minerals Council of Australia MINEX 2002 Awards for mining safety excellence.

# Priorities for the Future

- > Full environmental compliance
- > Annual rehabilitation of at least the equivalent area of land we clear for mining
- > To provide value-added rehabilitation and mine closure outcomes
- > Ensure focus on any community issues or concerns with our operations
- > To complete ISO140000 certification of our EMS
- > Further reduction in greenhouse gas emissions
- > A target of zero accidents
- > Review our safety standards and auditing
- > Implement a fitness for work policy



Danny McCarthy overseeing the plant feed stockpile area at the Curragh Mine, Blackwater, Queensland.

2001 REPORT PRIORITIES	OUTCOMES
Continue to manage our operation to minimise the impact on the Curragh mining lease and surrounding areas.	We maintained our record of no non-compliances. We received an Environmental Management Award from the Rockhampton Chamber of Commerce and the Australian Institute of Management.
Continue to meet the commitments given in our Environmental Management Overview Strategy and Plan of Operation.	We achieved Environmental Performance Category 1, the highest category rating under the Qld Environmental Protection Act.
Continue to be open and responsive to our neighbours and the community at large.	Ongoing and broadly-based contact with the community, local and government authorities.
Aim to achieve zero incidents and accidents.	One Lost Time Injury, 20 medical treatment injuries and 61 first aid cases.
Fully implement the Safety Management System (SMS).	Initial implementation completed and SMS available on our intranet.
Promote workforce health education.	Influenza inoculation and fatigue education programmes implemented. Health and lifestyle brochure distributed.
Implement SiteSafe database.	Database installed and implementation in progress.



## Overview

Our safety performance continued to improve with only one lost time injury during the year, resulting in a further reduction in our Lost Time Injury Frequency Rate. The injury broke a record accident-free period of more than 1,000 days.

We established real-time water quality monitoring and sampling on Blackwater Creek, upstream and downstream of our operations. The monitors are linked to the telephone system which ensures that staff are aware of how the level of the creek relates to the haul road which crosses the waterway. During the year we relinquished a number of sub-blocks from one of our exploration areas and obtained landholder approval for the rehabilitation of the disturbed areas.



## Business management



Andrew Walker, Peter Noack and Tod Mathews in the Pisces Pit.

### Training

#### Environmental

To inform all our employees of the mine's environmental responsibilities, our induction process covers company policy, legislation, water management, rehabilitation, topsoil management, waste management, reject management, conservation, environmental monitoring and emergency procedures. Contractor or temporary employees undertake a separate induction which includes an environmental segment.

Employees and contractors also receive environmental communications through tool box talks and incident report briefings.

#### Health

A fatigue management programme was conducted by a psychologist with mine site experience to prepare employees and contractors for the introduction of our fatigue policy. Participants were advised on modification to lifestyle to accommodate requirements of shiftwork. This training is to be conducted annually.

An influenza inoculation programme was carried out by our nominated medical advisor who visits the site every two months to provide advice to employees and to advise management on health improvements for the workforce.

An occupational therapist visits the mine twice a month to review strains or sprains, either work or non-work related and to inspect workstations to assess their ergonomics.

Health and lifestyle brochures are sent to family homes monthly.

#### Safety

Our employees and permanent contractors are required to attend monthly safety meetings designed to discuss tasks and related health and safety aspects with the work group. These meetings also include a scheduled topic aimed at promoting our focus on health and safety. Each meeting is documented and concerns raised by employees are followed up by the supervisor or referred to the appropriate manager.

Our Health and Safety Committee includes representatives elected by employees

from each department. Its charter is to foster and improve health and safety on the mine site.

Our Training Management System, encompassing specific training related to black coal mining will continue to be developed over the next twelve months.

Training is competency-based and carried out by qualified assessors.

We are the only Registered Training Organisation in the Queensland coal industry.

Supervisory personnel are required to attend courses which cover risk management, accident investigation and communications. Seventy-three of our employees did this training.

Training for employees and permanent contractors was conducted on our identified Principal Hazards. Two hundred and sixty three people attended this training during the year.

#### Emergency

We have a dedicated fire rescue vehicle and a trained fire and rescue team.

Team members are trained to respond to on and off-site emergencies and to work under the direction of statutory emergency authorities.

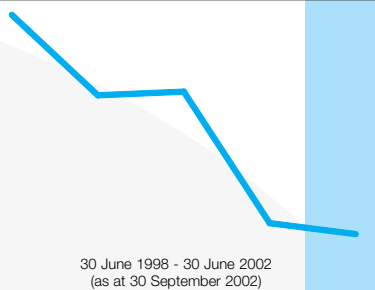
During the year 2,666 working hours were spent on emergency training activities.

A six member team competed in the Australian National Road Accident Rescue Challenge at Hawkesbury, New South Wales in May 2002.

The seven-member mines rescue competition team competes annually in the Queensland Open Cut Mines Rescue Competition. This competition is attended by the major mines in Queensland and a representative team from New South Wales and involves various mock emergencies. Our team was overall runner up, won the Best First Aid trophy and we received the highest team score in the theory section.

#### Lost Time Injury Frequency Rate

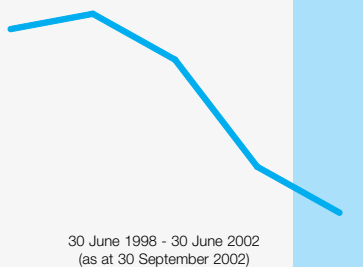
1998	1999	2000	2001	2002
7.0	4.8	4.9	1.3	1.0



30 June 1998 - 30 June 2002 (as at 30 September 2002)

#### No. of Workers Compensation Claims

1998	1999	2000	2001	2002
17	18	15	8	5



30 June 1998 - 30 June 2002 (as at 30 September 2002)



# Environmental Policy

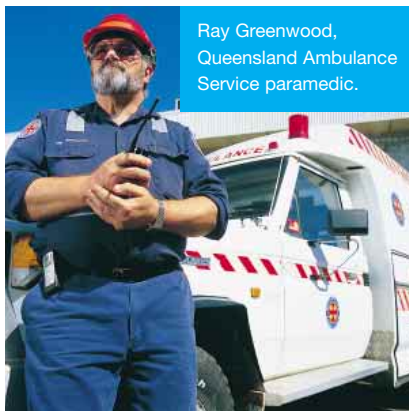
Curragh Queensland Mining Pty Ltd will manage its operation so that the environmental impact on the Curragh mining leases and surrounding areas is minimised. In order to achieve this goal we will:

- Comply with relevant Environmental Acts, Regulations and Standards;
- Ensure that best practice technology is used to develop systems within our Environmental Management Overview Strategy (EMOS) and Plan of Operations (PoO);
- Provide the necessary resources to allow us to meet our EMOS and PoO commitments;
- Educate our workforce in all relevant environmental matters to achieve our commitments;
- Select contractors who have demonstrated capability in working to our standards;
- Identify areas with potential for non-compliance and minimise the risk through sound management practices;
- Maintain an 'open book' approach in our documentation of environmental matters and self-report any instances of non-compliance to the relevant authority;
- Regularly communicate with our neighbours to inform them about the mine's operation; and
- Continually improve our environmental management performance in order to reach a Category 1 compliance rating.

I require all employees, contractors and visitors to comply with the relevant procedures and practices set out under this policy.

Murray Bailey  
General Manager  
April 2002

## Curragh



Ray Greenwood,  
Queensland Ambulance  
Service paramedic.

We have a dedicated ambulance and an on-site Queensland Ambulance Service paramedic to provide for the health and welfare of our employees. A modern on-site medical centre provides a wide range of services including pre-employment health assessments, three-yearly Coal Board Medicals and alcohol and drug testing.

Every fire warden is trained annually in evacuation procedures. Evacuation exercises are held every year.

### Compliance

#### Environmental

Our Environmental Management Overview Strategy (EMOS) contains our commitment to protect or enhance environmental elements impacted by mining and these commitments are implemented through a Plan of Operations. We achieved an Environmental Performance Category 1 under the Queensland Environmental Protection Act 1994. Criteria include full compliance for two years with the Plan of Operations, no unauthorised material or serious environmental harm for two years, demonstrated potential to meet long-term commitments and evidence of continual improvement in environmental management. An audit of our Plan of Operations in May 2002 found "there are no significant inconsistencies between the Plan of Operations and the conditions of the environmental authority".

We submitted a new two year Plan of Operations to the Queensland Environmental Protection Agency in May 2002 for the replacement of the existing plan that was to expire 1 July 2002.

Under the EMOS we have a commitment to rehabilitate 60ha a year of disturbed mining area.

#### National Pollutant Inventory (NPI)

We completed our NPI report for the period for 2000/2001. Reported emissions did not exceed Environmental Protection Agency threshold levels at our mining lease boundaries.

### Health

New employees and permanent contractors undertake a pre-employment Coal Board Medical (CBM). Permanent contractors who do not have a current CBM must undertake a pre-employment CBM. We provide a CBM-level test every three years rather than the five-yearly legal requirement. Annual health reviews are conducted.

All non-permanent contractors are required to undertake a health assessment conducted by the on-site Queensland Ambulance Service paramedic. Both the annual health review and the health assessment of contractors have highlighted a number of health issues which would not have been picked up if these tests were not conducted.

### Safety

Our Safety Management System (SMS) has 31 elements which are audited against performance criteria. The SMS internal audits are required to be completed every two years. There are 84 Standard Operating Procedures (SOP) which have performance criteria and are audited every two years.

The Department of Natural Resources and Mines conducted a site audit of our SMS on 20 November 2001. No deficiencies were identified.

The SMS and SOP are subject to external audits conducted every five years.

Compliance to our alcohol policy is measured via random testing of all people entering the mine site on a particular shift. This shift is randomly nominated by the General Manager. Personnel attending site induction are also breath-tested.

During the year 12,633 tests were conducted with 45 testing positive.

Everyone attending site induction and all those completing Coal Board Medicals are drug-tested. Random drug testing is carried out via a computer-generated list. Ten tests per shift are conducted with the shifts nominated by the General Manager. Special projects, such as shutdowns, may have additional alcohol and drug screening.

Over the year 1,399 drug tests were conducted with positive results from 13 people. Eleven of these results came from the induction process and eight of those tested did not pursue employment at our mine. The other three were re-tested at a subsequent induction and advised that they would be targeted for testing additional to the normal random sampling process. The remaining two were contractors who proved positive from random testing and their employer terminated their employment.

**Licensing and approvals**

We hold environmental licences and permits for a range of activities and structures. Compliance is assessed through audits and the submission of annual returns (or reports on compliance) to the regulatory authorities, all of which were submitted. These audits and submissions confirmed that we were in compliance.

**Management systems**

**Environmental Management System (EMS)**

Approval of our EMS submitted to the Environmental Protection Agency in November 2000 has been delayed due to changes in relevant legislation.

**Safety management system**

Our Safety Management System (SMS) has now been implemented to meet the statutory requirements of the Coal Mining Health Act and Regulations. The SMS was developed in consultation with our workforce and is named "Project Zero" to reflect the company philosophy of zero injuries, accidents and incidents.

The SMS prescribes the health and safety responsibilities of everyone on our site and provides a framework of management and statutory responsibilities. All procedures and policies are readily identifiable. The key advantage of the system is its status as a living document - constantly subject to change, identified through the employee consultative and risk assessment process. The SMS is a deliberate and integral part of the management of our operations.

As part of the requirements of the Coal Mining Health Act and Regulations we are required to develop mandatory Standard

Operating Procedures. Development of these procedures is well under way and is being done using the joint consultation process with the workforce which promotes ownership and at the same time the expertise of the workforce is utilised to ensure that all procedures are practical and efficient.

**Other/internal management systems**

An intranet site has been installed which allows easy access for personnel on site to the SMS, Site Safe, Chem Alert, current Incident/Accident and near-Miss/Hazard reports. Training in the use of this system has begun.

We entered the Mineral Council of Australia's 2002 MINEX award. An evaluation team visited the mine site in June 2002 after reviewing our 50-page submission.

The Health and Safety Policy describes the manner in which we manage our operations to ensure the health and safety of employees, contractors and visitors. It requires that our operations are to be conducted in a zero accident and incident-free environment and outlines how we will achieve this goal.

The Health and Safety Policy is displayed in prominent places and is reviewed every two years.

We have a WorkCover-accredited rehabilitation policy and rehabilitation programme. The programme assists employees who have been injured or ill, whether work-related or non-work related, to return to work in a productive and safe manner. This policy is displayed in prominent places and reviewed by management every three years. WorkCover reaccreditation was received in September 2001.



**Environmental**

**Air (atmospheric emissions)**

**Dust**

Dust deposition is monitored at 12 sites located around the perimeter of the mining leases and in the town of Blackwater. The dust readings were within the recommended Environmental Protection Agency (EPA) guideline of an annual mean of 120 mg/m<sup>2</sup>/day for residential areas. Monitoring 10 kilometres from the mine in Blackwater is part of our ongoing commitment to the community.

Air quality management measures included the use of 75,000-litre capacity water carts for haul road dust suppression, minimised topsoil stripping before mining and regular washing of light vehicles before use on public roads.

Dust suppression trials of loaded coal wagons using a dosing system were carried out in conjunction with Queensland Rail.

**Greenhouse emissions**

A total of 52,785 tonnes of greenhouse gases were emitted from the mine site operations. Diesel-powered equipment on site contributed 94 percent of the emissions, electricity 0.5 percent and blasting 5.5 percent (see Figure 1).

We have begun replacing the motors on our coal haulers with more efficient units aimed at achieving a ten percent reduction in fuel consumption on the re-powered haulers. At this stage no figures are available for comparison.

**Noise**

Blast noise levels and ground vibration caused by overburden blasting did not exceed EPA limits. All monitoring records are retained in the environmental database.



Water truck suppressing dust on mine roads.

Figure 1: CO<sub>2</sub> Emissions 2001-2002

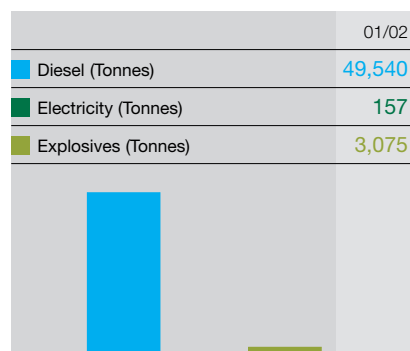
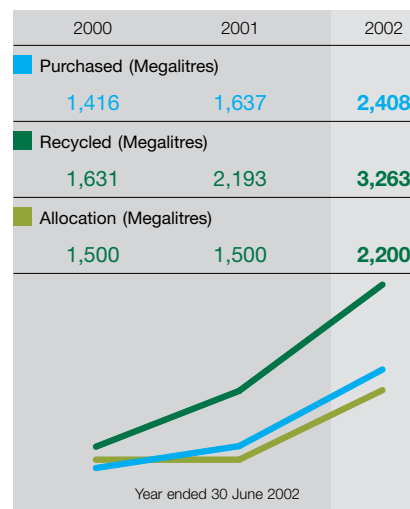




Figure 2: Water Usage



## Water

### Consumption

We continued to install water management facilities, including open drain and retention dam construction and pipeline and pump upgrades. Two telemetry water sampling monitors were established on Blackwater Creek which flows through our mining leases. These real-time monitors sample water flows both upstream and downstream of our operations whenever there is a flow in the creek. The creek height is also recorded against the level of the haul road creek crossing for safe use of the road. Surface and ground water quality in the vicinity of our activities are regularly monitored to identify any impacts at an early stage and to assess the effectiveness of our management practices.

We aim to minimise the risk of uncontrolled and controlled direct releases of mine water off-site.

We purchased water from the Bedford Weir and supplemented this with recycled site water (see Figure 2).

We monitor water usage and information is considered at operational management meetings each week. We received only 45 percent of the average annual rainfall and needed to purchase more water.

We were also successful in tendering for an additional water allocation which will be used in low rainfall periods and future years as yearly production tonnage increases.

### Groundwater

No water is drawn from underground aquifers.

### Discharges to surface and groundwater

No off-site discharges to surface or groundwater.

### Reuse

Recycling of water is an important part of our site environmental management. We use water from our 25 retention dams for dust control and in the coal preparation plant. During the year 3,263ML of recycled water was used, an increase of 47 percent on the previous 12 months. Due to dry weather conditions all available stored water was consumed.

### Waste

#### Solid waste

The dragline shutdowns, coal preparation plant upgrade, the erection of new shovels and increased operation of the coal preparation plant resulted in increased waste volumes. Solid waste generated from these included general and hydrocarbon waste volumes. Hydrocarbon wastes are regulated under Queensland legislation (see Figures 3 and 4).

#### Recycling

Engine coolant continues to be refiltered and reused in the mobile equipment workshop when components are changed on major equipment. The introduction of a long-life engine coolant has reduced the use of coolant inhibitors. This coolant has a potential life of 10,000 engine hours which should reduce the usage of coolant further.

Recycling volumes also increased accordingly with increased generation of waste. Recovery of scrap steel from the mine site totalled 1,433 tonnes.

We continue to reuse hydrocarbon waste as a lubricant at the coal preparation plant and on dragline dump ropes. Reuse of waste oil as a lubricant at the coal preparation plant increased 13 per cent on the previous year (see Figures 5 and 7).

Figure 3: Recovered Hydrocarbons from Draglines

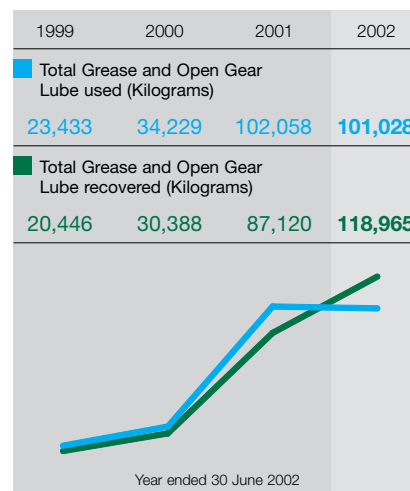


Figure 4: General Waste Volumes

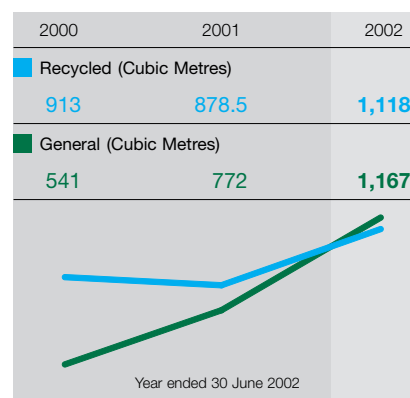
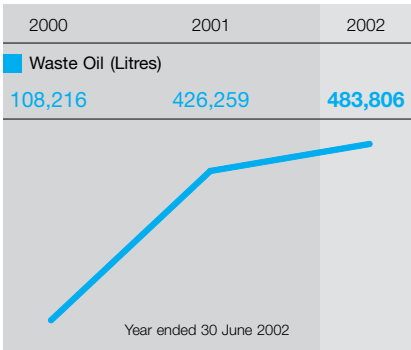




Figure 5: Volumes of Waste Oil Reused Onsite



In addition to this increase a further 28,000 litres was exported off-site for reprocessing (see Figure 6).

All regulated waste (as defined by Queensland Acts) is taken off-site to licensed facilities. Our environmental risk is minimised by prompt removal of this waste. Recovered hydrocarbon volumes increased and exceeded the volume used on the draglines due to major shutdowns on three draglines (see Figure 3).

**Land**

**Flora and fauna**

A slashing mowing programme was introduced to slash grass under power lines rather than have continual grading of these areas. This programme was to control soil erosion and declared weed spread and infestation.

**Contamination**

We have 11 notifiable activities and eight suspected contaminated sites registered with the Environmental Protection Agency in accordance with the Environmental Protection Act 1994. At the present time eight of the sites are in use. Environmental management plans are in place for each relevant notifiable activity so that further possible contamination is minimised. Monitoring programmes are in place for activities being carried out at these sites.

**Rehabilitation**

A topsoil inventory is used to record volumes stripped and stored in numbered stockpiles. We have nearly three million cubic metres stockpiled for reuse during rehabilitation. Sixty hectares of disturbed area were rehabilitated by recontouring, replacing the topsoil and seeding with native trees and locally-adapted grasses. Our continuing commitment to sustainability saw us rehabilitate areas disturbed by drilling and relinquish portions of our exploration areas

that were surplus to our requirements. This involved submission to government of a final rehabilitation report and obtaining the approval of landholders for the work carried out to restore the disturbed areas.

**Resource use**

**Fuel**

Diesel fuel use increased from 9,961 kilolitres to 17,135 kilolitres due to increased overburden removal by contractors using diesel-powered equipment and increased coal production.

**Energy**

Total electrical energy consumption was 166,956 thousand kilowatt hours, up from 153,629 thousand kilowatt hours last year. The coal preparation plant operated on a continuous roster for six months of the year to produce our increased product tonnage.

Figure 6: Waste Oil Exported Off Site

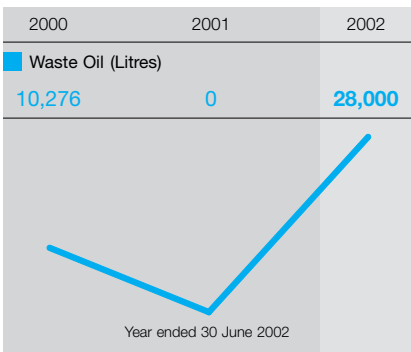
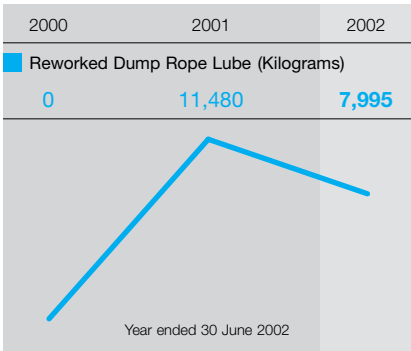


Figure 7: Reworked Dump Rope Lube Volumes



Safety and health

**Lost time**

We had one Lost Time Injury (LTI). Our Lost Time Injury Frequency Rate was 1.0 compared with 1.3 last year.

**Workers compensation**

The LTI resulted in a workers compensation claim and there were other claims related to medical treatment injuries. We are pleased that our claim numbers continue to reduce, down from 15 two years ago to eight last year and five in the year under review.

Greg Lancaster, Rob Shanks, Troy Martin and Alan Bailey members of the fire rescue unit.





Lloyd Jensen with landowner Arthur Goodwin on the outskirts of Curragh Mine.



## Community/social

### Complaints

We maintain a complaints register to record issues of concern raised by the community. No complaints were received.

### Liaison with authorities

We are a member of the Queensland Mining Council which liaises with the EPA and Department of Natural Resources and Mines in the development of mining policy. Our environmental personnel regularly participate in discussions to develop industry guidelines.

### Communication

#### Newsletters and reports

Our video report on our operations has been provided to local schools and distributed to our stakeholders and is available to our employees.

We advise our employees and contractors of relevant issues through addresses by our General Manager, tool box sessions and notice boards.

Adjoining landholders, interested stakeholders, and relevant native title claimants are consulted on any expansion plans so that community needs are considered as part of our planning process.

#### Liaison groups

We are a member of the Central Queensland Mine Rehabilitation comprising industry, government and non-government organisation representatives.

### Community support

We sponsored a visit by the Queensland Fire Rescue Training Team to Blackwater to educate school children on fire safety.

We are the major sponsor of the Blackwater Crushers Junior Rugby League Club and donated \$5,000 over three years.

We donated a used four wheel drive ambulance to the Blackwater branch of St John Ambulance.

A variety of community relations initiatives are undertaken each year, providing financial or in-kind support in a range of areas.

### Hazard and risk

#### Programmes

Hazard and housekeeping inspections are conducted weekly by supervisors and monthly by area managers.

Results of the inspections are communicated to employees on area noticeboards.

Near misses and hazards must be reported when employees or contractors reasonably believe there is a danger to themselves, others or to plant or equipment. Anyone who identifies a hazard must take action to make the area safe, ensuring their own safety is not jeopardised. Where there is a requirement for further remedial action the employee shall report any hazard to the open cut examiner and supervisor, complete the Hazard Report form as soon as possible and give it to the supervisor for further action.

An integral part of our hazard and risk management is the Job Safety Analysis.

This is a documented system which identifies hazardous jobs and where necessary implements control measures to reduce risk to an acceptable level.

#### Emergency response

The Emergency Response Procedure (ERP) aims to minimise injury, damage to equipment, plant and installations while ensuring the health and safety of fire and rescue members and other personnel.

This procedure is underpinned by the Crisis Management Plan (CMP). Both the ERP and the CMP are activated in crisis situations. The ERP has been integrated with the Wesfarmers Crisis Management Plan.

#### Materials handling and storage

We have procedures for the purchase storage, use, transfer or decanting from containers and disposal of hazardous substances. This applies to substances classified as hazardous to health or as dangerous goods.

Chem Alert is a computer database used to register all chemicals. Employees have access to this database via our intranet.

#### Risk assessment

Employees are trained in risk management for controlling the risks involved in open-cut mining operations and work processes.

Risk Assessments to AS4360 are part of our Standard Operating Procedure development programme.

The Blackwater Crushers Junior Rugby League Club in action.



### Research

As part of our commitment to sustainable development, we continue to support seven environmental research projects in conjunction with the Australian Coal Association Research Programme and university and government agencies.

### Awards

Our mine environmental efforts have been recognised with an award of "Excellence in Environmental Management", presented by the Rockhampton Chamber of Commerce and the Australian Institute of Management at the 2001 annual business excellence awards presentations.

## Priorities for the Future

- > Re-powering of all haulers with more energy efficient motors (reduction of 10 per cent fuel use by these units)
- > Further reduction in use of coolant inhibitors
- > Ensure compliance with obligations under our Environmental Authority to meet the high standards expected by the community
- > Complete a Cultural Heritage Management Plan for the whole of the mining lease areas
- > Incorporate new resource areas into our existing Environmental Authority using our mine site expertise and following community consultations
- > Community consultation and participation to involve stakeholders in our activities
- > Implement Crisis Management Programme
- > Continue the consultation process with our employees to continually review and monitor the effectiveness of our Safety Management System
- > Benchmark our Safety Management System with other industry leaders with the view to continually improving our system
- > Promote further education of health and fitness amongst employees and their families
- > Promote health and safety awareness within the community





CSBP Kwinana Works,  
Western Australia.

### 2001 REPORT PRIORITIES

- No lost time or serious injuries.

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- Continued work toward our goal of zero contaminant emissions to receiving environments.

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- Continue working to safely and effectively deal with our historic wastes by 2006.

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- Groundwater management to protect the resource and water quality.

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- Reduction of noise emissions from our Kwinana site as part of the combined effort in this area by Kwinana industries.

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- Continue development and implementation of our risk reduction programmes in our major hazard facilities.

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- Continue our contribution to the social wellbeing of the Western Australian community.

### OUTCOMES

- Lost Time Injury Frequency Rate (employees and contractors) of 8.8 compared with 5.8 in the previous year.

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- Our total nutrient emissions in wastewater were reduced. We completed a feasibility study on a wetland at our Kwinana site in Western Australia and we are committed to the Kwinana Water Recycling Project.

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- We made further reductions of our waste stockpiles through reuse, recycling and safe disposal.

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- Groundwater usage was within licence limits, no addition to existing contamination and continued extensive monitoring.

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- We contribute to a Kwinana Industries Council research project and reduced our noise emissions during the year.

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- Another safety report for our major hazard facilities was acknowledged by the Department of Mineral and Petroleum Resources and our Kwinana site Quantative Risk Assessment was almost completed.

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- We have a significant community support programme and are also a major employer.



## Overview

During 2002, we achieved a reduction in environmental discharges, dealt with significant quantities of our historical wastes and formalised a number of commitments to further reduce our environmental footprint. We were awarded the State 3R (reduce, reuse and recycle) award in the Business and Industry Sector in the Western Australian Government Waste Management Awards in 2001 for our waste management initiatives. Although strong progress was made in managing the public safety issues associated with our operations, it was a disappointing year in terms of our occupational safety outcomes. We have increased our efforts to improve our performance. Community support remains an essential part of our activities and we participated in a number of important consultative programmes and activities.



# Business management

## Training

Training is an important part of our continuous improvement process as it plays a key role in maintaining and developing the skills of our employees. It is an integral part of the activities designed to address environmental, health and safety issues.

Comprehensive operating instructions for the sodium cyanide gas purification plant and the ammonia plant were largely completed during the year. Operating instructions for the sodium cyanide liquids plant, including the laboratory, were reviewed in consultation with the operators. Operating instructions have been created for the commissioning of the new sodium cyanide solids plant.

## Environmental

Information sessions for relevant staff on the new Environmental Protection Act Controlled Waste Regulations (2001) were conducted to reinforce aspects of our waste management system.

During the year our induction process was reviewed and more environmental information has now been included in sessions for contractors. New employees to the Kwinana site participate in a tour that covers our main environmental issues and the way in which we manage them.

## Health

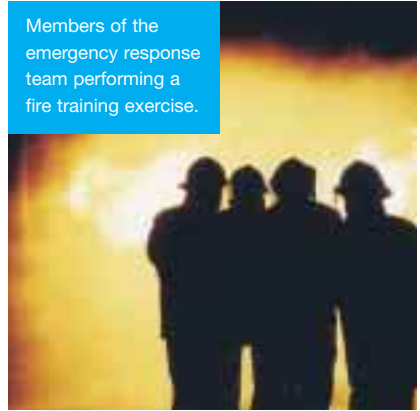
We continued to monitor the health of our employees and to identify those most at risk. Programmes to reduce health risks are being implemented.

## Safety

Our programme of integrated safety management requires all contractors and new employees to undergo an induction process aimed at providing people with the knowledge they need to work safely in specific areas. Apart from general safety issues, employees are provided with specific instruction for relevant workplace areas.

## Emergency

Our emergency response programme covers two main areas - the provision of a response capacity across the Kwinana site in the case of industrial or medical emergencies and a stewardship programme for our products in the community.



Training exercises involving local communities and emergency services were conducted during the year. Training of our staff in the basics of initial response continues, as does our close association with the Fire and Emergency Services Authority (FESA) throughout Western Australia. FESA inductions and familiarisation with our Kwinana site were combined with the twice-monthly training of our Emergency Response Teams and the regular training of our Incident Control Team.

## Compliance

### Environmental

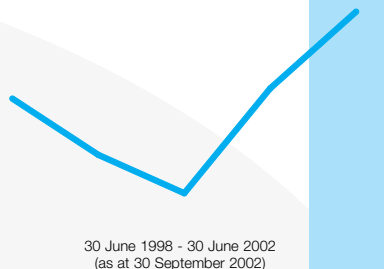
Our operations are regulated under the terms and conditions of licences and other approvals issued under the Environmental Protection Act, the Rights in Water and Irrigation Act, the Explosives and Dangerous Goods Act (and related dangerous goods legislation), the Poisons Act and the federal Industrial Chemicals (Notification and Assessment) Act (NICNAS). In addition, we are required to comply with a wide range of regulations.

During the year we complied with all of our licences with the exception of a minor exceedance of our licence limit for ammonium nitrate particulates from our prill plant dryer stack in January 2002, conducted as part of our beyond-compliance testing. The Department of Environmental Protection (DEP) was advised but decided to take no action. The test was repeated and the result was below licence limits.

As reported last year, there were 32 minor numerical exceedances of our effluent licence limits for aluminium, nickel, and copper during the year 2000. At the end of June 2002, the DEP had taken no action regarding these exceedances, 11 of which had lapsed at that time through expiration of the statute period. The time period for the remaining 21 exceedances expired in August with no action having been taken by the DEP.

### Lost Time Injury Frequency Rate

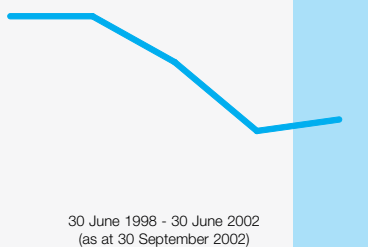
1998	1999	2000	2001	2002
5.4	3.2	1.7	5.8	8.8



30 June 1998 - 30 June 2002 (as at 30 September 2002)

### No. of Workers Compensation Claims

1998	1999	2000	2001	2002
43	43	39	33	34



30 June 1998 - 30 June 2002 (as at 30 September 2002)

An outstanding appeal against some of the limits in our Kwinana Environmental Protection Act licence is now being considered in the context of the draft Cockburn Sound Environmental Protection Policy (EPP). This policy will set environmental protection zones for Cockburn Sound based on quality criteria for certain nutrients and other substances.

#### National Pollutant Inventory (NPI)

Our second NPI submission, which contained information on 36 substances, was made as required in September 2001 and appears on the NPI website at [www.npi.gov.au](http://www.npi.gov.au).

#### Health

We continued to provide a fully-equipped and professionally-staffed first aid centre at the Kwinana site. We have a comprehensive health and rehabilitation service for all employees injured at work.

#### Safety

We are not aware of any official inquiries, prosecutions or official complaints in reference to our occupational safety and health activities.

#### Licensing and approvals

All Waters and Rivers Commission, Environmental Protection, Poisons Act, Dangerous Goods and NICNAS licences were renewed. In addition, a number of approvals were sought and received relating to specific projects.

We received acknowledgement from the Department of Mineral and Petroleum Resources (DMPR) for our ammonia transport management plan. Approval was received under the Environmental Protection Act for the disposal at the Mt Walton East Intractable Waste Disposal Facility of arsenic contaminated waste from our decommissioned ammonia plant. The waste transport to Mt Walton East was completed in June 2002 and we expect to receive final acceptance certificates from the state government in October 2002.

The construction of the new sodium cyanide solids plant for the 75 per cent-owned Australian Gold Reagents (AGR) began in 2001. Under Part 4 of the Environmental Protection Act we submitted a proposal to change the existing environmental conditions related to the sodium cyanide business. Ministerial approval was given to construct the plant subject to conditions. Approval was then sought for modifications to the conditions in relation to the transportation of solid sodium cyanide. We conducted extensive consultation with local councils and the community. At 30 June 2002, the Minister was considering third party appeals against recommended conditions for approval of this proposal. Approval was received in early August 2002.

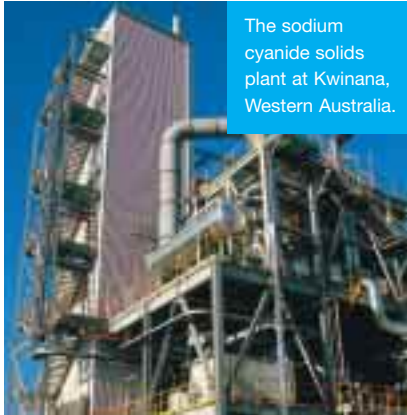
Our safety report for the production of sodium cyanide was also amended to include the solids plant and was acknowledged by DMPR in early July 2002. We also applied for approval from the department to operate a natural gas pipeline from Wesfarmers LPG to service the sodium cyanide plant which was subject to the submission of an operations safety case. Conditional acceptance of our operations safety case was granted in early July 2002.

In September 2002, Australian Gold Reagents was fined \$50,000 plus costs after pleading guilty to a charge laid by the Town of Kwinana. The proceedings related to commencement of construction of the sodium cyanide solids plant without building approval under the Town's planning regulations. We very much regret this incident and have apologised to the Town of Kwinana.

Mark Morton and Craig Fildes at the proposed site of the new sulfuric acid tank, at the Port of Albany, Western Australia.







The sodium cyanide solids plant at Kwinana, Western Australia.

We conducted an extensive community consultation programme in relation to our proposal to the Environmental Protection Authority (EPA) to import sulfuric acid to Albany. We continue to keep the local council and community informed of progress on the project.

In addition to these major projects, we also sought and received regulatory approval from the DEP and other agencies for a number of projects on our Kwinana site.

## Management systems

### Integrated management systems

Our intranet provides access to a number of our management systems which support environment, health and safety processes. An integrated reporting software package (Sitesafe), which will allow us to have one system for recording all accidents and incidents, will be functional during the latter half of 2002.

We regularly conduct audits of our management systems by trained personnel which includes a review of environmental, health and safety issues.

### Environmental Management Systems (EMS)

We have an EMS that is aligned to ISO 14001. To assist us in managing this system we have a software package (EMSoft 2000) which records our identified environmental aspects and impacts. We do not intend to seek certification of our EMS at this stage.

Our EMS identifies the following aspects and impacts as the most important matters for management:

- effluent discharges to Cockburn Sound;
- our Bayswater site; and
- groundwater.

Our activities in these areas are detailed in the relevant sections of this report.

### Quality management systems

Our chlor alkali and ammonium nitrate processes are accredited to AS/NZS ISO 9001:2000. This standard is closely aligned to business working practices and aims to:

- enhance customer satisfaction;
- consistently provide product that meets customer and applicable regulatory requirements; and
- include processes for continual improvement.

Both our ammonium nitrate and chlor alkali processes received this accreditation following an audit in January 2002 from Quality Assurance Services.

Our Kwinana laboratory continues to maintain accreditation by the National Association of Testing Authorities (NATA). As part of the process of continuous improvement, the laboratory initiated an auditing programme with two other laboratories, the Chemistry Centre of WA and Nufarm Agchem. In addition, the Chemistry Centre of WA in June 2002 conducted a safety audit on the storage of hazardous chemicals in the laboratory. A number of suggestions were made which will be implemented during 2002/2003. The laboratory underwent an audit by NATA in 2001/2002 against the new ISO/IEC17025 standard. This resulted in accreditation being continued subject to preparation of an action plan related to new provisions in the standard.

### Safety management system

The continuous improvement programme for the management of safety was further developed during the year. As required by the National Standard for Major Hazard Facilities, an additional review of safety reports was conducted, resulting in significant adjustments being made to documentation and systems. A policy document detailing our Safety Management System (SMS) has been developed. It describes our holistic safety approach and addresses safety from both the occupational and community perspective. The document also addresses major hazards at Kwinana, which are captured in safety reports developed for approval by the DMPR. The SMS also documents many of the accountabilities, responsibilities and the level of authority allocated to those with a role in managing our systems.

The implementation of our SMS at Kwinana involved the identification of critical objectives for occupational health and safety. These objectives are included in departmental safety action plans that form the basis of management of, and accountability for, safety at all levels.

The SMS includes the review and documentation of risk profiles associated with our processes. This will be incorporated with the Quantitative Risk Assessment and will form the basis of our new risk register. Storage and analysis of safety data will be assisted by the introduction of the new Sitesafe computerised incident recording and analysis programme.

### Policy

We have environmental, quality and occupational health and safety policies. These policies outline our commitment to operating in a safe and environmentally-responsible manner to produce and distribute quality products. They are displayed in all business units.

Copies of the policies are available on request by telephoning (61 8) 94118232, or by e-mailing [responsible\\_care@csbp.wesfarmers.com.au](mailto:responsible_care@csbp.wesfarmers.com.au).

We are a signatory to the Responsible Care voluntary programme for environmental and safety management developed by the global chemicals industry and implemented in more than 40 countries. As part of this we are an active member of PACIA - Plastics and Chemicals Industries Association, Australia. This programme is implemented through the following six Codes:

- employee health and safety;
- manufacturing safety;
- transport and storage safety;
- community right to know;
- product stewardship; and
- environmental protection.

During the year, we participated in a significant review of the Responsible Care programme and we conducted initial self-assessments against three of these codes as part of our process for developing an implementation plan. We aim to complete these six assessments in October 2002.

During the year we consulted extensively with the EPA in relation to the draft EPP for Cockburn Sound, as well as making contributions to the development of public policy with the DEP, DMPR and other state agencies.

Figure 1: Ammonium Nitrate Concentration

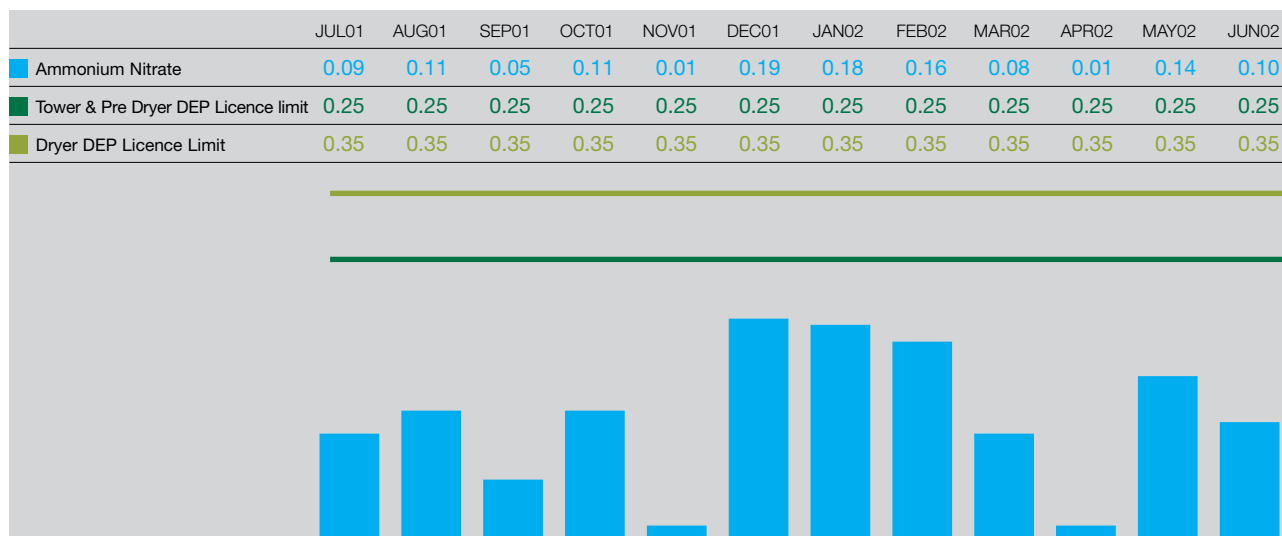
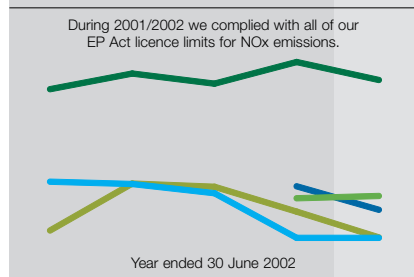


Figure 2: Kwinana NOx Emissions

	1998	1999	2000	2001	2002
NAP NOx	0.123	0.118	0.098	0.1	0.1
SCP 1 NOx	0.324	0.358	0.336	0.383	0.344
SCP 2 NOx	0.17	0.119	0.112	0.058	0.02
AMM Aux Boiler				0.087	0.092
AMM Primary Reformer				0.113	0.062



## Environmental

The data in this section has been collected by internal monitoring in accordance with our Quality Assurance Manual. It is generally obtained from point source emissions and will differ slightly from that reported as part of the NPI because of the way in which the NPI uses standard assumptions, in part, to calculate potential emissions we cannot measure (such as ambient dust). In some areas we do not exceed NPI thresholds and are therefore not required to report.

### Air (atmospheric emissions)

#### Dust

Dust from all sources reported under the NPI was 294 tonnes. As mentioned previously, we had one minor licence non-conformance relating to particulates from our ammonium nitrate prilling plant stack. Apart from this our emissions were below licence limits (see Figure 1). Discussions with the DEP regarding emissions from the plant reached agreement on research and management strategies. Modelling will be conducted to further develop our understanding of the plant's emissions.

#### Odour

We had four odour complaints during the year associated with our Bunbury superphosphate fertiliser plant. This odour can be traced to the organic content of the phosphate rock used in the manufacturing process. We aim to minimise odour by purchasing phosphate rock with low organic content.

### Greenhouse emissions

We continue to be a member of the Commonwealth Government Greenhouse Challenge programme. Our net greenhouse gases during the year totalled approximately 702,000 tonnes of CO<sub>2</sub> equivalent. This was an increase on last year's figure, mainly associated with higher ammonia production, as our new ammonia plant moved towards planned production levels.

During the year we submitted our 1999/2000 and 2000/2001 Greenhouse Challenge reports and prepared for an external audit of our 2000/2001 report. Nitrous oxide (N<sub>2</sub>O) continues to be a significant portion of our total greenhouse emissions. We keep international research under review and continue to measure our N<sub>2</sub>O emissions from our nitric acid and sodium cyanide plants.

### Noise

A noise report on the Kwinana Industrial Area (KIA) utilising survey data from August 2001 was released in late 2001. The report was prepared by the Kwinana Industries Council (KIC), of which we are a member. As reported last year, we recognised the need for action to reduce noise from the sodium cyanide and ammonia plants. A noise attenuation device was installed on the ammonia plant CO<sub>2</sub> stack during the year. In the sodium cyanide plant, the need to run both liquid plants to accommodate the solids plant will contribute to managing the noise associated with the start up blower, known to be a source of noise. Following this remediation work, we repeated the noise survey. A significant improvement was noted and these results have been established as our baseline.

We will continue to conduct regular noise surveys of our site and remain an active member of the KIC noise management

process, and the recently formed Northeast Rockingham Noise Reduction Group.

**Other emissions**

*Oxides of nitrogen (NOx)*

Our ammonia and nitric acid plants and both sodium cyanide plants, produce NOx and have continued to operate within their EP Act licence limits in relation to NOx emissions (see Figure 2).

*Sulfur dioxide*

Our sulfuric acid plant at Kwinana closed in January 2000. However, we still contribute to the ambient sulfur dioxide monitoring in the KIA. The levels were well below prescribed limits.

Our Albany and Esperance sulfuric acid plants ceased production during the year. We had one complaint relating to colour emanating from the stack at Esperance.

Sulfuric acid will now be imported through Albany. Community consultation conducted as part of the approval process for this project provided the opportunity for interested parties to contribute to certain aspects of the decision making process. This imported sulfuric acid will be utilised in the production of fertiliser at our Albany works. The project is subject to final assessment by the EPA.

*Chlorine*

The Kwinana chlor alkali plant continued to operate within chlorine emission limits under its Environmental Protection Act (EP Act) licence. We have an extensive monitoring system in place to detect chlorine at a number of locations around the plant (these are set to activate at levels below which health can be impacted). The system resulted in 123 chlor alerts during the year compared to 90 in 2000/2001. This increase can be attributed to additional maintenance requirements of the chlorine drying and compression system. In June 2002, the chlor

alkali plant recorded 15 years of production and seven years without a lost time injury to employees or contractors.

*Ammonia*

The new ammonia plant at Kwinana operated efficiently during the year. Since January 2002 the plant has operated at or above design capacity.

**Water**

**Consumption**

At Kwinana we extract groundwater from the Tamala (superficial) and Yarragadee (sub-artesian) aquifers. As in 2000/2001, we continued to limit our Tamala groundwater extraction to 1.5 million kilolitres. Our extraction licence limit is 2.8 million kilolitres. Figure 3 shows our groundwater usage from the Tamala aquifer.

Good progress was made with the Water Corporation and neighbouring industries on the Kwinana Water Recycling Project. The project will release a significant scheme water resource for use elsewhere in Perth. Construction is expected to begin in 2003 with completion in mid-2004.

This project will also enable us to dispose of wastewater to the Cape Peron outfall and utilise treated wastewater from this source as a substitute for groundwater in our cooling towers and other processes. When fully operational, the project will allow us and other industries to almost cease contaminant discharges to Cockburn Sound.

We signed a contract with Tiwest to supply artesian water from our abstraction bore which will contribute to the reduction in industrial scheme water use in Kwinana.

We used 140,106 kilolitres of scheme water at our various sites. In the past two years we have seen a marked reduction in our use of scheme water at Kwinana through sourcing alternative supplies from Western Power.

**Discharges to surface and groundwater**

We continued extensive monitoring of our discharges to marine and freshwater environments at our Kwinana, Bunbury and Albany sites. Discharges of phosphorus and fluoride remained historically low at all sites.



Malcolm Hayley water sampling downstream on the Preston River, Bunbury, Western Australia.

Figure 3: Monthly Total Extraction Kwinana Works

	JUL01	AUG01	SEP01	OCT01	NOV01	DEC01	JAN02	FEB02	MAR02	APR02	MAY02	JUN02
1998/1999 - Volume Extracted (ML)	55	64	94	197	139	148	156	176	143	160	168	172
1999/2000 - Volume Extracted (ML)	150	118	140	113	120	150	76	97	99	98	100	75
2000/2001 - Volume Extracted (ML)	90	57	73	82	88	95	80	76	98	82	84	79
2000/2002 - Volume Extracted (ML)	74	62	77	85	96	93	99	83	102	99	98	81

Average monthly licence limit is 233ML.

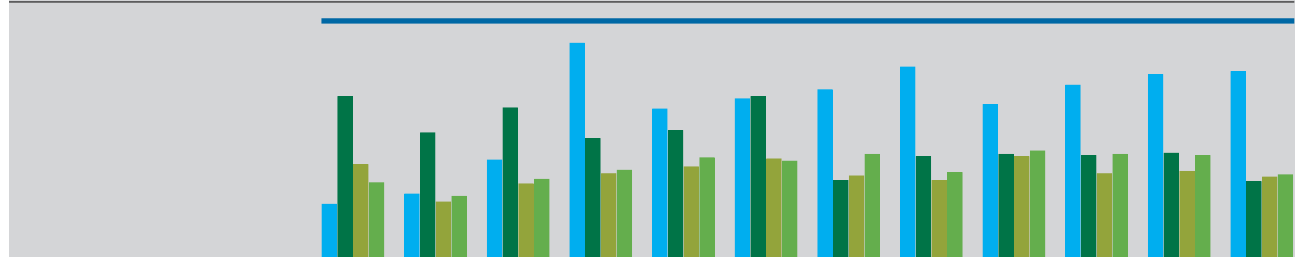
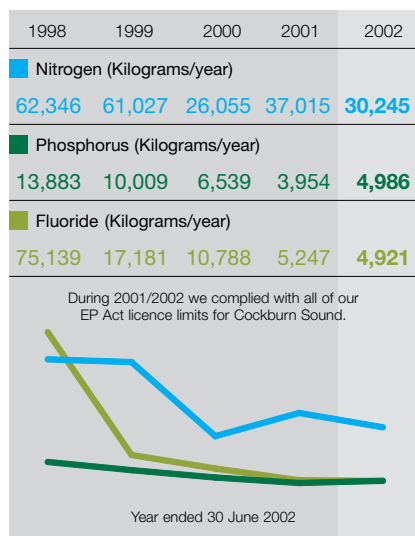




Figure 4: Discharge to Cockburn Sound

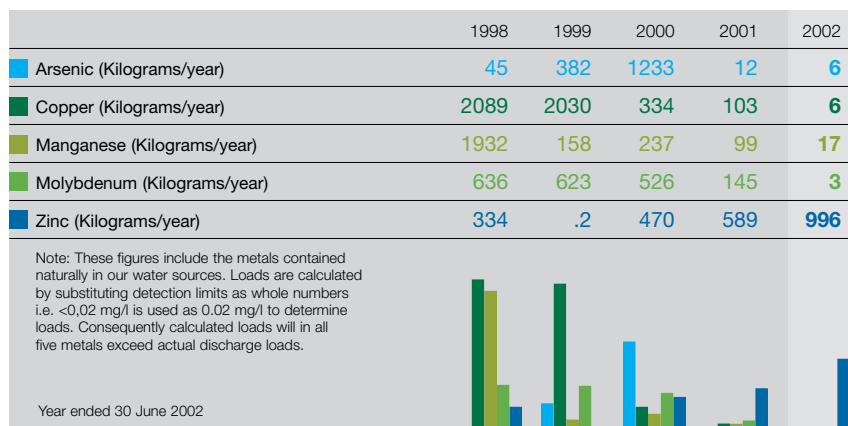


At Albany, annual discharges have been below 100kg for phosphorus and 400kg for fluoride for the past five years. Phosphorus discharge increased slightly from 67kg to 70kg and fluoride levels increased from 305kg to 358kg. Nitrogen discharges at Albany decreased from 2,956kg to 2,510kg in 2001/2002. We continued to pursue options to reduce discharges to the environment at this site. Nutrient reduction wetlands are not a feasible option and we continued to explore the potential for sewerage connection with the Water Corporation and other potential users with the aim of reducing discharges to Princess Royal Harbour. At Bunbury there were no discharges to the Preston River as wastewater produced was collected and reused within the plant and for irrigation on-site.

At Kwinana, discharges to Cockburn Sound remained historically low:

- phosphorus discharges totalled 4,986kg (see Figure 4). The increase from 3,954kg last year can be related to elevated discharges during the months of April, May and June 2002 which were associated with significant rainfall events and increased phosphate fertiliser despatch. Discharges of phosphorus can be related to cooling tower treatment chemicals, truck wash bays and product spillage. We continue to be vigilant with our housekeeping practices and aim to reduce discharges in the future.
- nitrogen discharges decreased from 37,015kg in 2000/2001 to 30,245kg in 2001/2002 due to further focus on wastewater management and recycling on site (see Figure 4).
- fluoride discharges remained close to background levels (see Figure 4).

Figure 5: Heavy Metal Discharges to Cockburn Sound

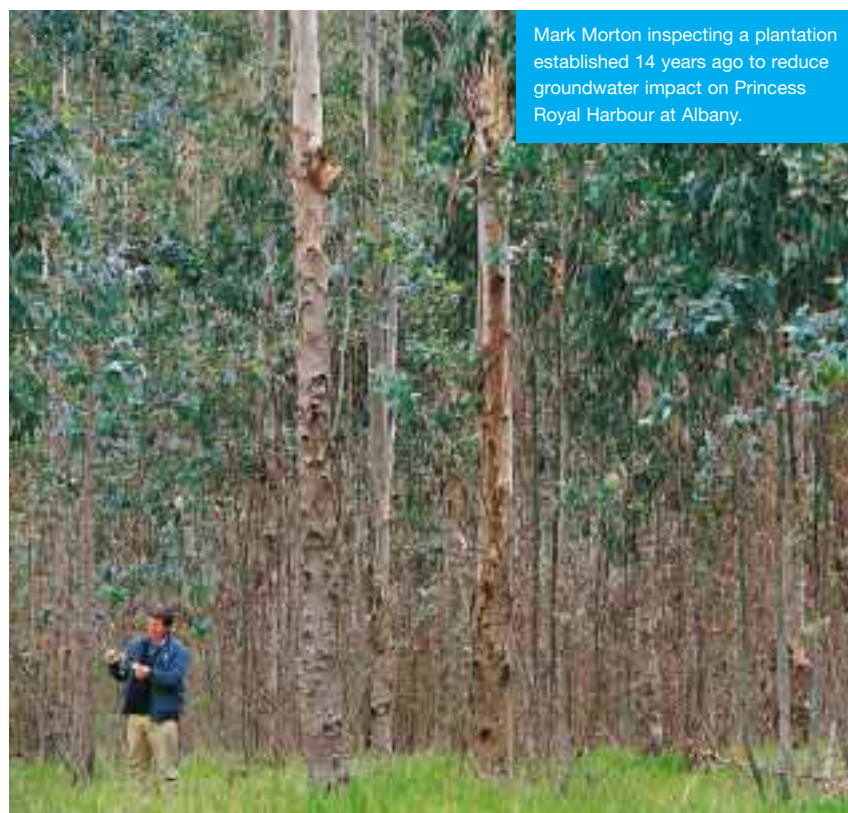


During the year we received EP Act approval to construct a sodium cyanide solids plant, and committed to maintaining total nitrogen emissions within our existing (at the end of 2000) emissions.

Combined heavy metal discharges are shown in Figure 5. The levels shown this year are consistent with that reported to the DEP and NPI and account for the background concentrations of nutrients and elements in seawater and groundwater used in our processes. They continued to decrease, except for zinc which increased from 589kg to 996kg. The large part of this increase relates to increased ammonia production, in turn leading to higher water discharges from the cooling tower. Zinc is used as an additive in our cooling tower water and is a trace element in our fertilisers as are other elements such as copper and lead. We regularly monitor effluent emissions from the ammonia cooling tower, which is our primary source of zinc. During the year we reviewed chemical treatment of the cooling tower. However, our ministerial approval for the plant required the use of a zinc-based cooling treatment rather than a majority phosphorous-based treatment. We will continue this work in 2002/2003.

**Reuse**

A number of our plants at Kwinana can reuse wastewater they produce. The fertiliser granulation plant accepted approximately 9,000m<sup>3</sup> of nitrogen-rich wastewater for use in the production process. This included wastewater from the nitric acid and prilling plants as well as other areas on site, such as truck wash bays. Proposed production changes during 2002/2003 may mean that the granulation plant may not be able to reuse as much wastewater in the future and we are trialling the reuse of appropriate wastewater in the superphosphate plant.



Mark Morton inspecting a plantation established 14 years ago to reduce groundwater impact on Princess Royal Harbour at Albany.

We continue to explore reuse options on site with favourable results from a feasibility study, conducted in 2001, into the use of wetland areas for nutrient reduction. We are likely to construct a pilot scale wetland during 2003 and we will review options for further effluent treatment based on that trial.

**Waste**

In November 2001 our positive waste management practices were recognised when we were awarded the State 3R (reduce, reuse and recycle) Award - Business and Industry Sector in the Western Australian Government Waste Management Awards. We aim to avoid the production of waste, reuse it where possible and ensure proper analysis and appropriate disposal when it is required.

We donated our \$1,000 prize money from the 3R Award to the Rockingham Regional Environment Centre which supported the "Gumboot" initiative. This programme involves the collection of titanium ring pulls from aluminium cans for reuse to make artificial limbs for land mine victims in Thailand. We now have gumboots situated in many locations around our Kwinana site for the collection of ring pulls.

In June 2002 we signed a memorandum of understanding with the Western Australian Centre for Cleaner Production to develop further our plans for cleaner production.

**Solid waste**

The EP Act Controlled Waste Regulations were implemented in July 2001. We are in discussion with the DEP regarding some difficult administrative issues arising from this new regulatory regime.

We improved our waste management procedures and developed a controlled waste management plan. The procedures underwent an external audit in June 2002. After a verification audit the procedures and the plan will be submitted to the DEP for approval.

Waste collected for reuse and recycling at Kwinana included empty drums, printer and toner cartridges, gloves, cardboard, paper, and oil and grease (see Figures 6 and 7).

We continued to reduce our waste stockpiles. Our initiatives during the year included:

- supplying Alcoa with 1,670 tonnes of gypsum for reuse as a fertiliser on their rehabilitation areas and for treatment of bauxite residue, as part of a longer term undertaking;

- reusing about 3,100 tonnes of sulfur filter residues in fertiliser production at Bunbury;
- transporting 207 tonnes of spent vanadium pentoxide to Vanadium Australia at Windimurra for reprocessing;
- disposal of about 364 tonnes of arsenic-contaminated waste to Mt Walton East Intractable Waste Disposal Facility;
- removal to the appropriate landfill of approximately 700 tonnes of lead sulphate from our Albany works; and
- removal of about 11,200 tonnes of neutralised fluoride-containing residues from our Bunbury superphosphate plant site to an approved landfill.

We are an active member of the Kwinana Waste Synergies Project which aims to determine and pursue the potential for co-ordinated waste management initiatives within the area. In particular, options are being researched for large volume inorganic waste sources that have the potential to reduce raw material use.

Figure 6: General Waste Disposal to Landfill from Kwinana

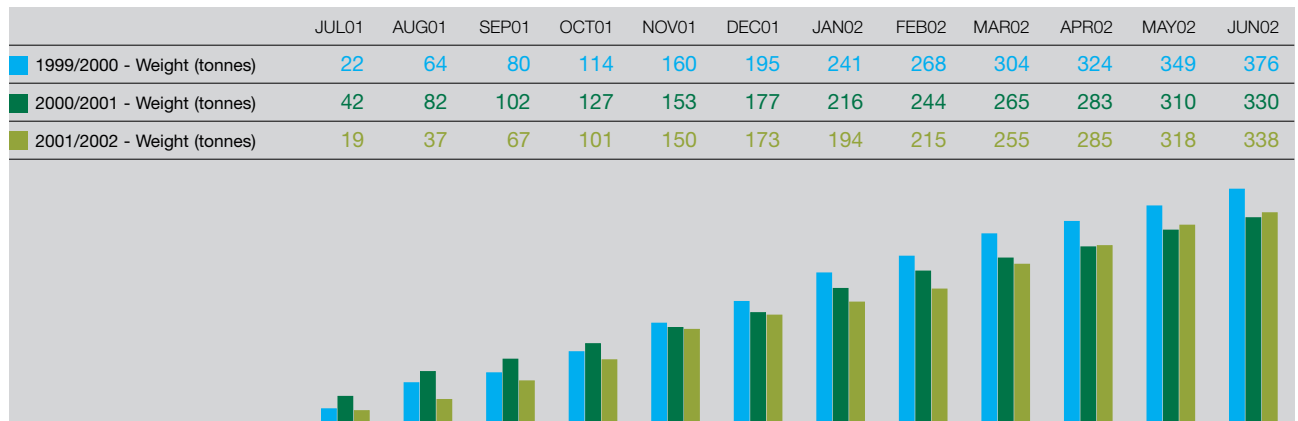
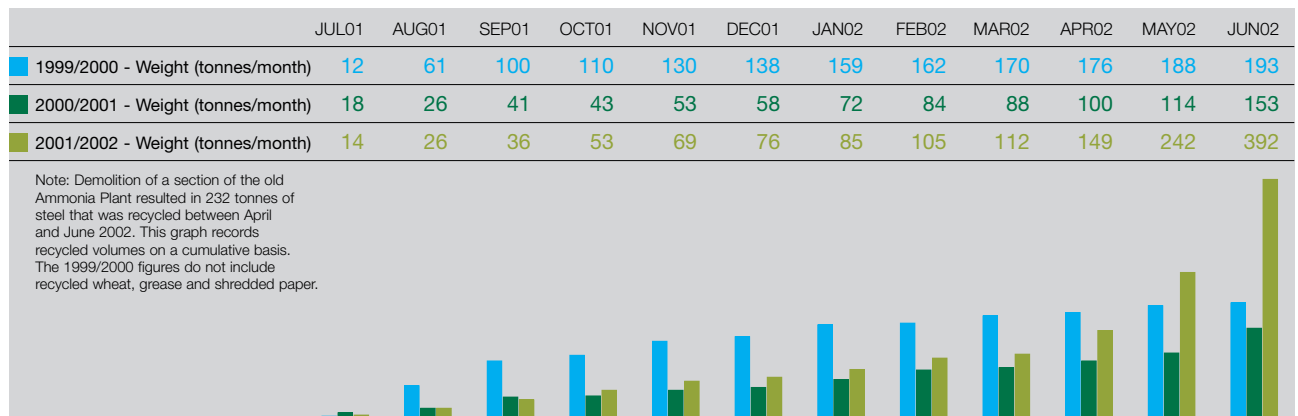


Figure 7: Kwinana Site Recycled Waste



**Liquid waste**

At Kwinana, we reuse a number of the wastes that we produce. Our granulation plant reuses wastewater from our ammonium nitrate prilling plant and nitric acid plant and our superphosphate and sodium cyanide plants reuse almost all of the wastewater they produce. We ensure that waste requiring treatment and disposal off-site is handled in accordance with relevant legislation.

**Land**

Recent work with new liquid nitrogen fertilisers emphasised the benefits of more uniform application using spray technology which more effectively applies nutrients close to the growing plant. In collaboration with the Western Australian Department of Agriculture, we have been evaluating superphosphate coated with alkaolam, a by-product of the bauxite refining process. The alkaolam coating maximises plant uptake of fertiliser nutrients and contributes to reducing leaching into waterways. Our SKYPLAN service has helped farmers match nutrient applications to plant productivity to improve efficiency of fertiliser use.

**Flora and fauna**

All of our manufacturing sites have been cleared in the past and now have some form of amenity plantings internally or on their boundaries. We also own a site at Calista in Western Australia which contains an excellent example of a Swan Coastal Plain wetland. The site is adjacent to the Leda Nature Reserve and we intend to manage it in co-operation with the Department of Conservation and Land Management. The site contains a significant gypsum

stockpile and we are pursuing several options to remove this before entering a co-operative land management agreement.

Pigeons in the Kwinana area may present some threat to endemic fauna populations on nearby islands in Warnbro Sound. We are a member of the Feral Pigeon Control Group which aims to develop strategies and targets to manage the pigeon population. Research revealed two sub-populations of pigeons, one residing on the islands of Warnbro Sound and feeding in residential areas and the other in the industrial area. The industrial area pigeon population does not appear to directly interact with the endemic species in Warnbro Sound. We are trying to reduce pigeon numbers on our site by identifying ways of eliminating food sources and taking part in a culling programme.

**Contamination**

A number of our sites have contamination issues related to past practices. We aim to prevent new contamination occurring whilst remediating existing sites. Actions during the year included:

- initiating an assessment of historic waste disposal sites at our Esperance works, with the aim of developing a remediation strategy;
- reviewing and researching options for the disposal of gypsum from our Wellard Road site whilst continuing to monitor groundwater;
- receiving regulatory approval for the remediation of our ammonia arsenic plume located under our decommissioned ammonia plant which will use technology undergoing final trials in the United

States and expected to be in use on site late in 2002; and

- finalising a strategy for our Bayswater site based on remediating it in preparation for future land development.

**Resource use**

Our operations use energy in the form of natural gas and electricity most of which can be related to our processes. During the year we consumed 661,320 litres of petrol and 34,796 litres of LPG in our fleet of 95 cars.



**Safety and health**

**Lost time**

Once again our safety record was disappointing. Our Lost Time Injury Frequency Rate (LTIFR) was 9.7 for employees only and 8.8 when contractors are included. The respective figures last year were 6.2 and 5.8.

**Workers compensation**

There were 34 workers compensation claims, compared with 33 last year. We are committed to reducing the incidence of claims.

**Hazard and risk**

**Emergency response**

Central to our programme of risk and hazard identification and analysis is the ability to respond in emergencies to protect our people, our community and assets. Our highly developed emergency procedures, training and equipment assist in ensuring a timely and efficient operational response on and off site. The tactical level Emergency Response Team reports to an Incident Control Team that is responsible for command, control and co-ordination arrangements. For serious incidents – those with the potential to impact on personal safety or our reputation - our Crisis Management Team is activated.

A programme of special risk plans for the Major Hazard Facilities, operations plans for the other processing plants and fire pre-plans for administrative buildings, has been developed with the Fire and Emergency Services Authority (FESA) and is reviewed and revised as buildings and plants are modified and the nature of our business changes.



Andy Ritchie adjusts a fall arrester to a safety harness worn by Jim McFaul at Kwinana.



We held one major training exercise on site involving a number of FESA units and supporting Kwinana Industry Mutual Aid companies. FESA attended and supported two off-site exercises.

During the year the Emergency Response Team responded to one transport-related incident, one incident involving our products stored on customers' properties and 10 incidents on our site. Of the Kwinana-based incidents, five were attended by FESA and were of a very minor nature. No injury or significant property damage resulted. No emergency incidents were reported from our country operations.



Bunding surrounding the Flexi-N loading facility at Kwinana.

**Materials handling and storage**

Collectively we handle, store and distribute more than 1,600,000 tonnes of material each year including internal handling during manufacturing in solid, liquid or gaseous form. Our operations hold all the necessary licences and permits.

Our operations are covered by purpose-specific procedures that are regularly reviewed and updated. During the year we had no significant losses of material to the environment other than in our effluent streams.

**Risk assessment**

We have further developed our programme of risk assessment. This covers public risk from our Major Hazard Facility operations and is assessed through a Quantitative Risk Assessment (QRA). The QRA review process continued throughout the year and should be completed before the end of 2002.

The assessment of risk is also carried out using HAZOP and other analysis tools to review the potential impact of changes to our process and methods of control.

These processes were complemented by the introduction of a system of team-based risk assessment involving experienced operators, process technicians and engineers, conducting a detailed and systematic review of a particular work practice or method, process, equipment or work environment. The likelihood and potential consequences of hazards are then determined, ranked and necessary controls implemented. This process of risk assessment is being used at all locations, including country works.

**Employee wellbeing**

We provide a fully-equipped first aid centre at Kwinana staffed by qualified personnel. Employees are encouraged to attend voluntary annual health examinations.

For employees who suffer illness or injury arising from their work we provide a high

standard of first aid and follow up medical treatment. We ensure that we take all available steps to achieve a timely and complete rehabilitation including normal return to work or the provision of alternate duties. A health awareness newsletter is distributed to employees and we provide a confidential counselling and support service to our employees and their families. We deliberately do not have access to any of this data. We promote fitness by encouraging participation in events such as the Heart Foundation's "Climb to the Top".



Liz Williams demonstrating the new OxyPort machine to Darryl Collins.

# Making a Difference



The demolition of the vetrocoke section of the 32-year-old ammonia plant at Kwinana.

During the year we demolished the vetrocoke section of our decommissioned 32-year-old ammonia plant. This section of the plant contained equipment contaminated with arsenic that had been used in the process. Comprehensive sampling and risk assessment was conducted to determine suitable disposal options.

The demolition was completed successfully with one minor safety incident (a small tyre fire). The metal generated was recycled and the contaminated waste was safely transported and disposed of to the Mount Walton East Intractable Waste Disposal Facility. Later this year contaminated soil from the area will be removed and the remediation of the ammonia/arsenic groundwater plume will commence during 2002/2003.



## Community/social

### Complaints

Complaints from third parties during the year totalled 15 with seven relating to our operations at Bunbury, six at Kwinana and one from both Esperance and Bibra Lake. All of these were relatively minor and were satisfactorily resolved. Environmental incidents, including complaints, are recorded in our environmental incident reporting system.

We received a request for information during our Wesfarmers Environment Safety & Health Report stakeholder consultation forum in May 2002 relating to monitoring of water at our Wellard Road property. We addressed this issue on-site during the year and continue regular monitoring of the groundwater at the site.

### Communication

We acknowledge the community's interest in our operations and are committed to open communications with our stakeholders:

- between July and November 2001 we conducted briefing sessions on plans for our new sodium cyanide solids plant with local governments, regulators and community interest groups, with a particular focus on transport issues;
- from August to March we conducted consultations with community groups in Albany, regulators, residents and local government, on plans for the construction of our sulfuric acid receipt and storage facilities at Albany Port;
- also at Albany, we liaised with local businesses and residents near our site, local government and regulators in relation to the demolition and removal of our sulfuric acid plant;
- we gave presentations to the Kwinana Community & Industries Forum on a number of projects, including remediation of our groundwater plume and changes to the Kwinana Designated Industries Assistance Group. We also presented noise abatement results, which showed that we are no longer a significant contributor of noise to the local community;
- during the year we contributed to establishing, then participated in, the Kwinana Emergency Management Liaison Group, which meets in a public



forum involving community and regulatory stakeholders, to review public safety issues;

- we are an active member of PACIA with participation at Board and Issues Council level. This is a key part of our industry leadership in assisting to develop new policies and approaches; and
- in May we participated in the Wesfarmers Environment, Safety & Health Report stakeholder forum, attended by government agencies, community and industry organisations, to discuss various aspects of the report.

As a member of the Kwinana Industries Council we undertake community attitude surveys which assist us to understand the concerns and interests of the local community on an ongoing basis.

We are updating a company profile to inform key stakeholders about our business. We also produce internal newsletters for our employees.

We plan to distribute a Community Report to our stakeholders in 2002 as a means of updating the community on our environment, safety, health and community initiatives and major projects.

On 14 March 2002 we conducted a site tour and presentation for local governments and community interest groups in the Kwinana region and provided updates on our operations and environmental improvement initiatives.

During the year we continued our programme of hosting visits by students to various parts of our organisation.

As part of our community involvement programme, we held an Open Day in April at our Kwinana site which was attended by approximately 2,000 visitors. Eighteen guided bus tours were attended by approximately 650 people. The event was organised by 65 volunteer employees and included site tours, children's activities, a mock emergency exercise, educational displays and a school project.

**Community support**

We sponsor a wide range of community organisations throughout Western Australia, including:

- major sponsorship of Curtin University's Centre of Excellence in Cleaner Production;
- sponsorship and support for a number of rural advancement groups including contributions toward projects promoting the development of skills for children and young people, such as support for local schools promoting health and safety, literacy development and computer skills;
- a number of community safety, health and environment projects including the Rockingham Kwinana State Emergency Service, the Kwinana Rockingham District Hospital and the Rockingham Environment Centre's "Gumboots" recycling project; and
- sponsorship of a number of apprenticeship and university awards.

**Research**

As a member of the Australian Minerals Industry Research Association we support research into the safe use and disposal of sodium cyanide, a gold reagent used by the mining industry. We also support a range of agricultural research programmes, including the measurement of pasture quality with the CSIRO and nutrient research with the Grain Research Development Corporation.

We invest about \$600,000 each year in our own agricultural research activities and about \$100,000 of other research is contracted to external providers.

The underlying aim of this research is to enhance economic returns for the end user by maximising nutrient uptake and improving plant productivity and quality. The specific objectives of the work include:

- evaluation of new fertiliser products under field conditions;
- investigation of more effective methods of fertiliser application; and

- generation of data to validate and improve our fertiliser recommendation computer models, based on soil and plant analysis services.

In addition, Vermibiologicals - a composting company - partners with us to reduce our organic waste, which is used as a feedstock for their worm farms.

**Awards**

In November 2001 we were awarded the Business and Industry Sector State 3R (reduce, reuse and recycle) Award which recognises organisations that have developed successful waste reduction, reuse, recycling and cleaner production programmes or activities. Through our initiatives and continued efforts we strive to reduce the production of waste and our impact on the environment.

# Priorities for the Future

- > Halve our LTIFR with particular focus on reducing our all injuries rate
- > Continue to work towards a goal of zero contaminant emissions, and particularly in 2002/2003 progress our plans for a nutrient stripping wetland in Kwinana
- > Continue to work safely and effectively to deal with our historic wastes by 2006
- > Progress safety management systems for our major hazard facilities
- > Manage our groundwater to protect the resource and water quality
- > Maintain our contribution to the social wellbeing of the Western Australian community

CSBP's Business and Industry Sector State Three R Award.







Michael Lynch drafting cattle at the Great Southern Regional Cattle Saleyards in Mount Barker, Western Australia.

### 2001 REPORT PRIORITIES

Halve Lost Time Injury Frequency Rate (LTIFR) at Wesfarmers Landmark and reduce to zero at Wesfarmers Federation Insurance.

Promote awareness of safety, health and environmental issues to increase employee wellbeing and ensure legal compliance in both companies.

Continue to progress Agsafe accreditation of all relevant Wesfarmers Landmark branches.

Undertake an ergonomic evaluation of workstations, and appropriate training of staff, at the Wesfarmers Federation Insurance head office in Bassendean, Western Australia.

### OUTCOMES

Wesfarmers Landmark's LTIFR decreased from 6.8 to 6.1. Wesfarmers Federation Insurance decreased from 1.7 to 1.5.

Safety has been promoted throughout our organisation. Information updates have been placed on the intranet, and safety issues featured in our internal newsletter. Wesfarmers Federation Insurance continues to update policies and procedures and maintain an intranet site. Managers are required to regularly inspect workplaces.

The majority of sites have maintained accreditation.

An ergonomic study has been completed and appropriate training has been conducted in relation to workstation design and usage.



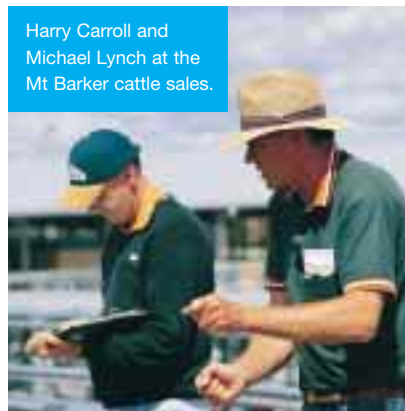
## Overview

There was a slight improvement in our Lost Time Injury Frequency Rate for the year but we need to refocus our efforts on achieving a better result. As part of this, we are considering the recommendations of a task force that investigated safety for our employees and visitors to livestock saleyards. During the year about 100 staff completed their initial Agsafe accreditation training in storing, handling and transporting agricultural chemicals and another 180 were re-accredited.

[Due to the large number of our branches and their geographical spread we have gathered data for this report from a survey distributed to all locations. Responses were received from 82.5 per cent of the businesses we contacted. A further survey, sent to saleyards and livestock handling facilities, produced responses from 39 of the 63 facilities in which we have an ownership or management interest.]



## Business management



Harry Carroll and Michael Lynch at the Mt Barker cattle sales.

### Training

#### Environmental

All staff who handle, sell, recommend and/or advise on agricultural or veterinary chemicals are required to attend training and be accredited by Agsafe, a non-profit organisation which implements the agricultural and veterinary chemical industry's self-regulatory programme of accreditation. The training consists of a basic two or three day course for initial accreditation, and a re-accreditation module which must be undertaken every three years. The training programme aims to ensure that people who handle agricultural and veterinary chemicals, from manufacture to end-use, understand relevant safety, regulatory and duty of care obligations. Agsafe also produces a quarterly update publication, which covers changes in legislative requirements and other industry information, which is distributed to accredited personnel.

During the year, about 100 staff completed their initial Agsafe accreditation training and about 180 were re-accredited.

#### Safety

Safety training has been predominantly instigated at branch level. A compulsory training programme is being developed to cover all major areas and it is planned to be introduced in the coming year.

During the year a number of staff attended first aid training and other safety and/or environmental training on an informal basis.

Our saleyard induction training has been ongoing and we are considering recommendations from a task force that investigated further strategies to assist with the safety of our staff and visitors to the saleyards in which we operate. These include not working alone at night, non-time-switched lighting while staff are working at night and the need for a task analysis for a set of saleyards. This analysis was carried out by an external consultant at the local authority-owned Wagga Wagga saleyards in New South Wales. The findings addressed mainly engineering aspects of saleyard design, with some reference to "people factors", which are generally the major issue in saleyard accidents. We can influence saleyard design only in yards which we own, either solely or jointly,

representing about 35 per cent of yards or other cattle holding facilities in which we work. We are currently examining ways to increase employee cattle handling skills, the main area of concern identified in investigations of accidents/incidents in saleyards.

Our induction programme and our occupational health and safety sites on the intranet deal with issues such as back safety and manual handling. We also have links to government agencies for staff to update knowledge in these areas.

At Wesfarmers Federation Insurance occupational health and safety training is included in our induction programme for all new employees and we use the intranet to keep staff informed of safety and health issues.

#### Emergency

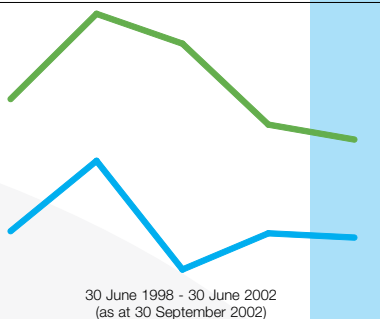
To gain Agsafe accreditation, an emergency procedure plan is required to be presented. About half of the accredited branches that responded to our survey reported having practised their emergency procedures during the year.

Our location managers are encouraged to involve local emergency agencies, such as the local fire brigade, ambulance service and police, in their on-site training. This can have mutually beneficial outcomes, such as at Berrivollock in Victoria, where the local fire brigade assisted with establishing the branch evacuation procedure. Four of our staff joined the local service.

At Wesfarmers Federation Insurance the emergency evacuation procedures in the head office building are reviewed regularly and updated where necessary. Trial evacuations occur at least annually.

#### Lost Time Injury Frequency Rate

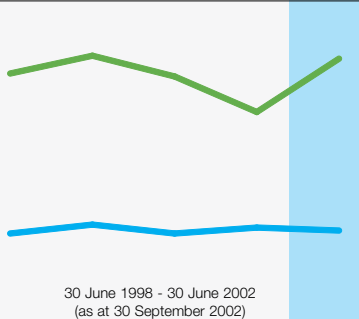
1998	1999	2000	2001	2002
	Wesfarmers Landmark			
8	12	10.6	6.8	6.1
Wesfarmers Federation Insurance				
1.8	5.1	0	1.7	1.5



30 June 1998 - 30 June 2002 (as at 30 September 2002)

#### No. of Workers Compensation Claims

1998	1999	2000	2001	2002
	Wesfarmers Landmark			
57	63	56	44	62
Wesfarmers Federation Insurance				
3	6	3	5	4



30 June 1998 - 30 June 2002 (as at 30 September 2002)



## Compliance

### Environmental

For our locations that sell agricultural chemicals, Agsafe accreditation of both branches and staff ensures that we are aware of environmental compliance requirements and we are kept informed of any changes through Agsafe publications, government agencies, local authorities and internal resources. At other locations, advice from local authorities, government agencies and through our own communication channels ensures that our staff are kept informed of compliance requirements. There were no reported breaches of environmental requirements.

### Health

Occupational health and safety legislation varies from state to state. We endeavour to keep our staff informed within all business units, particularly via our intranet site.

### Safety

We endeavour to keep all our staff informed of requirements under state acts, codes of practice and regulations and of any changes.

WorkSafe Western Australia issued improvement notices for the Bassendean wholesale merchandise store on a range of issues, including the need for a register of hazardous substances, risk assessment of manual handling activities and the operation of forklifts. An external consultant was commissioned to complete both an overall hazard identification report for the location, and a manual handling hazard identification and risk assessment report. All areas raised by WorkSafe have been addressed and a response is awaited from them.



Tony Murdoch loading chemicals onto the back of a ute using a flat bed trolley.

The Southern Division of Wesfarmers Landmark (some 120 locations) has contracted an external company to ensure our forklifts are serviced regularly and maintained to required standards. An audit of all forklifts within the region was carried out at the beginning of the contract. There is ongoing maintenance and regular reports of any outstanding items are submitted. For the Western and Northern regions 99 per cent of respondent locations (78) reported that forklifts were serviced regularly.

At Wesfarmers Federation Insurance our occupational health and safety policy and procedures have been in place for several years. These are reviewed at least annually and updated where necessary.

### Licensing and approvals

The Agsafe national accreditation aims to ensure that there is responsibility, regulatory compliance and duty of care throughout the agricultural and veterinary chemical industries. The industry has approval from the Australian Competition and Consumer Commission (ACCC) not to trade with individuals or organisations that do not meet their accreditation obligations. To gain accreditation for a site we must prove that we are compliant with all federal and state legislation and regulations covering agricultural and veterinary chemicals. We are represented on the Agsafe Council.

Accreditation targets are set for agricultural and veterinary chemicals as defined in Section 4(1) of the federal Agricultural and Veterinary Chemicals Act, 1988 including specified poisons and other dangerous goods. Agsafe accreditation requires planning and emergency procedures for chemical spills, fire, contact with poisons and evacuation procedures.

Premises are required to be audited by qualified external auditors through Agsafe every two years. Agsafe maintains a register of the current accreditation status of each location and staff member. Should a branch fail to maintain compliance requirements, it may have trading sanctions placed upon it. Agsafe retains records of all premises audited. Any location with outstanding items is notified and must rectify the items prior to receiving a renewed certificate. Currently several branches have attended to outstanding items and are waiting on Agsafe to confirm their re-accreditation. At the time of reporting, Agsafe records indicated that of 235 listed locations, 22 are in various stages of re-accreditation and 44 are undetermined. Some of these are where branches have amalgamated or very small quantities or no chemicals are carried. This is an ongoing process and records need to be updated constantly. There is no obligation for locations that carry

minor levels of agricultural or veterinary chemicals to be accredited. However the ACCC is still considering broadening the scope of our exemption to cover all agricultural suppliers. Our aim is to have all our premises that sell agricultural chemicals accredited.

Licences for the storage and handling of dangerous goods and chemicals are required in each state, but not all of our premises carry large enough quantities to require licensing. Where required, premises are licensed and renewed bi-annually.

At all times sites are going through various stages of Agsafe re-accreditation.

The accreditation process involves checking that all licences are in place at each location. Licences cover matters such as dangerous goods, poisons, hormone growth promotant and explosives. In Queensland, the Dangerous Goods Safety Management Act came into force on 7 May 2002.

Under the Act, the occupier of a possible Major Hazard Facility or Large Dangerous Goods location is required to notify the Department of Emergency Services of their existence if dangerous goods or combustible liquids exceed specified quantities.

Occupiers of existing large dangerous goods locations and possible Major Hazard Facilities have three months from May to notify the CHEM Unit within the Department of Emergency Services. Our Rocklea wholesale outlet is likely to be classified as a large dangerous goods facility. If confirmed we will commence work to comply with all legal requirements.

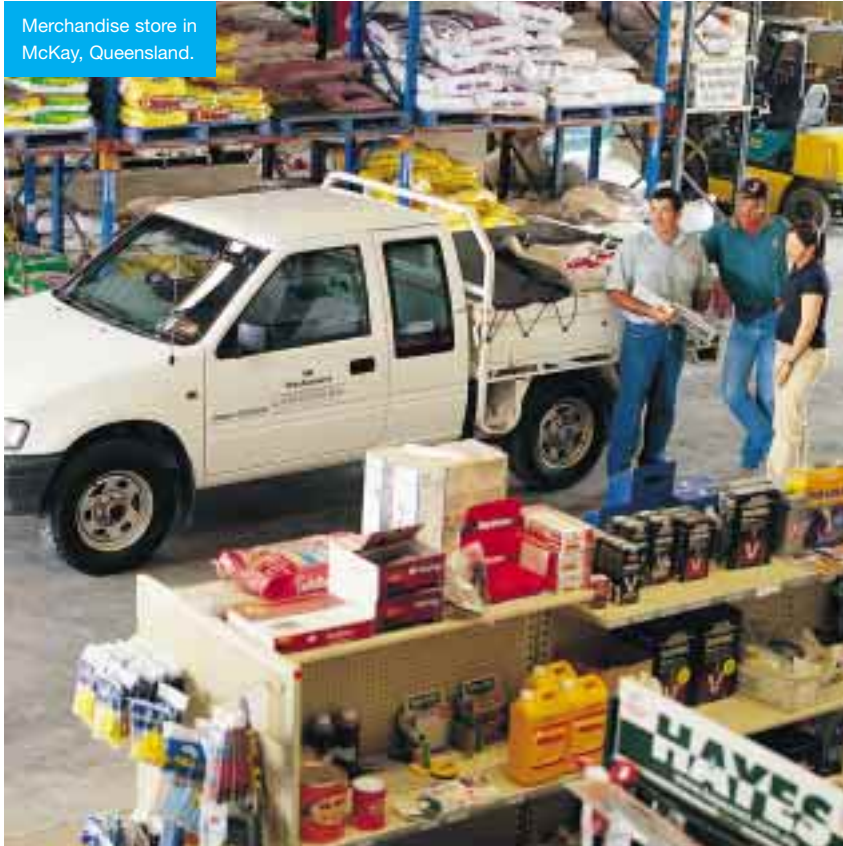
Seven of the sites responding to the survey reported chemical spills or near misses. The most common cause was leaking chemicals or minor spills.

All were contained and there were no major longer-term concerns. Reports received under our accident/incident reporting system showed a further six minor incidents involving chemicals, including leaks, falling drums and a broken chemical bottle sent in a mailbox.

We own or part-own and operate 63 saleyards (cattle handling facilities) throughout Australia. Many of these handle small volumes of sheep and cattle or are used solely as holding pens. The major issues for large saleyards are effluent run-off, dust and noise. This report deals with only the saleyards or holding yards owned or part-owned and operated by us. The requirements for licensing of saleyards in Australia vary from state to state. In New South Wales and the Northern Territory there are no licensing requirements under the Environmental Protection Authority (EPA). Other bodies, such as SafeFood NSW, license saleyards to ensure that they meet



Merchandise store in  
McKay, Queensland.



construction and animal welfare standards, with a focus on quality assurance of the end product. Some local councils require saleyards to be licensed, and other saleyards have National Saleyard Quality Assurance accreditation.

The EPA in Queensland has passed the responsibility for saleyards to the Department of Primary Industry (DPI), which does not require saleyards to be licensed but does check on environmental issues. As previously reported, there are environmental issues associated with our Toowoomba saleyards regarding soil contamination. The dipping facility is still in use, and although the problem has been discussed with the DPI it has not been resolved. Effluent run-off is an issue due to the bare-earth surface, and the heavy rains that occur from time to time. Discussions with the DPI are progressing on the best way to alleviate these problems.

In Western Australia, saleyards are required to be licensed, under the Environment Protection Act (1986), where the annual throughput exceeds 10,000 cattle per annum. Our only saleyard requiring licensing is Northam. The Department of Environmental Protection issued a licence on the 21 March 2002 which is current until 16 March 2003. The saleyard is also registered as an offensive trade with the Northam Town Council.

In South Australia, all saleyards with throughput greater than 50,000 sheep

(or equivalent stock) per annum are required to be licensed. Our saleyards at Strathalbyn and Jamestown hold current licences.

At the Strathalbyn saleyard complex we plan to upgrade drafting facilities and overhead walkways, but are still waiting on approval of our proposal. A programme is also in place to plant further trees to address wind and dust issues. At Jamestown saleyards a new watering system has been installed to reduce dust.

In Victoria, livestock saleyards or holding pens designed to have a throughput of at least 10,000 animal units per year, are required to be licensed. However, premises discharging or depositing waste solely to land are exempt. Our Heywood saleyards have been downgraded and the throughput of cattle reduced. Our Traralgon and Koonwarra saleyards meet the throughput requirements, but are exempt from licensing on the basis of their discharge activities.

We continue to comply with the EPA Victoria Abatement Notice on the Koonwarra saleyards which specifies minimum management standards for waste water treatment and irrigation. During the year safety rails were fitted to the loading ramps at Traralgon and at Koonwarra extensive work was completed to upgrade guardrails and kickboards to the raised walkways.

In Victoria we have many saleyards which are only used once or twice yearly and do not require licensing.

## Making a Difference



CRC FOR  
PLANT-BASED  
MANAGEMENT  
OF DRYLAND  
SALINITY

Dryland salinity is widely recognised as Australia's most threatening environmental problem. Its impact is most obvious in agriculture, but dryland salinity is also having a major adverse impact on rivers, country towns and infrastructure including roads and the nation's biodiversity.

Dryland salinity is affecting over 5.7 million hectares across Australia, with this figure set to rise to 17 million hectares by 2050 (National Land and Water Resources Audit).

Wesfarmers Landmark has made a major financial commitment to the work of the Co-operative Research Centre for Plant-based Management of Dryland Salinity based at the University of Western Australia. In conjunction with the Centre, we have been conducting workshops with our staff on a regional basis to assist them identify signs of salinity in the landscape and techniques for managing the problem.

As the CRC's research work progresses, we will assist in the dissemination of information and the application of research to farmers and land managers through workshops and field days.

## Management systems

### Environmental Management System (EMS)

We have no EMS in place. We report every year to the Wesfarmers Limited Board on our environmental performance.

### Safety management system

We are committed to the provision of a safe and healthy work environment. It is our objective to be recognised by our employees, customers, the community and stakeholders as a responsible company committed to the continued improvement of health and safety management in all business activities. Safety of employees is not negotiable.

The aim of our occupational health and safety system is to:

- create an environment where health and safety are integral parts of day-to-day business;
- identify all work hazards and put in place effective strategies and training to manage them;
- maintain accurate records to allow analysis and forward planning; and
- reduce accidents and incidents.

Our overall objective is to position safety as the normal way of doing things.

Accident reporting and investigation are integral to our occupational health and safety plan. The information collected is analysed and used to plan ongoing strategies.

All accidents and incidents are required to be reported immediately to assist with rehabilitation. Our policy of early intervention aims to offer alternative duties to injured workers to allow them to return to work at the earliest possible time.

All lost time injuries must be reported to our Managing Director within 24 hours.

### Policy

A copy of our occupational health and safety policy statement is given to all new employees prior to commencement. They are required to sign off that they have read and understood its contents. Wesfarmers Federation Insurance has its own policy statement.



## Air (atmospheric emissions)

### Dust

Dust is an issue around saleyards and is also associated with the transmission of Q Fever to humans. In response to our survey, Barraba and Hay in New South Wales and Jamestown in South Australia all nominated dust as a issue.

### Odour

No respondents to the survey indicated any complaints or issues associated with odour.

### Greenhouse emissions

We have no accurate measure of Greenhouse emissions that originate mainly from energy used at our sites. Given that we act only as agents for livestock we do not consider animal emissions to be our responsibility.

### Noise

No noise complaints were reported by respondents to the survey.

## Water

### Water consumption

We have no accurate measure of water consumption. The main use of water relates to the washing down of saleyards and trucks.

### Discharges to surface and groundwater

We acknowledge that within our merchandise business, with the amount of agricultural chemicals handled and stored, there is a potential for major spills. Through our compliance to dangerous goods handling and storage requirements we aim to reduce the risk of such an event.

## Waste

### Solid waste

Packaging materials are our major source of solid waste, including cardboard, plastic wrapping and wood. At our warehouses this is collected by waste removal contractors. Our branch network handles smaller quantities and disposes of it locally.

### Liquid waste

Branches promote the Chem Collect programme. This is a federal government initiative working through each state's

environmental protection agency to dispose of commercial and farm chemicals and is free for primary producers. This is soon to be replaced with Chemclear, which will provide a free service to farmers for the collection of unwanted registered chemicals.

Some of our branches promote the Chem Collect programme for use by customers.

### Recycling

We promote the drumMuster programme and act as a collection depot at some locations. The programme is an environmental initiative developed by the National Association for Crop Production and Animal Health, together with the National Farmers Federation, the Australian Local Government Association and the Veterinary Manufacturers and Distributors Association, to encourage the return and recycling of used chemical containers from farmers.

## Land

### Contamination

We acknowledge the potential for contamination at some of our sites, particularly saleyards, where past practices may have involved chemicals in controlling parasites on stock.

The Toowoomba saleyards require preparation of rehabilitation plans and this will be done in consultation with relevant authorities. The old woolstore at Goulburn in New South Wales is fenced off with no entry to the premises.

## Resource use

### Fuel

We have about 1,200 vehicles in our fleet, comprising sedans, station wagons, four wheel drive vehicles, trucks and utilities. Due to the large number of utilities and diesel-fuelled vehicles where liquefied petroleum gas (LPG) tanks cannot be fitted, about 36 per cent of our vehicles are equipped to use LPG, down from about 53 per cent last year. This has reduced due to the larger number of utility vehicles now in our fleet. Our policy is to fit LPG tanks to vehicles if they are expected to travel over 20,000 kilometres a year. We encourage drivers to use LPG where possible.

Our records indicate that our fuel consumption for the year was about two million litres of unleaded petrol, 1.8 million litres of LPG and 5.7 million litres of diesel. On average vehicles travel about 50,000 kilometres each year.

At Wesfarmers Federation Insurance, we have about 90 vehicles in our fleet of which 44 are fitted with LPG. Fuel consumption for the year was about 428,000 litres of LPG and 347,000 litres of unleaded petrol.



## Safety and health

### Lost time

We had a decrease this year in our Lost Time Injury Frequency Rate (LTIFR) from 6.8 to 6.1.

There were 128 medical treatment injuries reported during the period. Medical treatment injuries are recorded when a person attends a professional health service provider after a work-related incident.

Wesfarmers Federation Insurance had an LTIFR of 1.5.

### Workers compensation

Wesfarmers Landmark recorded 62 workers compensation claims for the year, of which 38 incurred no lost time.

Wesfarmers Federation Insurance recorded four workers compensation claims for the period.

## Hazard and risk

### Programmes

As part of our audit process we have a safety check list which is to be completed for all locations on a regular basis. This is being further developed and will be reintroduced over the next year within the total Risk Management Module of our training package.

During the year risk assessments were completed by external consultants at three merchandise sites in Victoria and at the Bassendean warehouse in Western Australia, together with a manual handling hazard identification. These assessments will be used as a guide at other locations. One of our major areas of concern is the manual handling involved at our merchandise outlets. From information gathered through our accident/incident reporting, manual handling accidents/incidents account for 27 per cent of the total number of reports.

Within the training programme to be introduced next year, hazard identification and risk assessment tools will be issued and training will be given in the process, after which we propose to audit each location on its hazard identification and risk reduction strategies.

Our intranet site continues to be a source of information on various aspects of safety and legislation and we intend to upgrade this during the coming year. Training will also be given during our proposed programme for use of the intranet to gain current information of any legislation or compliance requirements.

In most states now, occupational health and safety legislation requires that task analysis and risk assessments are carried out at all premises.

Data gathered from accident/incident reports revealed that the majority (37 per cent) of our injuries occurred in either the merchandise store or yard, 29 per cent in saleyards and 16 percent on clients' properties. Eighty percent of these injuries involved bruising, strain/sprain or laceration. These figures do not cover Wesfarmers Federation Insurance.

### Emergency response

As mentioned earlier the Agsafe accreditation programme requires a documented evacuation plan.

### Materials handling and storage

The integration of the Wesfarmers Dalgety and IAMA Ltd businesses to form Wesfarmers Landmark has resulted in branch mergers in most locations. During this process, consideration was given to the storage and handling of chemicals together with other safety and functional requirements. New purpose-built premises have been opened in all states in which we operate and building upgrades have taken place. This has improved our storage facilities and the safety of our staff and workflow. Storage facilities have been identified as a potential area of concern in the future at a few locations.

Daniel Alford loading pine poles at the new Landmark branch in Albany, Western Australia.





### Risk assessment

Wesfarmers Landmark maintains a register of buildings known to contain asbestos.

Other locations are self-assessed from year to year and information is gathered via the survey or at other times by reports from staff. Where a problem is identified appropriate investigation is carried out with the aim of addressing the asbestos issue. The last survey, conducted in April 2002, identified Ballandean and Colonasy in Queensland and Lake Grace, Ballidu and Mullewa in Western Australia as possible problems. Timboon in Victoria was also identified, but we are moving from this location in early December 2002. Follow up is progressing for these locations.

Wesfarmers Federation Insurance shares premises with Wesfarmers Landmark at many locations. At other locations no asbestos assessment has been made.

Risk assessments have been carried out at Bassendean and some merchandise stores and a saleyard in Victoria to ascertain risk factors associated with manual handling and the handling of livestock. Information gained from these reports will be used to examine additional training requirements and manual handling practices.

### Employee wellbeing

Our programme to encourage all staff who deal with livestock to be tested and vaccinated for Q Fever is ongoing.

Leptosporosis is another disease contracted through contact with animals. There was one reported case this year at Leongatha, Victoria. In many areas our staff are promoting animal vaccination for Leptosporosis to clients through newsletters and word of mouth.

Staff at larger locations were offered the opportunity to have flu vaccinations at our expense. At Wesfarmers Federation Insurance flu vaccinations are offered to staff at Bassendean each year prior to the winter months. There is a take up rate of approximately 50 per cent. The result over the past three years has been about a 40 per cent reduction in sick leave by those who had the injections.

An external Employee Assistance Programme is in place for staff who need assistance due to personal or work-related stress that may impact on their wellbeing or their ability to effectively carry out their normal duties.

At Bassendean we have arranged a massage therapist to provide 'over clothes' massages to arms, necks and shoulders to assist in removing problems with regular computer key work.

Warwick Nightingale and Matthew Hallam inspecting crop trial plots near Mudgee, New South Wales.



## Community/social

### Complaints

No written complaints were discovered through our survey, however there were a few verbal complaints covering such areas as rodents setting off the alarm system, access to loading or unloading at sites and building conditions.

### Communication

#### Newsletters and reports

Many branches distribute regular newsletters on issues covering chemical handling and usage and other associated safety information. Other sites conduct information sessions relating to chemical safety and they promote the "drumMuster" and "Ute it, Don't Boot it" message.

#### Website

Our Intranet site has an occupational health and safety link which covers our policy, accident and incident reporting procedures, saleyard induction, other policies, procedures and links to other relevant sources of information. This site will be developed further over the coming year.

### Community support

#### Research

Wesfarmers Landmark focuses its community sponsorship programme on rural and regional Australia. With nearly all our staff, members and agents working in more than 400 country locations, the company is very well-informed about community and social issues in rural Australia.

The key areas supported by Wesfarmers Landmark are sustainability, education of primary producers, selected industry events and sport.

Wesfarmers Landmark participates as a sponsor in major agricultural shows (such as the Sydney Royal and Brisbane Exhibition) as well as key regional field days.

Special events recently supported by us include the National Farmers Federation Annual Conference which was held at Carnarvon in Western Australia, in May 2002 to mark the Year of the Outback.

We were also the major event partner at the World Brahman Conference in Rockhampton, Queensland, in April 2002 and we are the principal sponsor of the World Hereford Conference to be held in Armidale, New South Wales, in 2004.

We provide support for a number of high-profile sporting events including the Australian Country Football Carnival (Australian Rules), the NSW Country Cockatoos (Rugby Union) and Country Week in Western Australia.

## Scholarships

Education projects include sponsorship of the Rabobank/University of Queensland Executive Development Programme for Primary Producers. Each programme involves around 35 full-time, leading-edge producers from Australia and New Zealand who attend two one-week residential courses separated by 10 months during which time participants undertake a project relating to their own farm businesses. In addition to sponsorship of the programme, Wesfarmers Landmark also provides five scholarships.

The company is also a contributor to the Nuffield Foundation and funds a Nuffield Scholarship each year, providing the opportunity for a primary producer to study international trends in agriculture.



Andrew Rogers  
outside the new  
Albany branch.

## Priorities for the Future

- > Update and fully implement the safety management system throughout Wesfarmers Landmark
- > Promote awareness of safety, health and environmental issues to increase employee wellbeing and ensure legal compliance
- > Introduce formal safety training
- > Halve LTIFR at Wesfarmers Landmark and reduce LTIFR to zero at Wesfarmers Federation Insurance
- > Improve the data collection process for this report





Wayne Abbott inspecting part of the Boddington pine plantation in Western Australia.

2001 REPORT PRIORITIES	OUTCOMES
Continue implementation of ISO 14001.	Manjimup Processing Centre, Deanmill and Yarloop Mill have achieved certification.
Progress removal of remaining underground oil and fuel tanks.	Underground tanks at Yarloop Mill, Boddington and Forest Harvesting South have been removed.
After receipt of new report, finalise action plan for rehabilitation of the Pemberton contaminated site.	Discussions continue with the Western Australian government after receipt of a second consultant's report.
Aim for zero Lost Time Injury Frequency Rate (LTIFR).	LTIFR of 1.9.



# Overview

Implementation of our Environmental Management System based on ISO 14001 continued with a further three locations – Deanmill, Yarloop Mill and the Manjimup Processing Centre – gaining certification.

Mill waste from Yarloop is now being recycled for processing and used for a number of purposes by Alcoa at its Wagerup refinery, including as a soil improver for minesite rehabilitation. This has enabled us to demolish the burner at the mill and end the burning of wood waste, resulting in improved air quality from reduced emissions to the atmosphere.

Our Lost Time Injury Frequency Rate increased from 0.7 to 1.9, but the total number of injuries decreased for the sixth consecutive year.





## Business management

### Training

#### Environmental, health and safety

Recognition of current competencies is currently being undertaken for our employees by the Department of Training through associated TAFE colleges. At year's end, approximately 14 per cent of employees were participating in the Recognition of Current Competencies Program aimed at achieving full or partial qualification in the Forest and Forest Products Certificate, Business (Office Administration) Certificate, General Construction Certificate or Certificate in Business (Frontline Management).

During the year 569 individual work instruction training sessions were conducted. These were necessary due to amendments to work instructions, requirement for skills upgrading or as a result of process improvements. There were an additional 339 training sessions not related to work instructions undertaken by our employees.

Fifteen team leaders completed the Diploma in Business (Frontline Management) and were presented with their certificates by our Managing Director in June.

### Compliance

#### Environmental

We are a harvesting contractor in state forests to the Forest Products Commission (FPC), and also harvest plantations on private property.

In state forests all harvesting operations are carried out in accordance with the "Code of Practice for Timber Harvesting in Western Australia" and the "Manual of Management Guidelines for Timber Harvesting in Western Australia".

These documents contain guidelines relating to protecting the environment. There are also management guidelines to control the spread of *Phytophthora cinnamomi* in the south-west forests. These procedures are monitored by the FPC and are periodically updated. The Codes have been referenced in our Environmental Management System. We believe we remain the only native forest/plantation harvesting contractor in Western Australia to have achieved ISO14001 certification.

Gavin Hort using a head rig saw at Deanmill.



Private plantation harvesting is conducted in accordance with the Code of Practice for Timber Plantations in Western Australia.

We operate a plant at Mundijong, 45 kilometres south-east of Perth, which uses a CCA (copper, chrome and arsenic) treatment process to preserve timber. The main products from this operation are treated pine rounds used in fencing, vineyard establishment and other applications.

The preservation process involves dried log rounds and timber undergoing a vacuum pressure treatment using the CCA solution. Once treated, the timber is stacked on a concrete pad to facilitate fixation. This process results in the treatment product becoming chemically bound or fixed in the timber. Any excess solution is captured and recycled. The treatment storage tanks are banded. This process is undertaken in accordance with our management procedures which conform to ISO 9002 and ISO 14001.

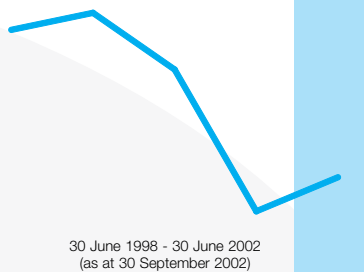
The Western Australian government's Department of Conservation manages Western Australia's publicly-owned forests. It administers the government's Forest Management Plan (FMP), which runs until December 2003.

The FPC administers commercial arrangements between the government and forest products companies. The Commission has achieved certification for its operations under ISO 14001.

As reported last year, the government's decision to end old growth logging will result in significant reductions in log availability under the new FMP, effective from the start of 2004. We estimate our log supply could be 60 per cent lower from that time. Our response has been to voluntarily reduce log intake and gradually reduce production so that the more than 400 redundancies which will occur are phased in rather than all happening at the one time. Over the year, full time employment fell from 698 people to 511.

Lost Time Injury Frequency Rate

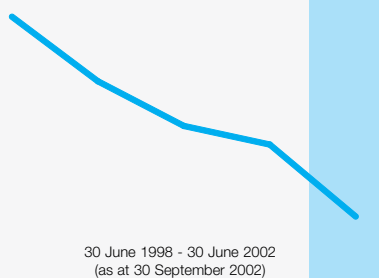
1998	1999	2000	2001	2002
7.1	7.7	5.7	0.7	1.9



30 June 1998 - 30 June 2002 (as at 30 September 2002)

No. of Workers Compensation Claims

1998	1999	2000	2001	2002
232	180	144	129	77



30 June 1998 - 30 June 2002 (as at 30 September 2002)



Stephen Martyn, inspecting 70-year-old regrowth in the Channeybearup forest block.

Karri thinning at the Warren forest block.

In May 2002 we submitted a detailed business plan to the government as part of its process of deciding log allocations from 2004 onwards.

**National Pollutant Inventory (NPI)**

Our facilities at Yarloop, Deanmill, and Collie sawmills, Mundijong treatment plant, and the Manjimup Processing Centre (MPC) have reported under the federal NPI legislation. The emission results for 2000/2001 are on the NPI Internet site at [www.npi.gov.au](http://www.npi.gov.au).

**Licensing and approvals**

To meet our legal obligations with respect to environmental licensing we hold two Department of Environmental Protection (DEP) licences, seven Department of Minerals and Petroleum Resources (DMPR) licences, four Water and Rivers Commission (WRC) licences and 20 Australian Communication Authority (ACA) licences. We have one registration with the DEP, a permit from the Health Department and a Water Corporation permit to discharge waste water.

WorkSafe Western Australia issued two Improvement Notices with which we complied.

No other licensing authorities have issued notices of non-conformance.

**Management systems**

**Environmental Management System (EMS)**

Our EMS is compatible with the requirements of the international standard and contains full documentation of our activities that may impact on the environment, while providing a baseline for continued performance improvement. The EMS continues to be integrated with our existing Quality Management System (ISO 9002).

Implementation of the EMS across the company continued with MPC, Deanmill and Yarloop Mill, achieving ISO 14001 certification.

Minor non-conformances were raised at Deanmill and MPC. Both sites have developed action plans to address these issues. Compliance EMS audits were conducted at Forest Harvesting North and Mundijong roundwood processing and timber preservation centre. No major non-conformances were noted.

We plan to commence working towards the ISO 14001 certification process for the Collie sawmill during the year.



**Environmental**

**Air (atmospheric emissions)**

**Noise/Dust/Smoke**

Noise and dust are issues at our four hardwood sawmills and two processing centres and are carefully managed.

Despite completion of remedial work, a further complaint was lodged about noise, smoke and dust emanating from the Yarloop sawmill. This complaint was discussed with the DEP. Noise reduction remedial work was again performed at Yarloop. We have not had any correspondence from the DEP on this issue. With the decommissioning and removal of the Yarloop waste wood burner smoke emission is no longer an issue (see Case Study page 70).

Pemberton Mill continues to work to the DEP recommendation for reducing smoke emissions from the waste pit.

**Greenhouse emissions**

Greenhouse emissions from non-renewable energy resources were estimated at 31,456 tonnes of carbon dioxide equivalents, a reduction of 9,374 tonnes from the previous year.

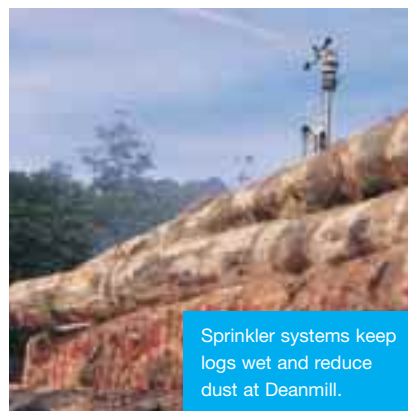
**Water**

**Groundwater**

Several sites have approval to use groundwater from either dams or bores. Groundwater is also used to top up recycling reservoirs.

**Recycling**

Pemberton, Collie, Yarloop sawmills and the Mundijong facility recycle water from their holding reservoirs.



Sprinkler systems keep logs wet and reduce dust at Deanmill.

# Making a Difference

Timber mill waste, which could not be sold as a product at our Yarloop Mill site, is no longer an environmental problem and will be recycled as a direct result of a joint initiative between Alcoa and Sotico.

Instead of burning the waste wood and residue sawdust each year in the mill burner, the waste will be put to constructive use at Alcoa's Wagerup refinery. This will reduce emissions into the atmosphere, improve air quality in the Yarloop area and provide a range of benefits to both organisations.

The project, which was completed in mid May, saw the demolition of the waste wood burner and the installation of a by-product recovery system.

Alcoa processes the mill waste and then uses it for a range of purposes, including as a soil improver for their bauxite residue area rehabilitation.

We estimate the cost of implementing the new by-product recycling system at approximately \$130,000. It is an excellent example of cooperation between industries to achieve cleaner production from both companies.

As a result of this initiative there have been a number of direct environmental benefits. The end of smoke emissions from the burner, an improvement in wood fibre recovery at the mill and a reduced call on natural resources by Alcoa through the substitution of the recovered wood waste for some of the mulch currently purchased by the company.

## Discharges to surface and groundwater

Our Mundijong treatment plant, MPC, and the Yarloop and Deanmill sawmills continue to take water samples. These samples are analysed by NATA Certification Services International-accredited laboratories. The DEP continues to receive an annual report on water sampling results from the MPC site.

## Waste

The ISO 14001-certified sites have drawn up action plans which focus on reducing waste.

### Solid waste

Bark removed from logs at our hardwood sawmills and sawdust continue to be sold to various customers for use as garden mulch and potting mix. Most sawdust produced from Collie is sold. Bark and sawdust that is not currently sold is burnt or stockpiled. Bark from our Deanmill site continues to be utilised by a south-west horticulturist for use on avocado orchards. Since the decommissioning of the burner no waste wood, bark or sawdust from Yarloop mill has been burnt or sent to landfill.

Bark and pine shavings from our Mundijong plant continue to be sold to garden supply companies.

Our initiative reported last year of sending containers of bark, sawdust and other fines to the United States to determine the product's suitability for power generation, did not produce a successful outcome. However, negotiations with a local power producer for the supply of all remaining waste not sold to horticulturists and other customers are continuing. Should the negotiations prove successful we will have eliminated the remaining small amount of our wood waste being burnt or going to landfill.

Jarrah residues are sold to Simcoa Operations Pty Ltd at Kemerton, near Bunbury in Western Australia to make charcoal for use in the production of silicon.

At some locations, waste paper, plastics, cardboard and metals are removed by waste contractors. Where there is no disposal service, suitable products are burnt, with metal strapping and plastics sent to local authority landfill sites.

### Materials recycling

Used vehicle tyres and waste oil are recycled. Tyres changed on site are removed by the supplier, used oil is stored and removed by contractors. The Forest Harvesting workshop at Yarloop has a waste oil collection centre which takes oil from vehicles, machinery and oil filters.



Demolition of the mill burner at Yarloop.





David Greep sampling water at Deanmill dam.

**Land**

**Contamination**

Part of our Pemberton sawmill site is contaminated with arsenic, chromium and pentachlorophenol resulting from timber treatment activities carried out, primarily, by previous owners, one of which was the Western Australia government. While we have made very little contribution to the contamination, we accept the need to contribute to the restoration of the site to an environmentally acceptable standard.

The extent of the contamination has been monitored on an ongoing basis. With the approval of the Minister for the Environment, a second consultant's report on how best to remediate the site was commissioned and received. After the report has been reviewed in detail by us and the DEP, we will discuss with the government the issues of responsibility and remediation.

Due to the potential risk of contamination, underground storage tanks are progressively being removed from various sites. Tanks at Yarloop Mill, Boddington and Forest Harvesting were removed during the reporting period.

**Resource use**

During the year we used 131,938 litres of petrol, 2,230,977 litres of diesel, 295,116 litres of LPG and 23,442,241 kilowatt hours of electricity. Our diesel usage was about one million litres less this year, representing a reduction of 2,972 tonnes of carbon dioxide equivalents not emitted to the atmosphere. Raw material delivered for use in our sawmills from state forests amounted to 216,177 tonnes.

Total native hardwoods used in the milling process reduced by about 35 per cent, or about 100,000 tonnes.



**Safety and health**

**Lost time**

The Lost Time Injury Frequency Rate (LTIFR) for the year was 1.9. Only two lost time injuries occurred.

The number of all injuries reduced by 36 per cent. This is the sixth consecutive year that the all injuries total has fallen. Since we began focusing on this aspect of our safety performance there has been a reduction of 69 per cent over a six-year period.

**Workers compensation**

Workers compensation claims continue to be a focus of management. The number of open claims as at 30 June 2002 was 40, compared with 51 in the previous year, a 21 per cent reduction.

**Hazard and risk**

**Programmes**

Our drug and alcohol programme, introduced at Yarloop sawmill in 2000/2001, has now been implemented at Welshpool head office, Westwood Timbers, Forest Harvesting and Transport (North and South), MPC and Deanmill. Management and employees have been supportive of this initiative.

**Materials handling and storage**

Training in manual handling techniques was conducted during the year and audits of the stacking and de-stacking work instruction continued.

**Emergency response**

Each location has an Emergency Preparedness and Response Plan. The locations with ISO 14001 certification have upgraded their plans to meet these requirements. These plans were included in their certification audits.

## Employee wellbeing

The results of the employee opinion survey referred to in last year's report were discussed with our workforce in August 2001. Job insecurity and communication were identified as areas of concern. The communication issue is being addressed through employee road shows, one-on-one discussions, establishment of a question/information email feedback line and a confidential telephone feedback line with additional general communication through our company newsletter.

Particular attention has been focused on the handling of redundancies due to the cessation of old growth forest harvesting. Enterprise Bargaining Agreements have built-in redundancy provisions and employees under workplace agreements or on salary contracts have been issued with a letter advising them of their entitlements should their positions become redundant. Employees facing job loss are kept informed of help and assistance available from a number of external agencies. Information sessions on financial planning, external employment opportunities and government assistance programmes have been held on a needs basis.

In conjunction with the Australian Workers Union we have developed selection criteria to assist management in situations where there is to be more than one redundancy at a location for employees with similar skills. This is aimed at ensuring that the selection process is fair and transparent.

From September 2002, an employee pack detailing contact names and addresses and other information to help find new work has been distributed to employees whose position has been made redundant.



James Fagan operating the picker and placer machine at Deanmill.



## Community/social

### Websites

Our website, located at [www.sotico.com.au](http://www.sotico.com.au), provides comprehensive information on our company and its business units. It displays our range of hardwoods, presents technical information and delivers comprehensive environmental information.

This highlights our Environmental Policy statement, our progress in adopting ISO 14001 certification and information on the Australian Forestry Standard. It recommends other websites to visit with regard to forest management and the benefits of timber and includes a frequently-asked question section.

The website also includes a news section, which provides up-to-date information on our company and the industry.

## Priorities for the Future

- > Progress removal of remaining underground tanks which contain hydrocarbon products
- > Finalise the long term management of the Pemberton contaminated site in co-operation with the State Government
- > Aim for zero LTIFR

# Verification Statement



ABN: 47 065 475 149  
ACN: 065 475 149

SMEC Australia Pty Ltd  
Level 5, 12 St George's Terrace  
Perth WA 6000  
Telephone: (08) 9221 5900  
Facsimile: (08) 9221 5901

## Verification Objective

Wesfarmers Limited (Wesfarmers) commissioned Snowy Mountains Engineering Corporation (SMEC) to verify the data and content of this Report 2002 Environment, Health, Safety and the Community (the report), their fifth such report. The objective was to assess the accuracy of statements made within the report and the appropriateness of supporting data.

Wesfarmers holds the responsibility for the preparation of the report and this Verification Statement represents SMEC's independent opinion. SMEC did not prepare any part of the report.

## Verification Method

The accuracy of the report was verified by randomly verifying a selection of the information presented. SMEC was commissioned to:

- identify major anomalies in the report;
- track the data streams from collection of the data to review of the conclusions made from resultant analysis and assess the accuracy and appropriateness of the processes used; and
- review the contents of the report with respect to the significant aspects of the organisation and the issues for the organisation's stakeholders.

Each business unit described in the report was visited by SMEC personnel. The visit took place at an operating site within each business unit to allow processes used in data collection to be observed and verified. Meetings were held with personnel responsible for collating and preparing the report for each business unit. Systems used for data collection were observed and tested for randomly selected data items. Specific focus was placed on verification of the basis for qualitative statements made in the report prepared by each business unit to ensure they could be substantiated.

The Curragh Queensland Mining audit was conducted by SMEC's Brisbane office and the Wesfarmers Landmark and Wesfarmers

Federation Insurance audit was undertaken by SMEC Victoria. All other business units were audited by SMEC's Perth office.

## Opinion

The data verification process involved reviewing the reports submitted by the business units then randomly selecting items for which verification would be sought. At each site the processes by which data was collected, stored, analysed and reported were examined to establish the robustness of the processes used and any misinterpretation that may have occurred as a result. Interviews were held with Wesfarmers personnel responsible for each data set and processes used to derive conclusions reported were demonstrated. Potential for errors in aggregation and interpretation were explored and consistency of approach for the purposes of reporting in this report was assessed.

The verification process used indicated:

- a high level of accuracy in the data presented. However, minor modification of some qualitative statements was required and slight adjustment of data was made to clarify the manner in which it was presented; and
- datasets were generally traceable and readily identified. During the audit, data trails were easily located and demonstrated and the aggregation and collation undertaken to reach conclusions were logically presented by the personnel responsible for undertaking those activities.

Overall, SMEC is satisfied that:

- the report is a fair and honest representation of the organisation's policies, management systems and performance;
- the numerical data presented in the report is valid and accurate; and
- the written statements in the report present an accurate representation of the results and progress achieved during the reporting period.

## General Findings and Recommendations

As a result of completing the verification process, the following recommendations are made:

- Wesfarmers seeks a consistent approach to measuring and reporting performance across all business units through striving to adopt best practice reporting standards. The continued implementation of the five-year improvement plan developed by SMEC in 2000/2001 and the integration of new global initiatives for reporting of environment, safety and health to include community and economic achievements will assist in this regard. However, consistency of approach

in reporting specific items across all business units continues to be a challenge and needs internal organisation wide standards to be agreed upon to deliver that consistency.

- Systematic collection and recording of data has benefited the reporting of specific items in a number of business units. Other units struggle to collate and aggregate data where the data is collected and recorded across a number of sections within the business unit, which raised some questions regarding the completeness of the information reported.
- Wesfarmers demonstrated best practice in the development of this report through the ongoing involvement of personnel across the organisation. This involvement included not only the personnel who prepared the report within each business unit but also a range of other personnel who were involved in data collection and management who provided input to the verification undertaken by SMEC. The level of ownership of the report and the information within it was very high in all instances and demonstrated a commitment to the integrity of the contents of the report. In light of organisational changes that were evident during the verification process, such commitment is to be commended.
- The introduction of new business units into this reporting framework will challenge personnel within those units as its development continues to progress. The ability of recently acquired units to meet the standard of reporting achieved by others is worthy of praise for the commitment to the reporting process that is evident in those units. New business units should be supported by those with experience in this reporting process to aid the maintenance of standards achieved to date by the existing reporting units.

The above findings represent a summary of the more detailed findings and recommendations presented to Wesfarmers.

For SMEC Perth,

**Brett Loney**  
Principal Environmental Scientist and Auditor  
BSc (Env. Sc.) PGradDip EIA.

For SMEC Victoria,

**Anne Bignell**  
Manager Environmental Services  
Senior Environmental Auditor (QSA)

20 November 2002



# Glossary

<b>Australian Competition and Consumer Commission (ACCC)</b>	The Federal Government's independent competition policy and consumer protection watchdog.
<b>Australian Standards (AS)</b>	National benchmarks for products and services.
<b>Environmental audit</b>	A programme to evaluate compliance with regulations, systems, programmes and policies.
<b>Gigajoule</b>	Unit of energy equivalent to 1,000,000,000 joules.
<b>Greenhouse gases</b>	Gases such as carbon dioxide, methane and nitrous oxide which contribute to retention of heat in the earth's lower atmosphere.
<b>Greenhouse Challenge</b>	The Federal Government's programme of cooperation between industry and government to reduce greenhouse gas emissions through voluntary action.
<b>International Organisation for Standardisation (ISO)</b>	ISO publishes internationally-agreed standards covering areas such as quality management (the ISO 9000 series) and environmental management (ISO 14000).
<b>Liquefied petroleum gas (LPG)</b>	A combination of, predominantly, propane and butane extracted from natural gas or as a by-product of petroleum refining.
<b>Liquefied natural gas (LNG)</b>	Comprising predominantly methane, it is produced from natural gas that has been purified, refrigerated and condensed to liquid form.
<b>Lost Time Injury (LTI)</b>	An LTI is any work injury which causes absence for one day or a shift or more.
<b>Lost Time Injury Frequency Rate (LTIFR)</b>	The main calculation we use to measure workplace safety performance. It is calculated by dividing the number of LTIs by total hours worked, multiplied by one million. Unless otherwise indicated, LTIFRs in this report do not include contractors. Another indicator, Average Time Lost Rate (ATLR), provides a measure of the severity of occurrences.
<b>National Used Packaging Covenant</b>	An agreement between the packaging supply chain industry and governments which sets guidelines covering the manufacture, supply, distribution, consumption and recovery/recycling of post-consumer packaging.
<b>National Pollutant Inventory (NPI)</b>	An Internet database designed to provide the community, industry and government with information on the types and amounts of certain chemicals being emitted to the environment.
<b>Overburden</b>	Unmineralised material overlaying coal deposits or ore bodies.
<b>Rehabilitation</b>	Treatment of disturbed areas to achieve a level of stability equal to that which existed before or to an alternative acceptable form.



Wesfarmers



# How can we improve this report?

Our goal is to continually improve the way we report on our environmental, health and safety performance and our community involvement. Your comments on our efforts are important so please take the time to give us your feedback.

**After completing the reply-paid form below, tear along the perforations and place in the mail. Please do not mark the blank area on the right of the form.**



	Yes	Generally	No
Did this report meet your <b>information needs</b> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you find the report to be <b>transparent and open</b> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you find the information <b>easy to understand</b> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you find the <b>information useful</b> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Poor	Good	Excellent
How would you rate our <b>environmental performance</b> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How would you rate our <b>health &amp; safety performance</b> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How would you rate our <b>community involvement</b> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Less favourable	Same	More favourable
How has this report <b>changed your opinion</b> :			
• of our environmental practices?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• of our health and safety practices?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• of our community involvement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**General comments** you would like to make about this report.

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What is your interest in this report?

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<input type="checkbox"/> Wesfarmers Contractor/Supplier	<input type="checkbox"/> Educator or Student
<input type="checkbox"/> Industry Advocate	<input type="checkbox"/> Special Interest Group
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