NEXT

Greg Payne, Station Manager – North, with his youngest son, Kieran, at Albion Downs Station, Western Australia. Our station managers' responsibilities include identifying opportunities for economic return while minimising impact on the environment.

Sustainability





WMC Limited

ABN 85 004 820 419 Level 16, IBM Centre, 60 City Road, Southbank, Victoria 3006, Australia

Telephone +61 (0)3 9685 6107 Facsimile +61 (0)3 9685 6100 Email sustainability@wmc.com

All WMC's public reports are available on the Internet (www.wmc.com).

This report focuses on matters from 1 January to 31 December 2001. The report refers to WMC Limited and its controlled entities, including Central Norseman Gold Corporation Limited (50.48 per cent owned and managed by WMC). On 14 January, 2002, WMC announced that Central Norseman Gold Corporation's shareholders had approved the sale of WMC's 50.48 per cent of Central Norseman to Croesus Mining. Management passed to Croesus on 17 January 2002, ending our 66-year association with the operation.

This report does not include any reference to the activities or operations of Alcoa World Alumina and Chemicals (AWAC), which is 40 per cent owned by WMC.

During the year WMC was the focus of considerable takeover speculation. More detail on this issue is available in the WMC Annual Report to Shareholders 2001, and on our website (www.wmc.com)

In September 2001, WMC sold the Three Springs Talc operation to Luzenac. On 30 November 2001, WMC finalised the sale of its Agnew Gold Operations and St Ives Gold to Gold Fields of South Africa. A summary of our performance for 2001, prior to the sale, is available on our website (www.wmc.com/sustain/index.htm).

This report is not intended to contain any legally binding representation.

All dollar amounts are in Australian dollars.



This icon indicates that more information is available on our website (www.wmc.com)

Contents

About WMC	3
From the Chief Executive Officer	4
Code of conduct	5
Overview	6
The value of reporting	6
Report scope	6
External verification	6
Sustainability and WMC	10
What is Sustainability?	10
WMC and the Global Mining Initiative	12
World Business Council for Sustainable Development	12
Business case for sustainable development	13
Hard issues	15
Community	15
Environment, health and safety	16
Economic performance	17
Community	18
Introduction	18
Our approach	18
Our Community Policy	18
Community engagement	20

Community development	20
Building relationships	21
Process management	22
Our community performance and commitments	22
Our people	26
Environment, health and safety	28
Introduction	28
Our environment policy	28
Our safety and health policy	28
Our approach	29
Our performance	30
Management systems	36
Meeting our commitments	38
Fatalities	39
Significant incidents	40
Our achievements	40
Key issues	42
Pastoral report	44
Future plans	45
Environment and safety data tables	46
Feedback	

Our behaviour-change program, Take Time-Take Charge, is reinforced with presentations by supervisors and with promotional material. Employees at our Kalgoorlie Nickel Smelter have been encouraging adoption of the program.

Graham Styles (left), Dean Schmidt, Rowan Harvey, Edith Heiberg and Helen Dickson.



This report was prepared with reference to the Global Reporting Initiative's June 2000 Sustainability Reporting Guidelines. The initiative's mission is to promote international harmonisation in reporting relevant and credible corporate economic, environmental, and social performance information to enhance responsible decision making. The Global Reporting Initiative pursues this mission through a multi-stakeholder process of open dialogue and collaboration in designing and implementing widely applicable sustainability reporting guidelines.

The initiative has not verified the contents of this report, nor does it take a position on the reliability of information reported herein. For further information about the initiative visit (www.globalreporting.org).

This year we opted to print a concise sustainability report, and focus on using the Internet as the primary vehicle for reporting more detailed information. This report contains that detailed information. The concise report provides an overview of our sustainability issues and performance, and a gateway to this full report and the site reports on the CD attached inside each report's cover.

HOME TOP SEARCH PREVIOUS NEXT CONTENTS PRINT 3 WMC Sustainability Report 2001

About WMC



Who we are

Established as an Australian gold exploration and mining company in 1933, WMC Limited is now a major global minerals explorer and producer with business interests in 16 countries.

We have grown WMC by expanding our asset base of copper-uranium, nickel, fertilizer and alumina, improving processes and targeting shareholder value. Our portfolio gives shareholders exposure to world-class mineral resources and a management team whose overriding goal is to increase shareholder value.

Long-term success requires more than world-class assets. It is achieved by highly skilled and motivated people, continual improvement, uniform processes, high standards of ethical conduct, responsible environmental and safety management and strong community partnerships.

Our vision

WMC is a minerals company determined to be BEST, symbolising our commitment to strive for optimal Bottom-line performance, Environment responsibility, Safety and wellbeing of our people and Teamwork.

Our values

Fundamental to creating and maintaining shareholder value is our commitment to:

- People constitute our single most important advantage.
 It is only through the combined efforts of our people that we will grow and prosper.
- **Integrity** is caring about how we get results. Committed to a future based on the fundamentals of our code of conduct. Ensuring our actions match our words.
- **Leadership** provides the environment for all our people to realise their potential and focus on our goals.
- Performance is continuously improving all that we do, measuring what is important and driving for excellence.
- **Innovation** is differentiating our business, we will be 'First to be First'.

WMC Code of Conduct

- We treat each other with respect and dignity.
- We respect the law and act accordingly.
- We are fair and honest in our dealings.
- We use WMC's property responsibly.
- We are accountable for our actions and their consequences.

Left: Pipework at our Mount Isa acid plant. **Below:** Mount Keith nickel concentrator.



NEXT

From the Chief Executive Officer

In reviewing our sustainability performance, I need to firstly acknowledge the tragic loss of two of our people, Zibi Kosowski and Phillip Steel. While our safety performance improves, we must challenge ourselves continuously to ensure our people are not harmed in the workplace. A major fire at Olympic Dam in October, while not seriously injuring anybody, serves as an important reminder to be vigilant.

We have come a long way since producing our first environment progress report covering the financial year 1994-95. We have reported in depth and, initially, separately on each triple-bottom-line aspect of our economic, social and environmental performance, to ensure the necessary quality and integrity in reporting each element. Having achieved that goal, this year we have consolidated our social and environmental reporting of our triple-bottom-line activities into a single report that sits alongside our financial/annual report as we move towards true sustainability reporting.

Much is happening in the industry including a prolonged period of low commodity prices, greater pressures to reduce costs and industry rationalisation. This leads inevitably to short-term responses. However, we continue to focus on longer-term sustainability issues, recognising that so-called 'soft issues', including environment and social issues, are fundamentally important to long-term business success. We continue to demonstrate solid improvements in our performance in these areas. However, our challenge is to engage more with our stakeholders. We have clearly moved from a world of 'tell me' to 'show me' and now to one of 'involve me'. This will require new skills and a greater responsiveness on our part.

The Global Mining Initiative, of which WMC is a founding member, is an example of our industry recognising that it needs to reposition itself (see page 12). The industry needs to be more responsive by way of its triple-bottom-line performance in line with changing community attitudes and

expectations. The initiative seeks to redefine the mining and metals industry's role as a positive contributor to sustainable development. We are fast approaching completion of the Mining, Minerals and Sustainable Development independent study on this topic and WMC continues to help shape the industry response and to put in place a sustainable development strategy.

I am delighted that WMC has been included in the 2001 Dow Jones Sustainability Index, based on their assessment of our sustainability performance and drawing, in part, on material presented in our non-financial public reports. WMC is also rated favourably with other ethical or socially responsible investment indexes. This reflects an acknowledgement by the financial sector that contributing to sustainable development can be an important indicator of a company that can deliver superior financial performance over the long term. However, I am still disappointed by the way some funds seek to impose moral judgements dressed as objective analysis, for example, excluding or down-rating WMC from indexes on the basis that we produce uranium or on the grounds of my public stance of challenging the scientific assumptions around climate change.

This report presents work in progress, describing our journey towards sustainable development. In this report we foreshadow the next stage on our journey: a commitment to develop WMC's Sustainable Development Strategy during 2002, including drawing on assistance from our External Advisory Group. While this report highlights many things we are doing which demonstrate our contribution to sustainable development, nevertheless, we need to firmly embed the integration of social and environmental considerations into our day-to-day decision-making, and demonstrate the business case for doing so. In this regard, I believe that the business case for pursuing such a strategy, company-wide, is becoming increasingly compelling.



Hugh M Morgan
Chief Executive Officer, WMC Limited

Hy. h. M.

HOME TOP SEARCH PREVIOUS NEXT CONTENTS PRINT 5 WMC Sustainability Report 2001

Code of conduct

A group of employees was selected to write the code ... to advise employees and contractors discreetly and promptly on processes to resolve ethical and conduct issues, and to ensure issues were resolved.

No issue defines a company's character better than its ethical conduct. The concept of a *WMC Code of Conduct* germinated in the early 1990s and, through the support of our board, management, employees and contractors, has evolved into our most valued and widely-supported document.

A group of employees was selected to write the code and, later, a committee was established to discreetly and promptly advise employees and contractors on processes to resolve ethical and conduct issues, and to ensure issues were resolved. Our managers are responsible for promoting the code; investigating, where necessary, to ensure the code is followed; and taking disciplinary action as required.

The code of conduct committee is chaired by an executive general manager and has three other appointed positions — an administrative assistant, the Executive General Manager responsible for Human Resources and a lawyer from WMC's Corporate Legal Group. Remaining members represent a cross-section of our people and sites. Over the years, 36 people have served on the committee, including two international representatives. Committee members usually serve for two or three years. The committee is working on a process to name four new members following the resignation of two members employed by WMC's recently-sold gold business, resignation of an international member who served on the committee for four years, and two resignations following redundancy and resignation from WMC.

The committee plans to meet two or three times per year, and its role is to:

• interpret the code and to provide advice to an employee or contractor on how best to respond to a specific situation

- advise managers or the Chief Executive Officer of any matters of importance
- review the code and recommend amendments to the Chief Executive Officer
- report to the Chief Executive Officer regarding application of WMC's operating policies and procedures relating to ethical issues
- raise awareness of the code
- report on code issues annually through the Chief Executive Officer to the WMC Board of Directors.

Misuse of the company's information systems including Internet abuse continues as a source of considerable management concern, particularly acquiring and distributing pornographic material. Clear guidelines have been established and distributed to all employees and contractors, and several policies and standards implemented which reflect the behaviour and values required by our code. During the year, disciplinary action was taken, and in some cases employment terminated, when the behaviour of a number of employees and contractors breached those policies and standards which form part of their contract of employment.

Over time, the committee provided advice on a range of issues including:

- A request for guidance on how to handle the personal collecting hobby of an employee, which overlapped with his WMC responsibilities.
- A sexual harassment charge levelled by an employee against a department manager.
- Misuse by a group of employees and contractors of WMC's Internet connection.

Brad Walker (left) and Ken Byers in the milling section of the Mount Keith nickel concentrator. Our employees re-commit annually to our code of conduct.



During 2001, the committee's principal effort was to update the *WMC Code of Conduct*, and revise the booklet, other pamphlets and web page. A history of WMC's code was distributed early in 2001 to all employees and contractors with an annual letter asking each to reconfirm that they committed to, and understood, the code. The code's updated web page can be accessed from www.wmc.com.

In late 2000 and early 2001, a company-wide employee perception survey demonstrated high awareness of the code. The survey highlighted employee opinion that some management practices were perceived to be inconsistent with the code at some sites.

The committee needs to address these findings, and will focus on two key issues during 2002:

- Improved understanding, by all employees and contractors, particularly senior management, of code issues through better and regular communication. The committee will use distribution of the updated WMC Code of Conduct, booklet and other pamphlets early in the year to reinforce the code's importance and behaviour that WMC values.
- Continued awareness-raising of code behaviour and ethical standards, particularly for new employees and contractors.

With Jack Parry, Executive General Manager – Exploration, retiring from the chair, a new chairman, Alan Dundas, Executive General Manager – Operations, was appointed in November 2001. As at 31 December 2001, the committee comprised seven members.

HOME TOP SEARCH PREVIOUS NEXT CONTENTS PRINT 6 WMC Sustainability Report 2001

Overview

The value of reporting

We believe that our reports provide a useful means of communicating our commitment to health and safety, the need to ensure high standards of environmental protection, and our approach to community issues to our employees and contractors, to their families and to our stakeholders. These reports are also a means of enhancing WMC's reputation as a leading resources company with a commitment to sustainable development, which adds to shareholder value by helping to maintain our licence to operate. Our reports help introduce us to potential host governments and funding organisations for new projects. They are also a means of differentiating us from our peers. We believe that the greatest value of these reports lies in their objectivity and openness – in our being willing to report not only our successes, but also our challenges, and past poor performance when we failed to perform to the standards set by, and expected of, us. We enhance our credibility by doing this, while identifying measures to address our failings, and providing third-party reviews of our performance by our External Advisory Group and external independent verification.

Report scope

In continuing our innovative approach to sustainability reporting, this year we have produced a single sustainability report encompassing our community, environmental, health and safety performance. This stands alongside our financial report. We have only published this full sustainability report and our site reports on our Internet web site. We have printed a limited number of a concise version of this report. The printed concise version includes a roadmap to our Internet site, and some key elements of the full report. Additionally, a CD is provided with the printed concise version which contains the full suite of reports.

We have done this in order to demonstrate cost reduction capability using a web-based publication platform.

Hopefully, other mineral companies, particularly those with fewer resources, will be encouraged to follow this path by reporting publicly, improving performance and enhancing the minerals industry's reputation.

This report is structured around the sustainability reporting elements, including independent verification, recommended by the Global Reporting Initiative. Established in 1979, the initiative is a multi-stakeholder international exercise tasked with developing sustainability reporting guidelines for voluntary use by organisations. Members of the initiative's steering group have included the UN Environment Program, the World Business Council for Sustainable Development and various non-government organisations. Sustainability guidelines were released in June 2000. They describe reporting principles and approach as well as outlining suggested content of a sustainability report (see www.globalreporting.org). The content is not sectorspecific, with supplementary guidelines yet to be produced detailing reporting performance indicators for key sectors, including mining. While other public reporting groups have developed reporting criteria, Global Reporting Initiative's sustainability guidelines are likely to become the international reporting benchmark.

External verification

This is the fifth year that we have contracted PricewaterhouseCoopers to verify our reported non-financial information. During this period, the information we report, systems from which that information is extracted and scope of our reporting has changed. These changes parallel our management and reporting vision as we move to integrate corporate and site reports addressing our community, environmental, health and safety performance.

Ammonia plant at our Queensland Fertilizer Operations.



DATA CONSULTANT'S COMMENTS

This is the sixth year that Energetics has been working with WMC on the environmental data elements of their non-financial public reports and the Greenhouse Challenge reports. WMC continues to improve its data collection and reporting processes by moving towards site-based reporting, identifying gaps and highlighting areas where improvement can be made. This enables sites to determine their own issues of concern, report against parameters that are relevant and important to their operation. It also encourages them to assess future impacts when setting new targets.

The key challenge that the WMC operations face is further integration of data management, analysis and target setting into the business planning process. Sites are in the process of assessing suitable indicators and developing targets that are more reflective of their individual operations and will assist in better management of their business.





Left: Our external advisory group provides advice on development of our sustainability reporting Jim Joy (left), Ian Lowe, Tricia Caswell and Alister Maitland. Absent: Gatjil Djerrkura.

Below: Gatjil Djerrkura joined our external advisory group in 2000.



EXTERNAL ADVISORY GROUP

This year we said goodbye to John Hyde and Francis Grey who made a strong contribution to our External Advisory Group. During the year, Professor Jim Joy, Minerals Industry Safety and Health Centre, The University of Queensland, has joined Tricia Caswell, Gatjil Djerrkura, Alister Maitland and Ian Lowe in the group. Professor Joy strengthens the group's focus on health and safety matters. The group met four times during the reporting cycle to review reports, and visited our Mount Keith open-cut nickel mine in Western Australia.

External Advisory Group comment

The External Advisory Group has advised WMC during the year on the preparation of this report. We have gathered our understanding of the company and its practices through discussions with staff at all levels, through site visits and from the report itself. We do not conduct the equivalent of an accounting audit, but believe this report gives an accurate and fair account of the issues raised and that nothing significant has been deliberately omitted. The External Advisory Group has a range of skills and experience that gives us confidence in this belief.

Environmental reporting and auditing is a developing science. The techniques are still emerging. WMC continues to become more exacting in this work using the contemporary expertise and high standing of PricewaterhouseCoopers and Energetics to verify their reporting.

This Sustainability Report is a significant step toward integrating the various aspects of sustainable development into the corporate culture of WMC. We believe the company's commitment is shown by its efforts to foster a culture of change and respect, to deal properly with sustainable development issues – environmental, social and economic – as they apply to WMC's work.

The path to sustainability will be a long one. There are significant areas where WMC needs to progress. We would like to see WMC assuring the community that it has a solid long-term resource base, has a commitment to responsible product stewardship and is working hard to alleviate its contribution to such environmental problems as global climate change. We would also like to see steps to ensure the new culture is embedded thoroughly at all levels of the company.

Finally, we respect WMC's interest in stating its position on matters of public policy as it has in this report in regard to greenhouse gas abatement. This does not mean that members of the External Advisory Group agree with these opinions or with each other on these issues, but we acknowledge WMC's right to its opinions and to be part of the debate.

 HOME
 TOP
 SEARCH
 PREVIOUS
 NEXT
 CONTENTS
 PRINT
 8 WMC Sustainability Report 2001

Independent Assurance Statement to WMC Limited Management

INTRODUCTION

PricewaterhouseCoopers is a global professional services firm which provides independent audit and other assurance services. Using specialists in the fields of environment, community, health and safety we adopted an independent assurance approach that, in the absence of generally accepted international standards for providing assurance over sustainability reports, reflects emerging practices and guidance including:

- local and internationally recognised financial and environmental auditing standards
- the assurance principles proposed by the Global Reporting Initiative.

Our independent assurance team has an established understanding of WMC Limited (WMC) through providing assurance services to 14 of WMC's operations over the past five years (see page 37). During the reporting period, we regularly liaised with WMC functional managers and staff and the External Advisory Group.

SCOPE AND OBJECTIVE

The information included in the WMC Limited Sustainability Report 2001 and the reports of the Selected Operations as defined below (the Reports) is the responsibility of WMC management who requested that we provide independent assurance of the information presented in the Reports.

We selected the Kambalda Nickel, St Ives Gold and Olympic Dam operating sites and the corporate functions for the assurance process. Based on our findings from the operating sites, the External Advisory Group recommended to WMC that Mount Keith Operations also be included (the Selected Operations). We do not express any conclusion on WMC's other operations.

The objective of our assurance process is to provide WMC management with an independent opinion on the:

- completeness and accuracy of the performance data in the Reports
- statements made in the Reports.

PERFORMANCE DATA

We examined on a sample basis the completeness and accuracy of the data in the Reports for the Selected Operations and the transcription and aggregation of data at the Company level by:

- considering the reliability of the systems and processes for data collection, collation and aggregation
- testing back to supporting information
- testing formulae, arithmetic accuracy and graphical representation
- assessing assumptions and estimates.

Conclusion -

Based on the results of our assurance procedures, we believe that in all material respects, the data presented in the Reports is complete and accurate.

STATEMENTS MADE IN THE REPORTS

We examined on a sample basis the statements made in the Reports including:

- achievement of objectives
- commitment to future objectives
- implementation of the Australian Minerals Industry Code for Environmental Management (the Code) at the Selected Operations

We also considered the scope and objectivity of the information presented in the Reports to determine whether the information was consistent with findings from our assurance procedures and interviews with relevant WMC management and staff.

Conclusion -

Based on the results of our assurance procedures we believe that in all material respects, the statements made in the Reports present a fair and objective view of WMC's environment, community, health and safety management performance for 2001.

WMC had undertaken to perform a stakeholder engagement process during 2001 but this was postponed due to competing business priorities. Once undertaken, this process should assist WMC provide more comprehensive coverage on significant stakeholder issues in future reports.

PROGRESS

Limited progress has been made during the reporting period to improve existing systems and controls used for the generation of information for the Reports. It is acknowledged WMC is re-defining their criteria for assessing performance to improve the measurement, reporting, monitoring and evaluation of sustainability related performance. WMC has also committed to greater involvement of the External Advisory Group in the future direction of WMC's sustainability strategy.

Pricewatcherse Cooper.

PricewaterhouseCoopers Global Risk Management Solutions

Nick Chipman, Partner Melbourne, 6 March 2002

PWC'S APPROACH TO VERIFICATION

Verification provides assurance to the report readers that assertions made by the reporting entity are supported by sufficient appropriate evidence. Procedures used included:

- Planning the verification and tailoring the verification approach to WMC.
- Understanding relevant processes and significant community, environment, health and safety issues.
- Reviewing the development and implementation of management systems and information collation systems that will influence the completeness, accuracy and integrity of the reported information.
- Assessing the adequacy of controls to ensure information timeliness, accuracy, completeness and consistency.
- Sampling reported quantitative data including monitoring procedures, metering or manual recording processes, recalculating etc.
- Sample review and substantiation of reported qualitative information based on our understanding obtained from the above points.
- Review report content and context.

Electronic Reporting

Matters relating to the electronic presentation of the WMC Limited Sustainability report 2001

This verification report relates to the WMC Limited Sustainability report of WMC Limited for the period ended 31 December 2001 included on WMC Limited's web site. The Company's directors are responsible for the integrity of the WMC Limited web site. We have not been engaged to report on the integrity of this web site. The verification statement refers only to the Sustainability Report 2001 identified below. It does not provide an opinion on any other information which may have been hyperlinked to/from the Sustainability Report. If users of this report are concerned with the inherent risks arising from electronic data communications they are advised to refer to the hard copy of the verified Sustainability Report 2001 to confirm the information included in the verified Sustainability Report 2001 presented on this web site.



HOME TOP SEARCH PREVIOUS NEXT CONTENTS PRINT 10 WMC Sustainability Report 2001

Sustainability and WMC



Barry Cloutt, Metallurgy Manager – Kambalda Nickel Operations, inspects innovative profiling of the tailings storage facility. The new work aims to encourage rehabilitation on the slopes and limit erosion.

We recognise that to fully achieve sustainable development outcomes, and to pursue the associated business benefits, we need to enhance our strategic approach.

What is Sustainability?

WMC has embraced the 1987 Brundtland definition of sustainable development which refers to development which meets the needs of the present without compromising the needs of future generations. From our perspective, this translates into measurable outcomes such as:

- operating in a safe, environmentally and socially responsible manner
- improving the quality of life through our products and services
- decreasing our environmental footprint along the value chain
- providing positive and increasing societal and shareholder value.

There are many aspects of what we are already doing which set us on a path towards sustainable development. These include:

- our code of conduct, ethics and company values
- safety, health, environment and community policies
- a culture of openness and transparency
- training and support for employees
- supporting management systems and standards of practice
- engagement with our communities and broader stakeholders
- superior social and environmental performance, as recognised by the Dow Jones Sustainability Index (see page 13), as well as operating a profitable business.

This is best illustrated in the accompanying diagram showing the overlapping social, environmental and economic aspects of our business and the activities around which we report.

We have described a four-phase path to sustainable development. This culminates in our organisation being able to fully and openly account for the economic, social and environmental aspects of our business activities while operating within a governance framework of the *WMC Code of Conduct*, ethics and company values. We already report on some of the sustainability performance indicators shown, but not all.

After discussions with our External Advisory Group, we consider ourselves to be between phases two and three of this conceptualised sustainability path. Accordingly, we have some way to go before claiming that all of our key business decisions are made in full consideration of their social, environmental and intergenerational consequences.

We recognise that to fully achieve sustainable development outcomes, and to pursue the associated business benefits, we need to enhance our strategic approach. We need a clear vision for the contribution WMC can make to sustainable development, supported by a culture of fully integrating environmental and social considerations in all our business decision-making. We are not there yet. The end of 2002 is our self-imposed deadline for establishing our sustainable development strategy. In completing this task, we plan to seek advice and assistance from our External Advisory Group.

Expectations about the benefits of development to society have risen sharply. Society looks for, and expects, business to be a long-term, net-positive contributor to economic, social and environmental wellbeing; in effect a net-positive contributor to sustainable development. As a result, the sustainable development issues faced by companies like ours are more complex as we seek to make a satisfactory return for our shareholders and ensure our own sustainability. Our continued licence to operate and access to resources depends critically upon our acceptance by communities within which we operate.

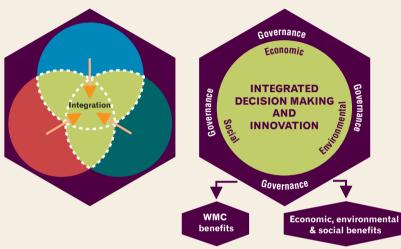
Hugh M Morgan, CEO

Keynote address – Australian Minerals and Energy Environment Foundation Conference, Melbourne 6 December 2001

WMC'S PATHWAY TO SUSTAINABLE DEVELOPMENT







Long-term shareholder value Licence to operate WMC contributing fully to Sustainable Development

Is WMC here?

Phase 1

A company in which financial and technical issues predominate.

Governance issues focus on legislative compliance.

Senior management's focus is on minimising liabilities and responding to those external pressures that have the potential to damage company reputation.

A closed culture.

Phase 2

A company whose management starts to view environmental and social aspects as more than just adjuncts to business. Moving towards the triple-bottom-line: accounting for economic, environmental and social factors.

Developing systematic approaches to managing community, environmental, health and safety management.

Approaches include policies, standards and performance measures.

Emergence of an open and transparent culture, including non-financial public reporting.

Phase 3

A company which has successfully extended triple-bottom-line considerations beyond corporate management into its operational areas. A commitment to a sustainable development strategy and develop continuous disclosure of sustainability performance. Company values and a code of conduct underpin decision making.

Adopting integrated risk management approaches. Setting stretch performance targets to minimise environmental impacts, reduce waste, and strengthen community partnerships and trust through engagement and openness.

Phase 4

A company which views the environmental and social aspects of business as opportunities for growth to sustain long-term shareholder value.

A company which addresses sustainability challenges through innovative solutions and is responsive to changing community expectations.

Environmental and social considerations are fully integrated into day-to-day business decision making.

POSSIBLE PERFORMANCE INDICATORS

Social responsibility

Social and cultural diversity Employee commitment Community partnership Safety and health Stakeholder engagement Community investment Capacity building

Economic benefit

Revenues
Earnings
Net cash flow
Shareholder return
Access to capital
Taxes and royalties
Return on capital

Environmental stewardship

Waste management
Emission reductions
Product stewardship
Energy and resource conservation
Technology
Biodiversity conservation

Governance

Code of conduct
Company values and behaviour
Policies
Management systems
Standards and guidelines
Openness and transparency
Reporting
Integrated risk management



Left: Nickel concentrate bubbles

Right: A sprinkler is used to reticulate acid on top of the gold heap-leach stockpile at St Ives.

WMC and the Global Mining Initiative

Two years ago, WMC joined other major international minerals companies in the Global Mining Initiative. The major driver was the mining and metals industry, worldwide, being judged on past poor performance of a few, and our industry's need to be more responsive to changing community attitudes and expectations. We operate in a complex world where sustainable development issues can have a critical effect on our access to new resources, 'licence to operate' and consumer demand for minerals. Increasingly, our industry is being asked to demonstrate its net contribution to sustainable development. Issues include disposing of industry wastes, environmental performance, the fair distribution of economic benefits, human rights, community consultation, and product stewardship.

The Global Mining Initiative has three elements:

- A two-year, independent Mining, Minerals and Sustainable
 Development study, funded by the industry at arm's
 length through the World Business Council for
 Sustainable Development. To be released publicly in April
 2002, the study will view industry performance objectively.
 It will also suggest ways forward on sustainable
 development issues, including sharing mineral wealth,
 contributing to improving community-level livelihoods,
 land access and use, biodiversity conservation, and industry
 governance including voluntary codes of practice.
- While the report sponsors are primarily mining and metals industry companies, they also include government and business. The work is supported by regional studies examining sustainable development issues most relevant to that region. Extensive dialogue with all stakeholders has been a feature of some regional processes. The Assurance Group, a distinguished body of 25 people mostly from outside the mining industry, peer reviews the work to ensure independence and integrity. The Assurance Group includes Tricia Caswell, a member of WMC's External Advisory Group.

- Establishing a new industry association: the International Council on Mining and Metals. The council's Secretary General is an eminent conservationist, Dr. Jay D. Hair, who has led two of the world's most prominent environmental organisations. The council is to be the clear and authoritative global voice of the world's mining and metals industries, developing and articulating their case for sustainable development. It will be our industry's principal point of global engagement with stakeholders. The council will also assist our industry to align its economic, social and environmental goals and so maximise its contribution to the challenges of sustainable development. Importantly, the council will be a chief executive officer-led organisation to drive change and improve our industry's sustainable development performance. Our Chief Executive Officer, Hugh Morgan, is an executive member of the council, which replaces the International Council on Metals and the Environment, reflecting a broader charter around sustainable development issues.
- An international minerals conference in May 2002, in Toronto, Canada. Chief executive officers of most major minerals companies and representatives from government, international organisations and communities will attend the conference. Mining, minerals and sustainable development outcomes will be discussed, and a forum provided for setting the industry's sustainable development agenda, to be coordinated through the International Council on Mining and Metals.

The Global Mining Initiative will conclude with a global conference on mining and sustainable development, leading up to the World Summit on Sustainable Development to be held in South Africa in September 2002, to mark the tenth anniversary of the Rio Earth Summit. Further information on the initiative can be obtained at (www.globalmining.com).



World Business Council for Sustainable Development

WMC is an active member of the World Business Council for Sustainable Development, which comprises 160 international companies from 30 countries and more than 20 major industrial sectors (see www.wbcsd.ch). The council aims to:

- be a catalyst for change, serve as a forum for leading business people to exchange ideas and best practice
- foster closer relationships between business, government and other organisations
- create framework conditions for business to remain competitive while contributing to sustainable development.

WMC is an active member of the council and our Chief Executive Officer, Hugh Morgan, serves on its executive committee.

Consensus was never the aim of the Mining, Minerals and Sustainable Development project. It is the process that has been embarked upon which is important – the start of ongoing dialogue that will lead to improved performance by the industry and greater understanding of differing points of view through engagement between all of the parties with interests in the mining and mineral processing cycle.

Hugh M Morgan, CEO

Keynote address – Australian Minerals and Energy Environment Foundation Conference, Melbourne 6 December 2001 HOME TOP SEARCH PREVIOUS NEXT CONTENTS PRINT 13 WMC Sustainability Report 2001

Business case for sustainable development

Our committment to sustainability enhances our reputation with stakeholders. This can help secure our 'licence to operate' by maintaining approvals at existing sites, allowing us access to new resources, giving us better access to capital, and lessening regulatory or licence requirements. It also helps us attract higher-quality employees who want to work for a progressive company. Leadership by senior management — in driving us towards sustainable development — also helps improve our environmental, health and safety performance and ensures better relationships and partnerships with our host communities.

WMC is listed as a sustainability leader in the non-ferrous metals (ex aluminium) sector of the 2001 Dow Jones Sustainability Index (DJSI). Being selected as a company committed to sustainable development in this index potentially increases investor demand for our stock. During the five years to August 2001, the Dow Jones Sustainability Index, with annualised returns of 15.8 per cent, outperformed the Dow Jones Global Index at 12.5 per cent. The sustainability index consists of the leading 10 per cent of companies in sustainable development, in 68 industry groups, in 21 countries [source: The Business Case for Sustainable Development published by the World Business Council for Sustainable Development, 2001].

Extract from the DJSI 02 Company Report

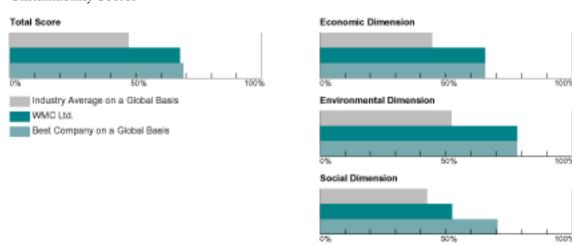
Sustainability Leader Member of DJSI World

WMC Ltd. Non Ferrous Metals (ex Aluminium)

Sustainability Performance

The overall company score reflects the strong leadership WMC showed as an early adopter of sustainable development in the mining industry positions the company amongst the leaders in the industry. WMC actively participates in the Global Mining Initiative to explore the implications of sustainable development for the minerals industry on a worldwide basis and has gradually widened its reporting framework to address financial issues along with safety, health and the environment. In its safety and health report the company openly addressed the past performance of the mining industry and contrasted it with the new approach of prioritising safety over other concerns. Through programs like "One WMC" there is also an active commitment to improving the quality of teamwork within the company. In the economic and environmental dimensions, WMC scored among the best in its industry group however its scoring on the social dimension suggests that there is room for improvement.

Sustainability Scores



Industry Group Overview: Non-Ferrous Metals (ex Aluminium)

The relative positioning of components within each industry group on a global basis is illustrated below based on cluster scores of the economic, environmental and social dimensions. Companies with identical cluster scores are listed alphabetically, and the sector leader is listed first.





SAM Research*

Zollikerstrasse 60 CH-8702 Zollikon-Zurich Phone +41 1 397 10 32 (direct line) +41 1 397 10 10 (switchboard) Fax +41 1 397 10 50 E-mail tatjana@sam-group.com

Internet www.sam-group.com,

www.sustainability-index.com

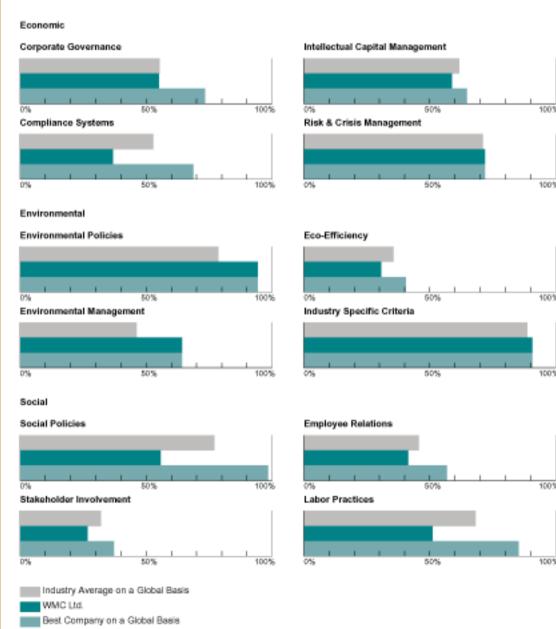
See also http://www.sustainabilityindexes.com/djsi_world/sectors.html

for an explanation of the assessment criteria.

*SAM Research is the organisation that undertakes the DJSI assessment.

Company Performance vs. Industry Average for Specific Criteria

The following bar charts highlight the performance of WMC Ltd. Compared to its industry average and best performing company for selected criteria. The criteria selected cover each of the corporate sustainability dimensions: economic, environmental and social.



HOME TOP SEARCH PREVIOUS NEXT CONTENTS PRINT 15 WMC Sustainability Report 2001

Hard issues



Left: WMC is a supporter of the new Mining Hall of Fame in Kalgoorlie, Western Australia. The complex is an opportunity to showcase industry innovation and acknowledge mining's contribution to society.

Right: Local Miao women, Yunnan province, China, where we have been conducting mineral exploration.



Community

WMC is committed to balancing its business needs with the needs of those communities in which it operates around the globe. The way we do business involves respecting community views and contributing to their activities.

STAKEHOLDER ENGAGEMENT

To be an effective and proactive community member, we must understand the needs and expectations of those communities in which we seek to operate.

While we collect information from our stakeholders on their perceptions, issues and expectations, we have not yet collected data in a systematic and measurable manner.

Our ongoing interaction with stakeholder groups includes:

- community relations coordinators and operations managers working with individuals and community groups
- community participation teams working with local groups
- Corporate and Community Affairs personnel maintaining relationships with national and local government, media representatives and interested community groups
- the WMC External Advisory Group providing broad external opinion and feedback on our public reporting
- participating in formal indigenous liaison committees
- participating in the Global Mining Initiative (see page 12)
- participating in relevant industry associations
- individual staff who voluntarily participate in local groups and organisations
- feedback we receive via our Internet site.

In our 2000 report, we stated an objective to conduct a survey, planned for 2001, to better understand community stakeholder issues, perceptions and expectations of WMC.

We commissioned PricewaterhouseCoopers to survey our Australian operations. They proposed a questionnaire aimed at local residents, business owners, staff members, families of staff, local indigenous community representatives, and national, state and local government representatives. We also planned to survey NGOs, industry bodies, special interest groups and WMC staff in Perth and Melbourne.

Low commodity prices, the sale of our gold and talc assets, takeover speculation and our planned demerger in 2002 led us to postpone the survey, which we hope to undertake when this period of change has run its course and we can be confident that such an initiative will produce a meaningful baseline.

INDIGENOUS EMPLOYMENT INITIATIVE

Our Indigenous Employment Initiative aims to equip trainees with the skills to secure and sustain employment. At the initiative's launch in 2000, we undertook to have 100 indigenous people employed at our operations by mid-2002. By December 2001, we employed 76 indigenous people in Australia.

Selling three sites in Western Australia in late-2001, reduced our employment opportunities in that state. At Olympic Dam, the initiative's introduction was postponed until 2002, due to takeover speculation and our planned demerger which consumed much of our management capacities.

We do not guarantee employment for indigenous trainees at the end of their training — we aim to equip each trainee with the skills and ability to secure employment on their own merit. We will only schedule pre-employment courses when we are sure there will be vacant positions for which graduates can compete.

Though curtailing future training would be a negative step, we will continue to provide pre-employment training but within the vocational stream of senior secondary education. This still allows us to provide skills and experience to indigenous students, albeit as credit towards their secondary school graduation rather than for immediate employment. When we are sure that vacancies are likely to exist for our graduates, we will again schedule training.

SPONSORSHIPS AND DONATIONS

WMC contributes financially to the communities in which it operates through employment, business opportunities, sponsorships and donations.

Sponsorships and donations are allocated at corporate, business unit, functional and operational levels, and through the WMC – Sir Lindesay Clark Trust Fund. Not having a consistent company-wide approach, and not always including expenditure associated with our community development activities, meant we could not accurately measure or report our total expenditure.

In November 2001, we contracted an external consultancy to review our sponsorship and donations practices. Their recommendations – which will enable us to apply a consistent WMC-wide approach and accurately report our total expenditure – are under review. Our plan is to introduce these standards and guidelines in early 2002.

HOME TOP SEARCH PREVIOUS NEXT CONTENTS PRINT 16 WMC Sustainability Report 200

Hard issues



Left: Steve Prynne, Process Technician – Kwinana Nickel Refinery, inspects operation of the Baldivis staging pond.

Right: Ben Crosby, Crane Operator, at work in the Olympic Dam copper refinery.

Environment, health and safety

We face significant challenges in achieving environmental excellence and our aim of incident- and injury-free operation.

ENVIRONMENTAL MANAGEMENT

Expectations

We continue to suffer an unacceptably high number of environmental non-compliance incidents – mainly small spills and unplanned emissions. Once considered a normal consequence of mining and minerals processing, such incidents are no longer acceptable.

Ultimately, our aim is to eliminate these incidents. Our first target is reducing incident numbers during 2003 by two-thirds compared with 2001. This will require investment in our facilities and a change in our people's culture and behaviour.

Mine closure criteria

Our ability to progressively rehabilitate, and to finally close sites, is often hampered by the lack of agreed closure criteria with regulators. Generally, when regulators set criteria well before closure, they are often so strict as to be uneconomical. Our challenge is achieving agreed closure criteria that meet all stakeholder requirements.

HEALTH MANAGEMENT

Health exposure standards

We have control programs to protect our people from potential exposure to harmful chemicals and materials. We design controls and protection procedures to meet the generally conservative statutory exposure standards for these materials.

Our challenge is to set company exposure standards that provide further levels of protection, but do not overly constrain our operations and burden our people with unnecessary controls and protection. We choose to operate with maximum exposure levels that are one-third of statutory standards.

Our products

Some believe certain metals and metal products present an unacceptable risk to human health and the environment and should be banned or restricted. An example is not using nickel in jewellery and coinage — as it may pose a skin sensitivity risk in some people.

Some believe waste disposal and nuclear proliferation issues outweigh the benefits from greenhouse-free nuclear power and the medical isotopes made available by the nuclear industry.

We are working through the International Council on Mining and Metals to meet this challenge and to encourage policy makers to apply sound science and risk assessment in regulating metal use and disposal.

SAFETY MANAGEMENT

Eliminating fatalities

Many activities in the minerals industry are inherently hazardous. While we invest considerable resources in standards to control major hazards, we continue to suffer fatalities. An ongoing challenge is extending our standards and controls to cover every activity with potential to kill or seriously injure our people. Our efforts must be focused and relentless.



Behaviour and culture

We still suffer an unacceptable number of injuries despite achieving a significant reduction in injury rates over recent years. Generally, injuries are not a result of equipment design or lack of procedures. They occur while doing routine work, in a good environment; usually a procedure covers the work, and Job Safety Analyses are completed. Injuries often occur when people bypass procedures or fail to recognise and control hazards associated with their activities.

Our challenge is to have all our people understand the critical role they play in their own safety.

GENERAL MANAGEMENT

Our people

Our professional and support staff are critical in managing environmental, health and safety issues, achieving objectives, and improving practices and organisational culture.

Disappointingly, we suffer a relatively high turnover of these personnel largely due to lifestyle and professional development issues – a situation worsened by high demand for such professionals throughout the minerals industry.

We have a significant challenge in attracting and retaining good environment, health and safety people – especially with our corporate uncertainty during the demerger process and takeover speculation. However, this is a challenge we must meet to achieve our objectives.

HOME TOP SEARCH PREVIOUS NEXT CONTENTS PRINT 17 WMC Sustainability Report 2001

Economic performance



Performance analysis

There were significant achievements in a difficult operating environment which include meeting key financial targets, such as debt repayment, reduced capital expenditure and share price growth in a depressed commodity market. Low prices, low production, with some operational issues, combined to reduce profits. However selling gold and talc assets for above-market expectations contributed to our bottom-line result.

Profit after tax was \$401.7 million, down from \$764.9 million in 2000. Profit after tax before significant items was \$308.5 million, down from \$741.1 million in 2000. This profit decrease was driven by a global economic slowdown, compounded by 11 September terrorist attacks in the USA, which reduced demand and substantially reduced prices for our products.

Several significant events had an impact on our results. A fire, in October, in the solvent-extraction plant at Olympic Dam resulted in a \$50.3 million after-tax charge for assets write-off and reduced copper and uranium oxide production. The weakness in the global aluminium market resulted in an \$80.9 million after-tax write-down of AWAC refining and chemical assets. Selling the Agnew and St Ives gold operations and closing associated commodity and currency hedging, selling Three Spring Talc operation and our equity interest in Mondo Minerals resulted in a profit of \$241.1 million after tax.

Sales revenue was \$2,796.9 million, a fall of 9.6 per cent from \$3,092 million for 2000, again due to lower prices and reduced production.

Depreciation and amortisation charged to profit was \$613.9 million compared to \$528.5 million for 2000, reflecting the first full year of charges for Queensland

Fertilizer Operations and increased amortisation of mine development at gold operations associated with increased production.

Net interest expense was \$140.9 million, compared to \$148.1 million of interest expensed for 2000. This lower interest charge reflects reduced average debt levels during 2001 and \$24.9 million of interest capitalised associated with Queensland Fertilizer Operations during 2000.

Cash inflow from operating activities was \$943 million, a decrease from \$1,172.5 million for 2000, principally due to lower prices. Cash inflow from investing activities was \$290.8 million, principally due to gold and talc assets sales amount-ing to \$610.2 million. This compares with an outflow of \$419.3 during 2000.

Cash inflow from operating and investing activities of \$1,233.8 million was used to reduce net borrowings by \$778.3 million and pay \$396.4 million in dividends. During 2001, we raised \$67.6 million of equity as a result of employees exercising their options.

Balance sheet management focused on reducing debt. Total liabilities decreased to \$5,158.9 million from \$5,681.5 million in 2000, principally due to the reduced borrowings, down \$622.3 million to \$2,322 million, and \$111.0 million of deferred realised profits from the 1998 gold hedge close-out. This was partially offset by an increase of \$327.1 million in payables due to the revaluation of existing hedge contracts at a lower exchange rate. Lower debt reduced our gearing ratio to 30.3 per cent.

Total assets decreased to \$10,012.3 million from \$10,371.2 million for 2000, principally due to the asset sales. This was partially offset by an increase in deferred hedging losses of \$309.4 million associated with the lower A\$/US\$ exchange rate as at 31 December 2001.

Capital expenditure was \$456.9 million, a reduction of \$11.7 million from \$468.6 million for 2000. This was largely due to reduced expenditure on our fertilizer operations.

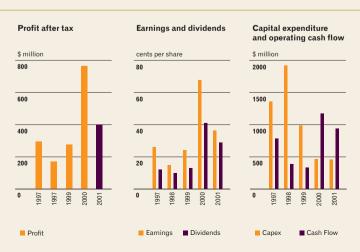
Left: Stainless steel pipework at our Mount Isa acid plant.

Shareholder returns fell as a result of the weak commodity prices. Dividends of 29 cents per share were declared, compared to 41 cents for 2000. Return on equity fell to 8.3 per cent, from 16.4 per cent in 2000. Our shares traded between \$6.58 and \$10.22, ending the year at \$9.55. This was higher than the \$6.12 to \$8.91 range during 2000 and that year's end of \$7.66. The price increase was due to the market recognising the value of our assets following Alcoa's approach, and was supported by the market's anticipation of economic recovery later in 2002.

After balance date, WMC made a \$27.2 million pre-tax profit from selling its 50.48 per cent interest in Central Norseman Gold Corporation Ltd, via a scheme of arrangement between Central Norseman and Croesus Mining NL.

In January 2002, WMC received \$71 million from closing out interest rate swap hedge positions.

These transactions have not been brought to account as at 31 December 2001.



Community



Introduction

For WMC, sustainability is about satisfying the triple-bottomline of social, environmental and economic performance, sometimes described as 'people, planet and profits'. In this concept, social equity and environmental quality are as important as economic performance. By focusing on all three areas we improve our capacity to operate competitively.

To create enduring and mutually beneficial community partnerships we must act for the long term. Such an approach challenges us to find the best ways to engage communities to better understand their aspirations and needs. We also need to encourage them to understand our objectives, and agree and implement community development initiatives that deliver genuine benefits for all stakeholders.

This section reports on our community performance during 2001, reviews our delivery against commitments, highlights disappointments and achievements and reviews key issues.

Our approach

Our communities are essentially self-defining, and involve all who are interested in or affected by our activities.

These include:

- our employees and contractors
- our shareholders
- individuals, either alone or as members of larger interest groups
- local 'host' communities
- indigenous people

- representative bodies
- issue-specific pressure groups
- non-government organisations
- industry associations
- politicians and government authorities
- international communities
- our customers
- our suppliers.

Our community activity involves engaging, developing and building relationships. It is appropriate to every stage in the mining cycle from early exploration to close-out and shut-down.

We believe that there is a clear link between successfully managing community activities and business success. We seek to add value to our communities, and to our company, by creating and maintaining long-term relationships, and by developing, implementing and managing a comprehensive community relations program for the mutual benefit of all involved.

Our approach can be summarised as seeking to:

- engage and ensure there are no surprises
- encourage informed consent
- deliver long-term sustainable outcomes
- build capacity, not dependencies
- create partnerships and environments which support the mutual achievement of community and WMC goals
- build community capacity and skills that can be transferred to other purposes post-mining
- leave genuine legacies through the transfer of human, social and financial capital.

To achieve this, we must ensure that our community focus and activities are consistent with, and complementary to, WMC's mission and objectives. The model, on page 19, shows the flow from corporate vision and mission to specific community plans, objectives and programs.

Left: Visitors in the prospecting gallery of the Mining Hall of Fame, Kalgoorlie. We sponsor the mining hall web site (www.mininghall.com).

Our Community Policy

As an integral part of the community, we recognise and act on our responsibilities. We work with communities to develop and nurture positive relationships built on mutual understanding and respect.

Building these relationships into long-term partnerships is essential for our business success. To achieve this we:

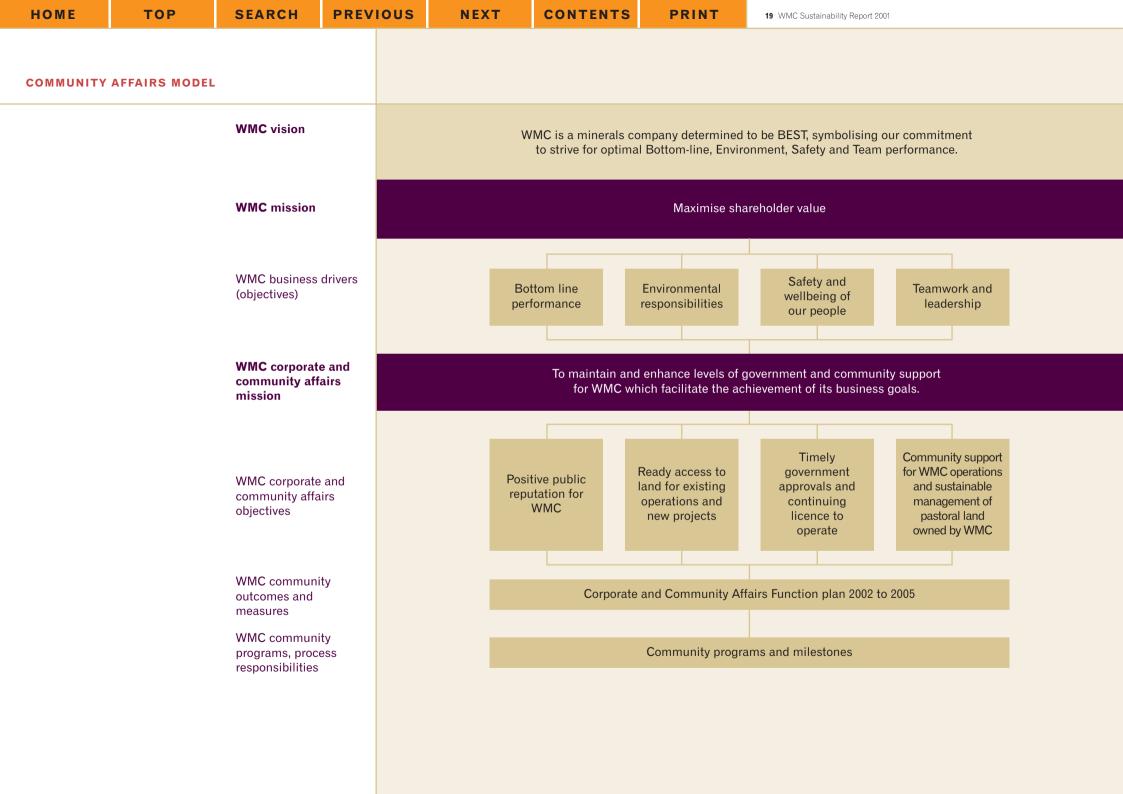
- value and respect human rights
- engage by listening, considering and responding
- communicate in an open and transparent manner
- respect cultural diversity and protect cultural heritage
- require our behaviour to be consistent with this policy.

As we invest in exploration, development, production and closure we, in consultation with host communities, government authorities and other organisations:

- encourage and support community development
- encourage and support initiatives to enhance social benefits such as environment, health and education
- identify and facilitate opportunities for employment, training and business relationships directly and through our contractors and suppliers.

We monitor, continuously improve and publicly report our activities and our performance.



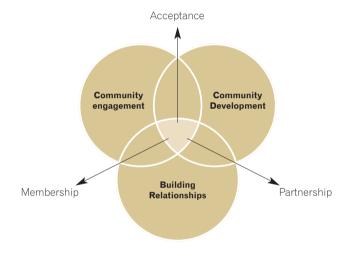


Nathan Mahoney (left), Tegan Lewer and Kylie Staak use computers donated to the Healy State School in Mount Isa by WMC Fertilizers.

Community Relations Activities

There are three core components of our community activities:

- community engagement
- community development
- building relationships.



This framework helps focus our efforts, and facilitates our community acceptance, membership and partnership. We have identified six key streams that are of mutual interest:

- community services
- environment and heritage
- education
- training
- employment
- business.

All of our community activities are consistent with one or more of these key streams.

We focus our development efforts on initiatives that will build community capacity.

Community engagement

We engage communities so we can identify their priorities, expectations and attitudes; to stimulate dialogue; and to foster shared values.

INDIGENOUS LIAISON COMMITTEES

As part of our consultation with indigenous communities, we establish liaison committees to explore matters of mutual interest. While objectives vary between committees, they include:

- providing advice and feedback on cultural heritage protection
- cultural awareness programs
- employment, recruitment and training initiatives
- education
- environmental matters
- business opportunities.

As at December 2001, we were involved in indigenous liaison committees with the Ngadju people in the Goldfields region of Western Australia, and the Kokatha, Barngarla, Nukunu and Kuyani people in South Australia.

In Queensland, a liaison committee representing nine indigenous stakeholder groups meets regularly with representatives from our fertilizer operations at Mount Isa and Phosphate Hill to discuss issues of mutual interest.

Community development

We focus our development efforts on initiatives that will build community capacity.



We seek indigenous participation in our operations by encouraging and supporting employment and business opportunities. We offer this support on merit, and subject to opportunities being available. We do not have a quota, nor do we 'create' jobs or opportunities. We focus on real, sustainable jobs and business opportunities.

We expect all indigenous applicants or business partners to show they are capable, commercial and competitive. This helps ensure our continuing support for indigenous participation within our businesses and by our contractors.

Alone, a merit-based standard would not acknowledge indigenous disadvantage in education, training or experience that can sometimes create impossible-to-overcome barriers to participation. We assist indigenous people to acquire knowledge, skills and experience to gain employment or tender for a contract.

We believe the self-esteem of successful individuals and businesses contributes to long-term retention of employment, and encourages others to take up similar opportunities.

INDIGENOUS EMPLOYMENT INITIATIVE

In August 2000, our joint Indigenous Employment Initiative was officially launched by Hugh Morgan, Chief Executive Officer of WMC Resources Ltd, and Peter Reith, then Australia's Minister for Employment, Workplace Relations and Small Business. At the same time, we became a signatory to the Australian government's Corporate Leaders for Indigenous Employment Project initiative, which encourages private-sector companies to develop strategies

NEXT

Below: Michael Beck, Human Resources Manager - Kalgoorlie Nickel Smelter, with students participating in the Tools for Change program. Students learn skills to help them in the transition from primary to secondary school.

Right: Graduates and staff of the 2001 Indigenous Training Program at Leinster.



Teams proactively engage and work with their local communities to identify and facilitate programs, initiatives and funding. They also build goodwill among employees, contractors and the community.

to generate jobs for indigenous Australians. On signing, Mr Morgan observed that WMC was only prepared to do so when it had capacity to generate real opportunities to meet its commitment. The \$1 million Indigenous Employment Initiative aims to facilitate, over two years, up to 100 jobs for indigenous people at our operations, directly or through our contractors. We believe this is an achievable target. Our focus on indigenous employment is the largest part of our program, started in 1997, to increase indigenous participation at our operations.

By 31 December 2001, we had conducted three preemployment training programs in Western Australia. Of 35 trainees who began the programs, 30 graduated, with 24 securing immediate employment. Subject to real opportunities being available, our plan is to run two to four programs per year from 2002. Graduates will gain credit towards a Metalliferous Mining Certificate level II.

In Queensland, we also have a two-year traineeship program. During 2001, as in 2000, this program provided four indigenous trainees with jobs. Depending on their job placement in plant, office or laboratory, trainees can obtain a Metalliferous Mining Certificate level II, Office Skills Certificate level II or Laboratory Chemistry Certificate level II qualification.

We plan to extend these initiatives to our other operations during 2002. As at 31 December 2001, we employed 76 indigenous people at our Australian operations.

Building relationships

In building relationships, we focus on creating long-term partnerships with our communities. If we benefit only specific individuals or groups, those benefits are likely to be short-term. To provide sustainable outcomes that can be enjoyed by our communities we need to provide benefits, independent of individuals or groups.

COMMUNITY PARTICIPATION TEAMS

Our community participation teams enable our people to help in addressing community concerns and needs. Teams proactively engage and work with their local communities to identify and facilitate programs, initiatives and funding. They also build goodwill among employees, contractors and the community.

In 1997, we established the first community participation team at our Kalgoorlie Nickel Smelter. In late 1999, we formed a similar team for our St Ives Gold and Kambalda Nickel Operations. In early 2001, we started another team at Central Norseman Gold Corporation. During 2002, we intend forming teams at our Mount Keith and Leinster Nickel Operations in Western Australia, at our Olympic Dam Operations in South Australia and at our Queensland Fertilizer Operations.

For more information see our site reports.



We fund the teams, which comprise volunteers from our sites, with annual budgets of \$20,000 to \$50,000 each. Our Kalgoorlie Nickel Smelter team allocates 40 per cent of its funds to major community infrastructure projects and events, 40 per cent to smelter-specific projects benefiting employees and contractors, and 20 per cent to specific community projects.



Christopher Rankine (left), Tyrone Ah One and Christopher Costello at school in Dajarra, Queensland, the nearest community to our Phosphate Hill fertilizer operations.



Process management

An effective management system is critical to any process that shares information, agrees on priorities and initiates programs. Our approach is based on a 'plan / do / check / act' process which can be applied to any activity from engaging individuals to implementing programs.

It is essential that we measure and report our actions and outcomes, and assess their social, environmental and financial impact on our company and our communities. A starting point is a 360-degree risk management approach where the impact on each triple-bottom-line component – social, environmental and economic – is assessed from company, stakeholder and community perspectives. This approach can clarify what can and will be done, and what can't and won't be done. We intend developing this approach during 2002, as part of our objective to implement a community issue-management process.

Our community performance and commitments

In our 1999 community report, we committed to a three-year program beginning in 2000.

Following our restructure of the community function in the first half of 2001, we further refined our objectives to be more specific and cross-referenced them with those in our 2000 report (see table on page 23).

Our efforts during 2001, have focused on staffing, role clarity and accountability, developing reference systems, planning, promoting partnerships, and continuing to deliver sustainable benefits to our host communities. Our continuing challenges are to consistently implement programs across our operations; better identify and understand the needs and aspirations of our communities; and develop our systems, particularly those to measure our activities.

WMC - SIR LINDESAY CLARK TRUST FUND

Since WMC established the trust over 21 years ago, more than \$3 million has been donated to over 500 recipients in the Goldfields and wider Western Australian communities. During 2001, the trust granted \$255,000 to 10 recipients. In some cases, payment will be made during 2002.

Managed by eight trustees – four from WMC and four from the community – the trust supports activities that complement our goals, are located near our operations and provide community benefit. The trust's significant grants during 2001 include:

- \$156,000 to Anglican Homes to fit-out the residents' lounge as part of the proposed Kalgoorlie nursing home upgrade. The community need is great as the existing nursing home may withdraw from the region, leaving no aged-care facility.
- \$50,000 to O'Connor Education Support Centre Parents & Citizens Association for fitting out a second-hand bus to transport students in wheelchairs. This will provide a much-needed resource for Goldfields community groups.
- \$22,000 to Career Enterprise Centre Mandurah to upgrade facilities for students with intellectual disabilities undertaking horticulture vocational training and education. The assistance will enable the students to take part in community revegetation projects. The centre also needed assistance fitting out a bus for transporting students in wheelchairs. The centre is negotiating to supply trees for WMC rehabilitation projects.
- \$4,400 to Andy McKay, a 13-year-old with cerebral palsy and multiple disabilities. Adopted as a baby, his foster family was not in a financial position to buy a special chair that is essential to Andy's care.
- \$3,000 to Catholic Schools Kalgoorlie Boulder to produce a video to help attract teachers to the area as the region's schools are finding it difficult to recruit and retain teachers.

Commitments in 2000 community report for 2001

PROGRESS FOR 2001

- the item was completed
- some progress / on-going activity
- plans developed

WMC community objectives for 2002-05						Develop op and guideli	Develop a	Allocate re	Establish a	Develop a ' framework,	Develop sc baseline re	Develop an plan for sig	Define spo enhance re	Develop the priorities re	Communic WMC.	Produce ar environme
STRATEGIES	CRITICAL AREA	PROGRAMS		СОМЕ	PLIANCE			Е	NGAGEM	ENT			ONSHIP		NCING FATION	
Build and consolidate	Personnel	Fill vacant community positions.						•								
the community team.		Qualify and reinforce community roles.	People					•								
		Increase the skill, knowledge and abilities of community personnel.						•								
Gain and maintain the support	Understanding	Communicate and gain agreement to strategic plan.		•												
of senior management, other	and	Reinforce the local role of our community personnel.	Support					•								
employees and contractors.	commitment	Implement an on-going contact / update / communication protocol.													0	0
	Community	Develop and implement a baseline review of our host communities and operations.									0					
	services	Develop a WMC speakers bureau for community interaction.							0							
	and support	Establish a community network.							0							
Develop and implement a WMC-wide	Education	Extend Tools for Change to our operations.			0											
		Extend Tools for Work to our operations.			0											
		Develop an education-focused program for West Musgrave.			0											
	Training	Implement WMC's Indigenous Employment Initiative across our operations.			0											
community program.		Implement a traineeship / apprenticeship program across our operations.	Programs		0											
	Employment	Implement Local Community / Indigenous People contract conditions across our operations.			0											
		Implement a data-capture process for indigenous employment across our operations.			•											
		Implement the Dajarra Maintenance Services employment / business model across our operations.			•											
		Increase indigenous employment across operations by 50 per cent on December 2000 full-time equivalent figures.			0											
	Business	Implement Local Community / Indigenous People contract conditions across our operations.	1		•											
		Increase contract work to indigenous businesses across our operations by 25 per cent on December 2000 value.			0											
	Reference	Develop a cross-reference of external support, service and funding sources.				0										
		Develop a cross-referenced community kit covering all initiatives, programs, results and references.				•										
	Engagement	Identify and reinforce community responsibilities of our line management.						•								
Develop and implement		Develop and implement external community training and awareness programs.								0					0	
a WMC-wide community		Develop and implement a community issue management process.	Compliance									0		0		
management system.		Establish community participation teams at all our operations.	Compliance		•											
	Compliance	Develop and implement a community strategic plan.			•											
		Develop and implement operating policies, standards and guidelines.				0										
		Identify and record all our community obligations.		0												
		Develop a community performance measurement process.			0											
Effectively manage key and	Profile	Develop and implement internal community training and awareness programs.								0						
on-going relationships, and		Make WMC the company of choice for external parties to preview community activities.	Reputation												0	
enhance WMC's reputation.	Influence	Build proactive relationships with our communities.							0				•			

PROGRESS FOR 20 Progress is reported for the item was comple some progress / on-g plans developed little or no progress WMC community	each item indeted going activity			Identify and record obligations.	Develop and implement community plans, including performance measures.	Develop operating policies, standards and guidelines.	Develop a community assurance program.	Allocate responsibilities for line managers.	Establish a community network.	Develop a WMC-wide training and awareness framework, and implement programs.	Develop scope and methodology for a baseline review, then implement.	Develop and implement a communications plan for significant issues.	Define sponsorship and donations plans that enhance relationships.		Communicate benefits within and outside WMC.	Produce an integrated community, environment, safety and health report.
STRATEGIES	CRITICAL AREA	PROGRAMS	FOCUS		COMI	PLIANCE			E	NGAGEM	ENT			ONSHIP SEMENT		NCING TATION
Build and consolidate the community team.	Personnel	Fill vacant community positions. Qualify and reinforce community roles. Increase the skill, knowledge and abilities of community personnel.	People					•								
Gain and maintain the support of senior management, other employees and contractors.	Understanding and commitment	Communicate and gain agreement to strategic plan. Reinforce the local role of our community personnel. Implement an on-going contact / update / communication protocol.	Support	•				•							0	•
	Community services and support	Develop and implement a baseline review of our host communities and operations. Develop a WMC speakers bureau for community interaction. Establish a community network. Extend Tools for Change to our operations.			0				0		•					
Develop and implement a WMC-wide	Training	Extend Tools for Work to our operations. Develop an education-focused program for West Musgrave. Implement WMC's Indigenous Employment Initiative across our operations.			0											
community program.	Employment	Implement a traineeship / apprenticeship program across our operations. Implement Local Community / Indigenous People contract conditions across our operations. Implement a data-capture process for indigenous employment across our operations.	Programs		0											
	Business	Implement the Dajarra Maintenance Services employment / business model across our operations. Increase indigenous employment across operations by 50 per cent on December 2000 full-time equivalent figures. Implement Local Community / Indigenous People contract conditions across our operations. Increase contract work to indigenous businesses across our operations by 25 per cent on December 2000 value.			0 0											
	Reference	Develop a cross-reference of external support, service and funding sources. Develop a cross-referenced community kit covering all initiatives, programs, results and references.			3	0										
Develop and implement a WMC-wide community management system.	Engagement	Identify and reinforce community responsibilities of our line management. Develop and implement external community training and awareness programs. Develop and implement a community issue management process. Establish community participation teams at all our operations.	Compliance		0			0		0		0		0	0	
	Compliance	Develop and implement a community strategic plan. Develop and implement operating policies, standards and guidelines. Identify and record all our community obligations. Develop a community performance measurement process.		0	•	0										
Effectively manage key and on-going relationships, and enhance WMC's reputation.	Profile Influence	Develop and implement internal community training and awareness programs. Make WMC the company of choice for external parties to preview community activities. Build proactive relationships with our communities.	Reputation						0	0			•		0	

OUR DISAPPOINTMENTS

We saw significant change in the way we organise and manage our community activities during the year.

We intended to begin a formal stakeholder survey, covering all our Australian operations, during 2001. We identified the survey's purpose, scope and methodology and selected an external consultant to conduct it. Our schedule was to begin surveying late in the year with first data available in early 2002. Given our decision to demerge WMC Limited, and cost pressures brought about through low commodity prices, we have deferred the survey until late-2002. Despite this setback, we remain committed to the undertaking that we gave in the WMC Limited Community-Environment Report 2000.

During 2001, we intended to complete the work necessary to establish a complementary body to our WMC – Sir Lindesay Clark Trust, the WMC – Sir Arvi Parbo Trust, to benefit our South Australian and Queensland communities. However, tax issues associated with its operation failed to be resolved. We are committed to delivering benefits to our communities and will re-visit this issue in 2002.

OUR ACHIEVEMENTS

Examples of our achievements during 2001, are highlighted under the six key streams of our community approach. Further examples are in our site reports.

Community Services

- During 2001, we decided to continue to offer employees and contractors a residential option at Leinster. We have committed nearly \$4 million to improve the town's housing stock over the next three years (Leinster Nickel Operations, Western Australia).
- We supported the Dajarra community in Queensland in trying to improve their potable water supply. We commissioned a report to identify sources of better-quality water and offered to help fund developing access to this supply. We are waiting for a response from the shire council. (Queensland Fertilizer Operations, Queensland).
- We donated a vehicle to the Western Australian Police
 Department's Better Tracks Program. The program aims to
 provide young Ngaanyatjarra people in the region of our West
 Musgrave project with a chance to attend camps and sporting
 events (Agnew Gold Operations, Western Australia).
- We provided funds to fence and connect water to a camping ground at Alberrie Creek, about 40 kilometres west of Marree to facilitate tourism. This is an extension of our work with the Aboriginal Lands Trust to control vehicle access to Finniss Springs Pastoral Lease, which they administer (Olympic Dam Operations, South Australia).
- During 2001, the Norseman community experienced difficulty in finding a new doctor. With our support, the shire council encouraged the Western Australia Government to declare the town an area with special needs, enabling it to search overseas for a qualified general practitioner. We funded advertising in South Africa to attract applicants. At year-end several applicants were being assessed (Central Norseman Gold, Western Australia).
- At Roxby Downs, a young community with the highest birth rate per capita in Australia, more than 100 babies are born each year. We support community health services in Roxby Downs by funding a study of support networks needed by young mothers (Olympic Dam Operations, South Australia).



- We supported maintenance and operation of the Norseman public swimming pool (Central Norseman Gold, Western Australia).
- To help address social and financial disadvantage experienced by the Ngaanyatjarra community, we committed \$300,000 over three years to develop and maintain the Tjulyuru Cultural Centre in Warburton, Western Australia (Exploration, Australia).
- Following discussions with the Roxby Downs Council, we agreed to contribute \$1 million to construct a cultural and visitors centre. The council will contribute the balance of the \$2.7 million cost for the centre, which is to be completed in mid-2002 (Olympic Dam Operations, South Australia).

Environment and Heritage

- We enhanced our ability to establish partnerships with indigenous groups by implementing heritage management protocols across all our Australian operations.
- We supported the Naragebup Rockingham Regional Environment Centre with \$5,000 a year, as part of our fiveyear sponsorship. The centre, established with a \$50,000 donation from the WMC-Sir Lindesay Clark Trust Fund, promotes the complexities of local wetland ecology to students, tourists and the local community (Kwinana Nickel Refinery, Western Australia).
- We continue to engage local indigenous people in a site enhancement program, as part of our long-term environmental plan for our acid plant at Mount Isa in Queensland. We have planted 3,000 native trees and revegetated the site (Queensland Fertilizer Operations).

HOME TOP SEARCH PREVIOUS NEXT CONTENTS PRINT 25 WMC Sustainability Report 2001



Training

- We require contractors to our Western Australian operations to identify and implement opportunities for training, employment and business participation by local and indigenous people. We plan to extend these requirements to all our operations (Nickel and Gold businesses, Australia).
- During 2000, we introduced a trainee scheme at our Queensland Fertilizer Operations to enhance employment opportunities for local indigenous people. In the first year, we recruited four participants. During 2001, we took on another four participants – three at Phosphate Hill and one at Mount Isa. The scheme enables participants to secure relevant TAFE certificates during their training and to move into full-time work with us or our contractors. We plan to extend the scheme to all our operations (Queensland Fertilizer Operations, Queensland).
- We are addressing community expectations of employment and enterprise opportunities through our engagement with the Ngaanyatjarra community at West Musgrave in Western Australia. Fourteen community members (including two women) have joined a work-experience program at West Musgrave, gaining experience in general camp maintenance, core cutting, catering and hospitality, and drill site rehabilitation. The program is a joint initiative with the Jameson Community Development Employment Program (Exploration Division, Australia).

Left: Brenden Tyrrell, a second-year Trainee Laboratory Technician at our Phosphate Hill fertilizer operations. Our indigenous employment scheme helps participants secure TAFE certificates during training.

Below: Steam billows from new noise suppressors on top of the Kwinana Nickel Refinery's flash furnace tanks. We have worked with regulators and community groups to prioritise issues of concern to the community from our refinery.

Education

- We supported our Tools for Change program for the fifth year. The program assists students in their transition from primary to secondary school. More than 500 students take part each year, with over 2,500 students completing the program since 1997 (Kalgoorlie Nickel Smelter, Western Australia).
- We provided 40 student placements through the Roxby Industry Training and Education program. The program allows Year 11 and 12 students at Roxby Downs Area School to gain accredited competencies through classroombased studies and specific work placements (Olympic Dam Operations, South Australia).
- We donated 94 superseded computers to child-care, kindergarten, school and indigenous groups in the region (Queensland Fertilizer Operations, Queensland).

Employment

- We supported the Northern Regional Development Board, based at Port Augusta in South Australia, in securing Australian government funding for a study comparing the region's skills base with requirements of our Olympic Dam Operations. This study will encourage greater recruitment from within the region (Olympic Dam Operations, South Australia).
- Many of the specialised skills needed at our Queensland Fertilizer Operations are not available locally. To extend the region's skills base and provide more employment opportunities for local and regional communities, we have initiated a regional recruitment program. The program provides a database of candidates from which we may fill future job vacancies (Queensland Fertilizer Operations, Queensland).



Business

- Dajarra is a predominantly indigenous community of more than 300 people, located 55 kilometres north of Phosphate Hill in Queensland. Before we established our operations at Phosphate Hill, the community had limited employment opportunities. We developed our relationship with this community, and have provided business and employment opportunities, through a Dajarra-based maintenance and services contract valued at approximately \$300,000 over three years (Queensland Fertilizer Operations, Queensland).
- With other industry representatives, government agencies and community groups in the North West Queensland Development Initiative, we are helping develop a sustainable future for the region's people and communities. The initiative presented economic and social development proposals for the North West to the Queensland Government (Queensland Fertilizer Operations, Queensland).

HOME TOP SEARCH PREVIOUS NEXT CONTENTS PRINT 26 WMC Sustainability Report 2001

Safety helmets from Leinster.

Our people

We encourage our people to grow, work in partnership, and contribute to sustained improvement in our business performance. Partnerships between individuals and with WMC encourages trust, integrity, teamwork, involvement and shared goals. We also help achieve our business objectives by providing an environment that develops leadership, relationships, competency and teamwork – underpinned by effective systems and policies.

A CHALLENGING YEAR

We began 2001 with restructuring to centralise our support and services areas, reducing the number of positions needed. We provided redundant employees with career-transition support.

Selling our gold and talc businesses, and most mines at Kambalda, created uncertainty for our people at these sites. Most of our people remained with these businesses after the sale.

Speculation about WMC's future was another challenge for our people. Employees were kept informed through presentations by our Chief Executive Officer and management team, and by posting information on our Intranet. Change and uncertainty has an impact on our people. To help people deal with change and uncertainty, we held workshops dealing with these issues late in 2001. We will extend the program during 2002.

Identifying and addressing diversity issues is a continuing challenge. Our Women's Advisory Network, established last year, struggled to develop as intended. For the network to be more effective, greater follow-up and coordination will be required. A number of issues canvassed have been developed into policy outcomes such as paid maternity leave. We are considering a broader approach to reinvigorate our efforts in addressing diversity issues.

EMPLOYEE FEEDBACK

During 2001, eighty per cent of our employees participated in our employee perception survey, which measures our

company's performance against key business drivers. Outcomes included:

Themes for improvement

- lack of commitment of leadership
- management practices inconsistent with WMC Code of Conduct
- lack of collaboration across work areas and sites
- poor, ineffective and closed decision making, with managers perceived as lacking accountability.

Positive themes

- Safety is the most important priority
- WMC is perceived as performing well with respect to environmental responsibilities
- WMC is perceived to be competing effectively in the market place with most written comments affirming a strong view of WMC as a successful organisation to work for.

A range of initiatives and responses have been pursued at a site level to address the concerns expressed and to enhance the positive themes reflected by the survey outcomes. At a company level, the WMC Managerial Leadership Program, scheduled for 2002, is a significant new program to develop organisation and leadership skills. The program will provide our managers with clear role expectations and accountabilities, and the systems, practices and tools they need.

We intend to survey at 18 to 24 month intervals to assess progress on issues raised by employees. Key initiatives will be integrated into our planning process to ensure they are supported and resourced.

TRAINING AND DEVELOPMENT

During 2001, we continued the Senior Management Program, Management Development Program and Manager Orientation Program in conjunction with Deakin University. We also launched the Supervisor Development Program for employees recently promoted to supervisory and management positions. During the year, 134 people participated in these four programs. All WMC operations, including our Exploration Division in China, sent participants. The successful one-week residential Supervisor Development Program will continue in 2002.

RECOGNISING INDIVIDUAL PERFORMANCE

Responding to an employee opinion survey finding, we developed and introduced the WMC 4Me - Be Your Best program in April 2001. This program is designed to make our Performance Management System easier to understand and use, and provide employees with opportunities for skills and competency development, recognition and reward. The system provides an integrated approach to individual performance and accountability focused on WMC's business objectives.

At least twice a year, our employees formally discuss their performance and future development with their supervisor. The program helps employee and supervisor develop skills to prepare for these discussions.

RECRUITMENT

A highlight of 2001 was adding web-based advertising to our recruiting procedures. This technology is a cost-effective way to reach a large number of candidates. We also see more and more job applicants seeking a career with organisations that match their views on sustainable development, strong values and ethical standards. We believe our team environment, competitive benefits and conditions, and opportunities for personal advancement add to our appeal as an employer.

EMPLOYEE BENEFITS

In October 2001, WMC introduced paid maternity leave. Women who complete one year of employment are entitled to six weeks paid maternity leave on returning to work.

In the same month, we introduced our Salary Continuance Insurance Plan, which provides employees with 75 per cent of their salary during extended periods of illness or disability. During July 2001, we transferred all employee superannuation arrangements to the Plum Master Trust. Benefits resulting from the change include investment choice, round-the-clock access to information and ongoing education in superannuation and investment through publications and newsletters.

EMPLOYEE SHARE PLAN

WMC has provided employee-based equity plans since the early 1980s.

The plans encourage employee ownership of WMC shares so that they can participate in the market performance benefits of WMC, and appreciate some of the issues associated with being a shareholder of the company. Permanent employees are eligible to participate in the plan. Access to WMC Options helps attract and retain employees.

The most recent offer saw 95 per cent of all WMC employees accept some or all of the options offered.

EMPLOYEE ASSISTANCE PROGRAM

The WMC Employee Assistance Program has been available since 1995. It provides our employees and their families with free, confidential access to qualified counselling services. The service provides help with stress and family-related matters, debriefings following trauma, personal advice, and career and work counselling. During 2001, the service was used by 304 employees and family members.

GRADUATES AND VACATION STUDENTS

Our three-year Graduate Program provided development opportunities during 2001 for 33 new graduates – 14 women and 19 men – in disciplines including metallurgy, mining and chemical engineering, geology, human resources, finance and environmental science.

During the 2001-02 vacation program, we had 57 students – 21 women and 36 men – participate, working as far afield as Mount Keith in Western Australia, Phosphate Hill in

EMPLOYEE NUMBERS AT 31 DECEMBER 2001*

ob group Percentages										
	Female	Male	Total	Female	Male					
Managers	31	297	328	9	91					
Professionals	96	371	467	21	79					
Paraprofessional	186	350	536	35	65					
Trades	7	342	349	2	98					
Clerical	145	49	194	75	25					
Sales/Services	19	48	67	28	72					
Operators	66	1,024	1,090	6	94					
Labourers	4	12	16	25	75					
Total at 31 December 2001	554	2,493	3,047	18	82					
Total at 31 December 2000	677	2,795	3,472	19	81					

^{*} Full-time equivalent employees

Queensland, Olympic Dam in South Australia, and in our Perth and Melbourne offices.

WORKPLACE RELATIONS

No time was lost by a WMC employee due to industrial issues during 2001, reflecting our efforts to establish relationships with our people and have them take pride in their achievements. We completed planned maintenance shutdowns at our Kwinana Nickel Refinery, Kalgoorlie Nickel Smelter, Leinster Nickel Operations, Mount Keith Nickel Operations, Queensland Fertilizer Operations and Olympic Dam Operations.

We continue to engage our employees on individual employment contracts. Our approach provides consistent terms and conditions for all our employees, along with development opportunities and recognition for performance outcomes. As part of the divestment of the businesses we sold during the year, employment for the majority of employees was maintained with the new business owners.

While the vast majority of our employees maintained the standards to which they agreed in their contracts, 36 employees resigned or were dismissed during 2001, mainly for breaching our Fitness for Work policy, or for behaviour inconsistent with their employment contract. Six of those dismissed filed applications for unfair dismissal. We defended all the applications and no personnel were reinstated.

HOME TOP

SEARCH

PREVIOUS

CONTENTS

PRINT

28 WMC Sustainability Report 2

Environment, health and safety

Emergency response training at Mount Keith Nickel Operations, using a decontamination shower.

Introduction

Managing environment, health and safety issues presents a complex challenge to any organisation — especially in the minerals industry. Many activities associated with the industry are inherently hazardous to people and the environment.

Our industry has a disappointing record in managing environmental, health and safety hazards. During the last ten years there have been 223 workplace fatalities across the industry in Australia. There is also a legacy of environmental impacts from abandoned mines and contaminated sites.

Accordingly, some people see our industry as dangerous, while others believe we have little credibility in our environmental management practices. Perceptions impact on our industry's ability to gain access to new resources, attract investment for growth and recruit talented people. Given such an operating environment, industry participants, including ourselves, have made considerable effort to improve their environmental, health and safety performance.

We continue to develop an integrated management system, and have worked to align all of our people to environmental, safety and health values. We, and others, have also sought to change public perception of our industry by reporting on our performance, including our successes and failures, and making public commitments to improvement targets.

To change current impressions of our industry, we need to achieve excellence in environmental, health and safety management. This aligns with our own objectives in ensuring the safety and health of our people and preserving the natural environment.

This section of our report outlines our approach to environmental, health and safety management. It details our performance during 2001, reviews our delivery against commitments, highlights significant achievements and disappointments, reviews key issues and outlines our plans to further improve our management systems and performance.

Our environment policy

The company is committed to achieving compatibility between economic development and the maintenance of the environment. It therefore seeks to ensure that, throughout all phases of its activities, WMC personnel and contractors give proper consideration to the care of the flora, fauna, air, land and water, and to the community health and heritage which may be affected by these activities.

To fulfil this commitment, the company will observe all environmental laws and, consistent with the principles of sustainable development, will:

- Progressively establish and maintain company-wide environmental standards for our operations throughout the world.
- Integrate environmental factors into planning and operational decisions and processes.
- Assess the potential environmental effects of our activities, and regularly monitor and audit our environmental performance.
- Continually improve our environmental performance, including reducing the effect of emissions, developing opportunities for recycling, and more efficiently using energy, water and other resources.
- Rehabilitate the environment affected by our activities
- Conserve important populations of flora and fauna that may be affected by our activities.
- Promote environmental awareness among company personnel and contractors to increase understanding of environmental matters.





Our safety and health policy

WMC strives to develop a culture that supports its safety and health values by encouraging behaviour and implementing processes that ensure the safety and health of all employees, contractors, customers and the communities associated with our worldwide operations.

In support of this, we believe that:

- no business activity will come before safety and health
- all incidents and injuries are preventable on and off the job
- accountability for safety and health rests with every individual
- individuals must identify, assess and manage hazards
- legal obligations are the foundation of our safety and health standards
- individuals will be trained and equipped to ensure an incident free workplace.





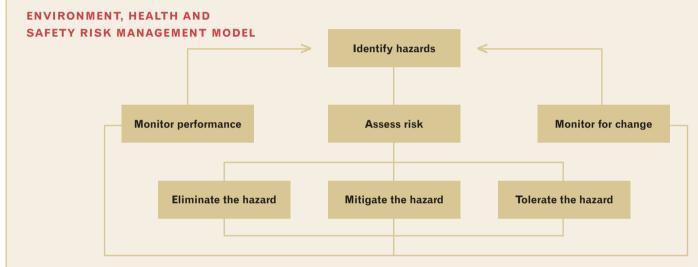
Our approach

We believe that excellence in environmental, health and safety management is achieved by:

- consistently applying sound practice and procedures
- comprehensive risk-management programs
- effective audit and assessment
- engaging and involving all stakeholders.

We aim to achieve this by:

- Operating in accord with an integrated environmental, safety and health management system.
- Having risk management processes that cover all aspects
 of our business from the design, construction and operation
 of our facilities; through the way we change our facilities,
 organisational structures and operations, and how our
 people approach their day-to-day tasks and jobs; to site
 closure and relinquishment.
- Having audit and assessment processes that ensure our sites comply with their legal obligations and the requirements of our management systems including compliance with company policies and procedures.
- Our people valuing personal safety and environmental protection; understanding their legal obligations and role in environmental, safety and health management; being trained and skilled in their work; and being engaged in decision making.



ENVIRONMENT, HEALTH AND SAFETY RESPONSIBILITIES DIAGRAM





SUMMARY

The following summarises our major incidents during 2001. Further details can be found on pages 39 to 42.

FATALITIES

Leinster fatality

On 14 January 2001, Zibi Kosowski, our Underground Manager at the Rocky's Reward mine at Leinster, Western Australia, died when hit by lightning while inspecting a minewater storage dam.

Mount Keith fatality

On the night of 18 May, Phillip Steel, an employee of contractor Roche Mining, died when the bulldozer he was operating fell approximately 100 meters down the side of the open-cut mine at Mount Keith, Western Australia.

ENVIRONMENTAL INCIDENTS

Olympic Dam fire

A significant fire occurred on 21 October 2001, in our Olympic Dam solvent extraction plant. The fire caused substantial damage to the plant and significant disruption to our operations. There were no health issues or serious injuries as a result of the fire and no environmental impact outside the immediate area of the fire. Investigations have concluded that the most likely cause of the fire was a static electricity discharge at a location where polyethylene piping carries a kerosene-like solvent. Our risk management processes had not previously identified the possibility that a fire could start in the manner and location of this incident. Accordingly, following our own thorough investigation we are commissioning further expert independent testing of this cause scenario.

Left: Alex Irwin, Graduate Environment Officer, inspects an intercept channel constructed to collect water seeping from the St Ives tailings storage facility.

Below: Clint List, Contract Port Facility Operator – Townsville, transferring sulphur for transport to our Mount Isa acid plant.



Vegetation impacts - Olympic Dam

Following a significant increase in the area of native vegetation killed by saline water aerosols from our mine ventilation shafts, we upgraded an existing Level 3 environmental noncompliance incident to Level 4 in June 2001. We have initiated preliminary work on remediation projects at Olympic Dam to reduce the aerosol emissions and ongoing vegetation impacts. (See page 40 for more detail.)

SAFETY

Injuries to people

Our lost-time injury frequency rate averaged 2.8 (injuries per million hours worked by our employees and contractors) through 2001. This is 10 per cent lower than the 3.1 we recorded during 2000. It is also substantially lower than the last published average – for the Australian metalliferous mining industry – of 9 for the 1999-2000 financial year

Our combined medical treatment plus lost-time injury frequency rate during 2001 was 14.6, this is 12 per cent lower than 2000. This measure shows constant improvement over the last seven years. In 1995, the first year that we kept consolidated records, our combined injury rate was 50.

Encouragingly, our lost-time injury performance of 1.8 in the second-half of 2001 and our combined injury frequency rate of 12.3, both showed significant improvement over previous reporting periods. We believe that this, in part, reflects the impact of our safety culture program, Take Time - Take Charge, introduced in May 2001. Even with this improvement, 262 of our people suffered injuries requiring medical treatment, or time off work. Many of the injuries were painful

Our performance

HOME

Over recent years, we have continuously improved our environmental, safety and health management. We have completed major initiatives, which include implementing an environmental management system and deploying standards that address significant hazards in our operations.

Plans for further improvement are part of our overall company business plan. These include expanding our systems to integrate all aspects of environmental, safety and health management. They also include plans for improving our audit and assessment processes, and programs to influence the culture and behaviour of our people to reflect personal safety and environmental protection values.

Although we have made considerable progress, we acknowledge that we still have a long way to go to achieve excellence. While our general incident and injury performance during 2001 improved, we suffered two fatalities, a significant fire and several serious near misses. Some near-misses could, under different circumstances, have been fatalities.

In all, 262 of our people suffered injuries requiring medical treatment or time off work. On 132 occasions environmental obligations were not met. The impact of these incidents on families, communities, our people, the environment, our reputation and our business has been substantial and regrettable. Our overall environmental, safety and health performance during 2001 was below the high standards to which we aspire. However, we continue to work towards achieving excellence in environmental, health and safety performance.

Louanne Munz, Business Relations Coordinator - Kwinana Nickel Refinery, with ammonium sulphate crystals. The product has been developed to maximise value for fertilizer production.



and caused distress to the injured person, their workmates and their families. Only those close to the families of the two people who died at our operations, or those who have been through a similar experience, can comprehend the impact of these fatalities on families, friends and communities.

While we are encouraged by the improvement in our injury rates, we are not satisfied with our overall safety performance. Our clear objective is to improve. Our goal is to be incident- and injury-free. Workplace fatalities are unacceptable, and we will only be satisfied when we have eliminated fatalities from our business.

Nature of injuries

As in previous years, most injuries were to hands and arms, and were cuts or impact injuries. Injury numbers by body part, accident and type during 2001 are almost identical to those for 2000. We need to reduce superficial cuts and impact injuries to hands and arms.

Our Take Time - Take Charge program specifically targets eliminating such injuries.

ENVIRONMENTAL IMPACTS

Clearing land

Our operations and exploration activities require us to clear land and to modify landforms. This impacts on landscapes in many ways, ranging from changing watercourses, to disturbing native animal and bird habitats.

Through careful planning, we seek to minimise the land area we affect. Generally, our land clearing activities are limited by legally binding agreements and licences. We rehabilitate affected land or newly created landforms once our need for



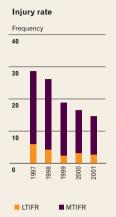
access ends. Again, our land rehabilitation plans are governed by applicable laws, agreements and licences.

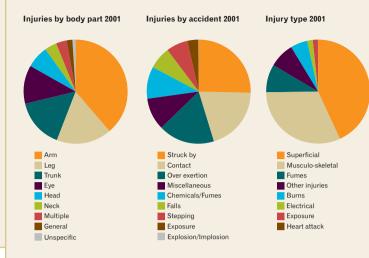
During 2001, we disturbed 465 hectares of land and rehabilitated 153 hectares. The net balance of disturbed land, as at 31 December 2001, was 8,728 hectares. Figures exclude sites sold during the year. The area we rehabilitate annually has progressively decreased over recent years. This reflects a reduction in the area of disturbed land available for rehabilitation – due to mining activity – and our need to postpone some rehabilitation due to budgetary constraints placed on us by poor commodity prices. We hold 3.2 million hectares under pastoral leases. Our approach to managing these leases is outlined on pages 44 and 45.

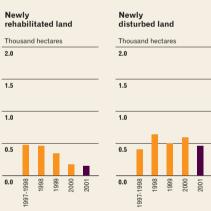
Emissions and discharges

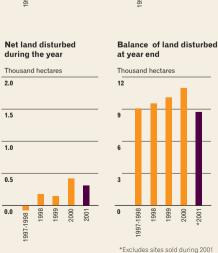
Our operations impact on the environment through emissions and discharges. These include waste disposal and stormwater discharges and run-off; along with gas, dust and aerosol emissions to the air.

Most of our emissions are regulated through our operating licences, and we are required to report regularly on these emissions to state regulatory authorities. We also report emissions of other priority pollutants that exceed respective threshold levels to state authorities. Our significant emissions are published by the Australian government, through Environment Australia, in the National Pollutant Inventory.









HOME TOP

SEARCH

PREVIOUS

NEXT

CONTENTS

PRINT

The most significant of our gaseous emissions in terms of mass – carbon dioxide, sulphur dioxide and nitrogen oxides – originate from our suppliers of electricity, our fuel-burning equipment, refinery, smelters and chemical processes, and from our using explosives.

Most of our particulate emissions come from dust generated by our mining, transport and ore processing. Vehicle movement on unsealed roads and tails blown from dry, unsealed tailings storage facilities also contribute to dust emissions.

In the WMC Environment Progress Report 1994-95, we committed to reporting our 'eco-efficiency' performance. The two performance indicators we selected for emissions were carbon dioxide and sulphur dioxide. As noted in our 1998 report, we achieved our 1998 targets for both these performance indicators. Our notable success in reducing sulphur dioxide emissions was a result of commissioning the acid plant at our Kalgoorlie Nickel Smelter.

In our 1998 report, we also published a new carbon dioxide target to be achieved by 2001. In each subsequent report, we have indicated our progress towards this target. Our carbon dioxide emissions increased from 80 kilograms per tonne of ore treated during 1998, to 87 kilograms during 2001. This was an 8.8 per cent increase, while our target required a 2.5 per cent reduction.

Of the calculated 8.8 per cent increase in our carbon dioxide emissions, 5.0 per cent is attributable to a change in the way government requires us to calculate emissions. The remaining increase was a result of our not achieving our energy targets, due to changes in mining practice. For more information see the Resource Use section (page 33) of this report and our site reports.

Our total carbon dioxide emissions increased from 1.82 million tonnes during 1998, to 2.99 million tonnes during 2001. Our projected carbon dioxide emissions for 2004 are 2.97 million tonnes, excluding the recently sold St Ives Gold, Three Springs Talc, Agnew Gold Operations and Central Norseman Gold Corporation. Our operations emitted slightly more than 47,000 tonnes of sulphur dioxide during 2001, an increase of 4,000 tonnes over our emissions during 2000 - primarily due to an increase in the amount of ore treated (see table on page 47).

Greenhouse Challenge

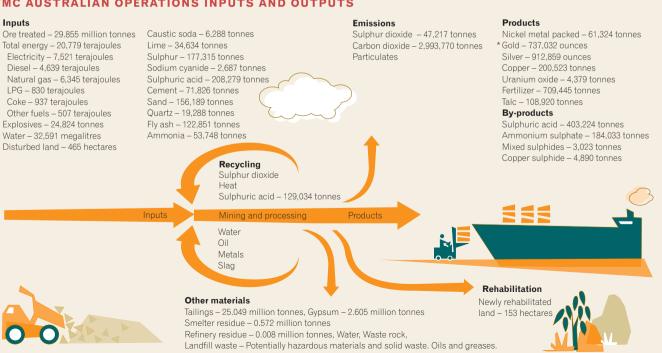
WMC participates in the Australian government's Greenhouse Challenge program. We submit an annual report on our progress in reducing carbon dioxide emissions, against our projected emissions – that is, our emissions if we had not implemented the actions identified in the report (business-asusual). In November 2001, we submitted our 2000 Greenhouse Challenge report (3rd annual report) to the government. We estimated that in 2000, we had achieved a 25 per cent reduction against our business-as-usual projections since 1994–95.

WMC ENVIRONMENT TARGETS 1998 TO 2001

Company-wide ² target	1998 base year	2001 target	2001 improvement	2001 status	2001 progress	Measure
Water ³	1.074	1.037	3.4% reduction	1.024	4.7% reduction	Kilolitres per tonne of ore treated
Energy	672.0	594.0	11.5% reduction	646.0	3.9% reduction	Megajoules per tonne of ore treated
Carbon dioxide	80.0	78.0	2.5% reduction	87.0	8.8% increase	Kilograms per tonne of ore treated

These company-wide targets are aggregated from those set by each operation. Cyanide target no longer applicable. Figures revised due to improved data. Some figures have been rounded.

WMC AUSTRALIAN OPERATIONS INPUTS AND OUTPUTS



We do not yet have information for all resources used or emitted. Refer to National Pollutant Inventory for more information. Some figures have been rounded. This applies to all input/output diagrams *Agnew Gold Operations and St Ives Gold data for nine months only.

A new open drain carries a larger amount of seepage water from the Argo open-cut mine at St Ives to Lake Lefroy. Traps collect sediment for removal. A 10-metre-wide culvert has been built to allow native animals and stock to cross.



Our water consumption includes potable water, mildly saline water and highly saline water. Much of the water we use, because of its poor quality, cannot be used domestically or in farming.

Resource Use

Our operations require us to use natural resources. We use water in our mining and processing operations. We use fossil fuels directly to generate electricity, raise steam and heating processes at our sites and in operating mobile equipment; and indirectly in the generation of the electricity we purchase.

While our energy consumption per tonne ore treated reduced by 3.9 per cent from 672 megajoules per tonne of ore treated during 1998, to 646 megajoules during 2001, we did not meet our energy reduction target of 11.5 per cent. The main reasons were changes in mining practice at Leinster, St Ives and Agnew where we developed new open-cut mines, and increased energy consumption at our Kalgoorlie Nickel Smelter. Our annual total energy consumption increased from 15.3 petajoules during 1998, to 20.8 petajoules during 2001, as a direct result of our increased production.

Our water consumption includes potable water, mildly saline water and highly saline water. Much of the water we use, because of its poor quality, cannot be used domestically or in farming. We reduced our water consumption per tonne of ore treated from 1.074 kilolitres during 1998, to 1.024 during 2001. This 4.7 per cent reduction is greater than our 3.4 per cent target for 2001, or 1.037 kilolitres per tonne of ore treated. Our success is primarily due to improved water efficiency at our Olympic Dam and St Ives operations. Our total annual water consumption increased from 24.4 gigalitres during 1998, to 32.6 gigalitres during 2001, as a direct result of our increased production.

Environmental and non-compliance incidents

In addition to our planned and licensed emissions, our operations impact on the environment through unplanned incidents and discharges. When these occur, they generally mean that we have failed to meet a licence or regulatory requirement. Accordingly, we classify these and other environmental incidents as 'environmental non-compliance incidents'.

We require our operations to report all environmental noncompliance incidents to senior management and our board. We classify environmental non-compliance incidents according to the actual or potential harm caused to the environment.

A Level 1 non-compliance incident is where no actual harm is caused to the environment. Level 1 incidents are generally where we fail to meet a monitoring or reporting requirement. At the other end of the scale, a Level 5 non-compliance incident involves a major environmental impact with long-term consequences. We have never had a Level 5 incident.

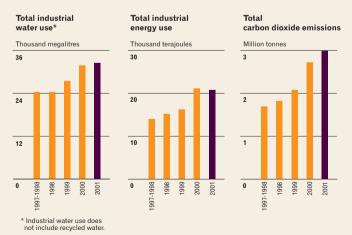
Level 2, 3 and 4 incidents involve some environmental impacts, with the difference in the classification being the area impacted and the time the impact is expected to last.

Our most common non-compliance incidents are air emissions, and soil contamination from spilling process materials, hydrocarbons, saline water and hazardous chemicals.

We have reported our environmental non-compliance incidents internally since 1994, using a tracking system to ensure that all incidents are reported to senior management.



Total resource use - Australian operations



HOME TOP SEARCH PREVIOUS NEXT CONTENTS PRINT 34 WMC Sustainability Report 2001

WMC NON-COMPLIANCE INCIDENTS 2001

	Ongoing incidents as at 1 January 2001	New incidents reported during 2001	Incidents resolved during 2001	Outstanding incidents as at 31 December 2001
Level 1 Technical issues involving environmental laws and regulations. Example: the late submission of a report.	9	31	36	4
Level 2 Minor non-recurrent issues. Example: a hydrocarbon spill which can be cleaned up immediately.	5	92	91	6
Level 3 Issues of a continuous nature but limited impact. Example: fuel leak that did not impact on ground water.	25	8	25	8
Level 4 Issues of a significant nature with medium-term effect. Example: process chemicals seeping into ground water.	2	1	1	2
Level 5 Major issues with potentially serious consequences and long-term impact. Example: breach of tailings system.	0	0	0	0
Total *	41	132	153	20

*Data includes Gold and Talc businesses until their sale. We use a five-level self-reporting procedure for environmental non-compliance incidents as presented in the table above. The levels rank from 1, incidents that present the least threat to the business, to 5, presenting the greatest threat.

Our system has developed over time and now also monitors the resources allocated to correct non-compliance incidents and tracks actions through to closure.

We reported 132 new incidents during 2001. This is 72 less than during 2000, and reflects work undertaken at sites to improve their environmental management practices.

Our most significant non-compliance incident during 2001 was at Olympic Dam, where we upgraded a previously-classified Level 3 incident to Level 4. As outlined on page 30 of this report, this incident involves the impact of saline aerosols from our mine ventilation system on native vegetation.

The other ongoing Level 4 non-compliance incident is at our Baldivis Tailings Facility. Part of our Kwinana Nickel Refinery, the facility is seven kilometres south-east of the refinery and adjacent to Lake Cooloongup – an inland salt-water lake. Our work to rectify the ground-water contamination at Baldivis is outlined on page 41 of this report.

Our only other Level 4 non-compliance incident resulted from ground-water contamination at our nickel refinery at Kwinana, Western Australia. This was the result of operations in the 1970s and '80s. We completed rectification during 2001, at a cost of \$50.7 million. For more information see page 41 of this report.

As at 31 December 2001, there were 20 non-compliance incidents still to be rectified.

HEALTH IMPACTS

We monitor the exposure of people to hazardous materials and agents in our workplaces. This includes monitoring for radiation exposure, airborne asbestos fibres, dust and various hazardous chemicals. We also test our employees and contractors for the effects of workplace noise at two- to five-year intervals and conduct regular health-surveillance testing.

By far, our greatest effort in monitoring worker health is at Olympic Dam, where the South Australian government tightly regulates worker exposure to radiation. They set strict exposure standards and review our site exposure reports monthly, quarterly and annually.

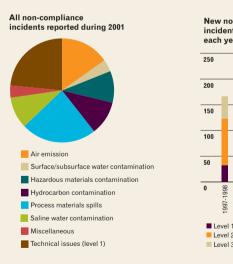
Mining at Olympic Dam releases radioactive materials, mostly dust and gases, into the mine shafts and drives. Our procedures to control our people's exposure to these radioactive materials include using ventilation air to keep radioactive dust and gas concentrations to acceptable levels. We adjust ventilation when measurements show an unacceptable increase in radiation.

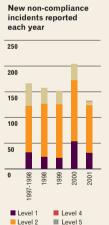
To ensure we comply with government-set exposure standards, our procedures at Olympic Dam require remedial action if radiation measurements exceed one-third of the government standard. Site radiation-protection procedures are incorporated into thirteen government-approved site radiation management plans.

During the 2000-01 statutory reporting period, which runs from July to June, personnel in our Radiation and Occupational Hygiene Group at Olympic Dam took 11,279 mine-air and gamma-radiation tests. These tests are



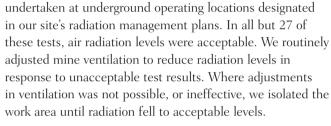
Matthew Harriss at work in the uranium packaging facility at Olympic Dam Operations. We have strict protocols for managing employee exposure to radiation, chemicals and dust.





Simon Hemsworth (left), and Ashley Low, mine surveyors and members of the Mount Keith Emergency Response Team.

The percentage reduction in positive alcohol and non-medical drug during 2001, compared to previous years, demonstrates the positive impact of our Fitness for Work program on our workforce.



In addition to tests in the mine, we undertook 4,513 air and surface radiation tests in the Olympic Dam processing plant to verify effectiveness of the site's radiation control procedures. While none of these test results exceeded legislated levels, some exceeded our action levels. When this occurs, we investigate to identify and control the radiation source. No test result was sufficiently high to present a radiation hazard to our workforce or require reporting to authorities.

We calculate worker radiation exposures every three months, based on personal dose monitoring and air radiation test results. Exposure results during 2000-01showed the annual average radiation exposure to our people was less than 15 per cent of the maximum allowable dose. The maximum individual exposure was less than half the allowable dose.

Fitness for work

We have a fitness for work policy that focuses awareness on the effects of drugs, alcohol and fatigue. Our policy includes random testing for drugs and alcohol, and encourages our employees and contractors to be conscious of the potential impact of workplace fatigue. Our Employee Assistance Program provides support and counselling to our employees and their families who may face challenges associated with drug-, alcohol- or stress-related issues.

During 2001, we conducted 13,639 random tests on individuals for drugs or alcohol across our nickel, copperuranium, fertilizer and Australian exploration operations. Of these, 255 indicated the presence of alcohol or drugs not related to medical prescriptions or legal, over-the-counter medicines. Last year, we reported that we had conducted more than 10,000 baseline and random tests for drugs and alcohol since 1997, with 563 non-medical-related positive results.

The percentage reduction in positive alcohol and non-medical drugs during 2001, less than two per cent compared to previous years of more than five per cent, demonstrates the positive impact of our Fitness for Work program on our workforce. However, the number of positive test results remains a concern.

We will continue with our rigorous testing and communication program associated with our Fitness for Work policy during 2002. We will also implement individual site health programs addressing lifestyle issues surrounding alcohol and drug use across the company.

Serious potential incidents

We have a system for reporting and recording serious potential incidents. These are incidents where there is no injury to people, or damage to the environment, but where such injury or damage could have occurred. We require these near-miss incidents to be reported, along with workplace hazards not previously identified, to enable us to address issues before further incidents arise.

During 2001, a total of 315 serious potential incidents were reported. Several of these incidents, under slightly different circumstances, could have resulted in fatalities. The most significant serious potential incidents reported during 2001 were:

Kalgoorlie Nickel Smelter – 19 March

A sheet of steel plate, weighing approximately five kilograms, fell 20 metres from an overhead platform. It landed approximately five metres from one of our people.

Leinster Nickel Operation – 4 July

An ore loader, working underground, drove into an open underground excavation, coming to rest just before it would have toppled into the excavation.

Kwinana Nickel Refinery – 26 July

A high-pressure steam line to the hydrogen plant ruptured. Though people were working in the area, nobody was injured.

Olympic Dam Mine - 27 July

An underground vehicle was damaged during testing of a prototype automated ore loader.

Queensland Fertilizer Operations - 5 August

A one-tonne beam-trolley and hook assembly fell some twenty metres from the overhead beam.

These incidents are reminders of the significant hazards encountered in our operations. While no-one was injured in any of these incidents, they were serious and full investigations were undertaken to identify the most appropriate remedial action required.



Left: Topsoil prepared for spreading on the wall of the Kambalda tailings storage facility.

Management systems

SYSTEM IMPROVEMENT

During 2001, we continued to work towards integrating environmental, health and safety management into our general business systems.

The previous year we completed, and agreed to, our framework of documents that define the environmental, health and safety outcomes we want to achieve and our expectations for the quality of management of these issues at our sites.

During 2001, we drafted standards to support our environmental, safety and health management system. These allow us to consolidate our existing major hazard and environmental standards into an integrated management system. We also developed technical support guides to assist sites to better manage environmental, safety and health issues.

We had planned to have these standards and supporting guidelines reviewed and agreed to by our operations by the end of December 2001. We did not meet this objective, but expect to have the standards and guidelines reviewed and agreed to during 2002.

Our management system is designed to meet the requirements of several international and Australian Standards. In particular, we aim to meet the requirements or intent of ISO14001, the international standard on environmental management; AS4801 and AS4360, the Australian Standards on safety management and risk management; and the target outcomes and objectives of the National Standard for the Control of Major Hazard Facilities. We believe that the latter standard provides a best-practice approach to managing significant hazards in complex industrial facilities.

Our aim during 2002–03 is to bring operations at all our sites into alignment with the requirements of our integrated environmental, safety and health management system.

WMC ENVIRONMENTAL, HEALTH AND SAFETY MANAGEMENT SYSTEM FRAMEWORK

Our management system is designed to provide a framework for integrating environmental, health and safety management into our overall business, including measuring, auditing and reporting our performance.

Group policies

Leadership, policy and organisation

Standard: Leadership, policy and organisation

Obligations management and assurance

Standard: Obligations management and assurance

Risk and hazard management

Standard: Risk and hazard management

Impacts management

Standards:

Environmental impact management

Environmental management standards*

Health impact management

Management of change

Standard: Management of change

Crisis and emergency preparedness

Standards:

Crisis management and recovery preparedness

Emergency response preparedness

Learning from incidents

Standard: Learning from incidents

Training and competencies

Standard: Training and competencies

Contractor management

Standard: Contractor management

Relationships with interested parties

Standard: Relationships with interested parties

Acquisition, divestment and closure

Standard: Acquisition, divestment and closure

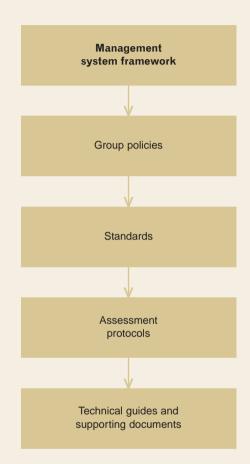
Facilities design, construction, operation and maintenance

Standard

Facilities design, construction, operation and maintenance

Major hazards+

General hazards



^{*}Translated from the Environmental Management System

⁺ Originated from the Elimination of Fatalities Taskforce

 HOME
 TOP
 SEARCH
 PREVIOUS
 NEXT
 CONTENTS
 PRINT
 37 WMC Sustainability Report 2001

AUDITS AND ASSESSMENTS

Audit and assessment is an important element of environmental, health and safety management. Through 2001 we undertook audit and assessment processes including:

- Completing the last three corporate environment audits within the triennial audit cycle commenced in 1999.
- Completing the fourth round of independent safety audits at our sites using the International Safety Rating System, other than Olympic Dam where we completed only three rounds of audits.
- Completing independent expert assessments against applicable WMC Major Hazard Standards at all operating sites and within our exploration division.
- Self-assessment against the requirements of the Minerals Industry Code of Environmental Management.
- Technical audits of our tailings operations at our gold and nickel sites.

WMC MAJOR HAZARD STANDARDS AUDITS

We established the Elimination of Fatalities Taskforce in 1996, in response to our desire to create a fatality-free workplace. During its first two years, the taskforce produced 20 major hazard standards, which we have progressively implemented at our sites.

At various times, we engaged experts to audit our implementation. Applicable standards at each site were audited at least once. Some external audits took place early during implementation and so do not necessarily reflect the current status.

To assess progress in meeting our commitment to full implementation by the end of 2001, we asked each site to conduct an internal self-assessment, with the accompanying action plans to be signed off by that site's general manager. Self-assessments began in the last quarter of 2001. As at 31 January 2002, most self-assessments had been done, with the review and sign-off completed at three of our sites.

AUDITS AND REVIEWS

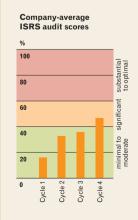
Business	Operation	1997	1998	1999	2000	2001
Nickel	Kalgoorlie Nickel Smelter	★ ∂ ₂	•	$\blacktriangle \bullet \partial_3$	 ∂₄ 	
	Kambalda Nickel Operations	∂_2	 ∂₃ 	A •	•	∂ ₄ ★
	Kwinana Nickel Refinery	∂ ₂	∂_3	A •	 ∂₄ 	A
	Leinster Nickel Operations	∂ ₂	∂_3	A •	★ • ∂ ₄	
	Mount Keith Nickel Operations	∂ ₂	∂_3	*•	• ∂ ₄	*
Gold	Agnew Gold Operation	•	∂_3	*•	$\blacktriangle \bullet \partial_4$	
	Carson Hill Gold Operation ¹	A				
	Central Norseman Gold Corporation		▲ ∂ ₃	•	• ∂ ₄	
	Goodall Gold Operations ¹	A				
	Hog Ranch Gold Mines ¹	A				
	St Ives Gold	★ • ∂ ₂	∂_3	A •	• ∂ ₄	*
Copper-Uranium	Olympic Dam Operations	$\star \bullet \partial_2$	*	 ∂₃ 	A •	*
Industrial Minerals	Hi-Fert	∂ ₂		 ∂₃ 	$\blacktriangle \bullet \partial_4$	
and Fertilizer	Mondo Minerals				A	
	Queensland Fertilizer Operations	•		•	$\star \bullet \partial_4$	A
	Three Springs Talc Operation	∂ ₂	•	$\blacktriangle \bullet \partial_3$	 ∂₄ 	
Other	Chibougamau Operations ¹	A				
	Energy Management Group	A	∂_{1}			
	Exploration Division	∂ ₂		A •	•	
	Mara Rosa Gold Project ¹	A	A			
	Mineral Processing Group	∂ ₂			A	
	Tampakan Copper Project ¹	A	•			
	Zarmitan Gold Project ¹					
	Wesmeg Gold Project	∂_1	∂_2	A •	A	

[•] Environmental management system desktop review ▲ Corporate environment audit ★ PricewaterhouseCoopers verification ¹Not operating during the reporting period ∂₁ International Safety Rating System (ISRS) Audit: Cycle 1 ∂₂ ISRS Audit: Cycle 2 ∂₃ ISRS Audit: Cycle 3 ∂₄ ISRS Audit: Cycle 4

The remainder will be completed by the end of the first quarter in 2002. We will analyse the self-assessments to identify common issues in implementing the standards company-wide.

SITE SELF-ASSESSMENT

During 2002-03, we will implement a single systematic process for site self-assessment within our environmental, health and safety management system. Historically, our auditing has segregated environmental, health and safety elements and considered their findings in isolation. This was a clear deficiency, given the risk-management focus that is central to each functional element.



Site self-assessments will be subject to corporate verification audits and, as deemed appropriate, independent external audits. The first round of verification audits will begin at some sites during 2002, and will constitute a baseline review of environmental, health and safety performance and compliance against the requirements of our integrated environmental, health and safety management system.

CODE SELF-ASSESSMENTS

HOME

During 2001, we completed our second code-implementation survey. In part, the results reflect a change in the assessment process between the surveys, and that little progress has been made during the year. This lack of progress is due to a change in focus. Rather than improving our environmental management system in its current form, we are developing a combined environmental, health and safety management system which, when implemented, will further improve our scores. See code implementation table below.

TAILINGS AUDITS

The potential failure of a tailings storage facility, and subsequent release of tailings to surrounding areas, is one of the most significant environmental risks faced by the mining industry.

Recognising this risk, we design and operate our tailings facilities according to strict criteria. These criteria match, or surpass, general industry standards. Additionally, we began quarterly corporate audits of our tailings storage facilites during the fourth quarter of 2001. Audit reports are submitted to the relevant executive general manager.

Meeting our commitments

We began public environment reporting with our 1994-95 report, and safety and health reporting in 2000. Since then, we made more than 450 separate public commitments to actions to improve our management systems and performance.

During 2001, we undertook a detailed review of our performance against these commitments. Overall, we believe that we have met the majority of the commitments made over the last seven years.

ACHIEVEMENTS

Against our commitments made last year, we have:

- Implemented Take Time Take Charge, our environment, health and safety culture and behaviour program, across all our sites and businesses.
- Completed initial implementation of our major hazard standards at all of our sites and within our exploration operations.
- Completed baseline health-hazard reviews at all our operating sites - other than our Queensland Fertilizer Operations – which we will undertake in 2002.
- Finalised development, and commenced rollout, of an environmental, health and safety training program for our front-line supervisors.
- Undertaken employee perception surveys at our sites, which included questions on safety culture.

Tailings storage - Australian operations

Below: Members of the Smelting Shift Team 1 at Kalgoorlie Nickel Smelter have an excellent safety record. Rear, from left: Steve Grose, Daniel Aue, Michael Strowger, Colin Harris, Brendan Brown, Vince De Carolis. Front, from left: Simon Bessell, Clem Pinoli, Alan Thompson,

Tom Richardson, Tony Farrell. Daryl Leaf was absent on a fire and rescue course

Total ore treated Million tonnes



Operating tailings storage

Hecta	ire	S	Million tonnes				
4000						250	
3200						200	
		l			/		
2400						150	
	•						
1600						100	
800						50	
0	997	1998	1999	2000	2001	0	
	1996-1997	*	_	~ ~	2		
	13						

Closed tailings storage



*1998 data not available

AUSTRALIAN MINERALS INDUSTRY CODE FOR ENVIRONMENTAL MANAGEMENT SUMMARY RESULTS -**CODE IMPLEMENTATION SURVEY**

Score (%)									
Year	Kambalda Nickel	Mount Keith Nickel	Leinster Nickel	Kalgoorlie Nickel	Kwinana Nickel	Olympic Dam Operations	Queensland Fertilzer		
104.	Operations	Operations	Operations	Smelter	Refinery	Operations	Operations		
2000	49	56	51	56	66	54	57		
2001	50	58	50	53	63	54	65		

Below: During 2001, we conducted surveys to review exposure to dust, fibrous material, noise, chemicals and radiation.

Right: Perseverance headframe at Leinster.



- Worked to improve alignment with our contractors by hosting a forum of senior executives from our major
 Western Australian contractors and by making our systems and programs available to all contractors who work for us.
- Completed the environment and International Safety Rating System audit programs at our sites.

DISAPPOINTMENTS

We did not fulfil our commitments to:

- Management system deployment: While we completed drafting the standards to support our environmental, health and safety management system by the end of 2001, we failed to meet our plan to have these reviewed and agreed to by our operational sites. Completing this review process and commencing work in the priority areas will begin in 2002.
- Workplace task audit program: While we designed and tested the program at one of our sites during 2001, we failed to implement the program at all of our sites. This program is important in our strategy to eliminate incidents and injuries. We will begin deployment of the program in 2002.
- Action tracking system: We failed to implement a common system for action tracking across our company. The system, incorporated into our new Environment, Health and Safety Data Management System, was designed and tested during 2001, but will not be available for sites to use until mid-January, 2002.

- Analysis of injury cause: The capacity to analyse incidents and injuries for cause is included in our Environment, Health and Safety Data Management System which became operational in mid-January 2002.
- Revised environmental targets. In our 2000 report, we committed to developing new eco-efficiency targets for publication in this report. These targets have not been developed, as the task is more substantial and complex than we anticipated. At this stage we are working towards publishing new eco-efficiency targets during 2003.

Our inability to meet these commitments was primarily due to our need to devote professional corporate resources to investigating and following-up significant incidents that occurred during 2001. Allocating resources within a limited budget means prioritising what we do. We will complete work on these commitments during 2002.

Fatalities

Any death resulting from an industrial accident is unacceptable. The impact on families, communities and workgroups is immense. A fundamental responsibility of any organisation is to provide a safe workplace and to eliminate fatalities. Regrettably, we had two fatalities during 2001.

LEINSTER FATALITY - ZIBI KOSOWSKI

On 14 January 2001, Zibi Kosowski died when struck by lightning while he and a colleague were inspecting a minewater storage dam at the Rocky's Reward mine at Leinster. A full investigation was held into the incident to ensure that



all possible lessons were learned and the findings applied across our operations.

The investigation found that Mr Kosowski and his co-worker acted in a perfectly reasonable manner by inspecting the dam when they did. There was no storm activity directly overhead and the lightning came from a storm front some five kilometres from where he and his co-worker stood. It is clear that they did not see the distant storm clouds as a threat.

Lightning risk assessments have been completed at our nickel operations in Western Australia. Our other sites will be assessed during 2002.

MOUNT KEITH FATALITY - PHILLIP STEEL

On the night of 18 May 2001, Phillip Steel, an employee of Roche Mining, died when the bulldozer he was operating fell approximately 100 meters down the side of the open-cut mine at Mount Keith. The incident occurred while Mr Steel was using his bulldozer to push broken rock and material over the edge of a mine bench. Phillip Steel was an experienced bulldozer operator who had passed a routine competency test for bulldozer operation only two weeks before the accident.

We undertook a full investigation into the accident, led by an independent specialist from outside WMC.



PREVIOUS

Significant incidents

OLYMPIC DAM FIRE

On 21 October 2001, a large fire occurred in the solvent extraction plant at Olympic Dam. The plant uses a kerosenelike solvent to extract copper and uranium from crushed and milled ore. The write-off of assets and costs associated with the fire is \$71.8 million, which includes \$21.5 million income tax benefit. It is expected that the uranium solvent extraction production will resume in the last quarter of 2002, followed by copper in early 2003. A fire occurred in the same unit in December 1999.

A company expert led a full investigation of the fire. The investigating team included independent safety and riskmanagement experts from outside WMC. The team was unable to determine the cause with absolute certainty because of a lack of conclusive evidence. However, based on the available evidence the most likely cause was a static electricity discharge at a location where polyethylene piping carries solvent. Further independent testing of this cause scenario is being undertaken.

Our site fire-response team extinguished the fire with support from local Country Fire Service volunteers and the Metropolitan Fire Service. Seven firefighters required treatment for minor injuries. Testing during and after the fire revealed no significant environmental impacts from the fire.

OLYMPIC DAM NON-COMPLIANCE ISSUE

Ventilation air is drawn through the underground mine at Olympic Dam by large and powerful electric fans on top of dedicated ventilation shafts. These shafts cut through two layers of porous rock containing saline ground water, from which up to 300 litres of saline water flows into the shafts each minute. The air-flow carries most of this water up the shaft and ejects it as a saline mist. The mist spreads over a large area and salt in the mist falls on vegetation. As a result many tall shrubs and trees surrounding the ventilation shafts have lost leaves. Many have died.

We first publicly reported this issue in 2000. The saline mist's effects increased during 2001. Vegetation on over 980 hectares of our mine lease is now significantly affected. This includes 340 hectares where defoliation of sand-dune species is greater than 75 per cent. The area of most severe impact has increased from 80 hectares at the end of 2000.

We are evaluating three options to reduce this impact, the first of which we are trialling:

- stopping water flowing into ventilation shafts by pumping ground water from the surrounding area
- installing an impervious sleeve into the shafts to stop water entering
- building structures around the top of the shafts to capture and collect the water mist.

We expect that extracting water from around the ventilation shafts will reduce flows into the shafts by up to 50 per cent. We have drilled six bores to allow ground water to be pumped out and plan to have the associated pumping system operational by mid-2002.

We are also assessing the potential effectiveness and costs of the other mist-elimination options and expect to complete this work by mid-2002. We have kept the Olympic Dam Environment Consultative Committee and the South Australian Environment Protection Agency informed of this issue through our six monthly and quarterly meetings.

Left: The fire-damaged solvent extraction area at our Olympic Dam Operations. Below: Large exhaust fans extract stale air from our underground mine at Olympic Dam. Salty water vapour pulled up by the fans settles on nearby vegetation.



Our achievements

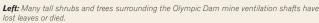


TAKE TIME - TAKE CHARGE

During 2001, we developed and launched the Take Time -Take Charge environmental, health and safety culture and behaviour program at all our sites. This program seeks to influence behaviour by encouraging our people to take ownership of safety and environmental hazards as they work. It includes regular promotions that focus workgroup attention on aspects of environmental, health and safety management under their direct control as a group and as individuals. The program supplements our existing Job Safety Analysis programs by having our people:

- **stop** before they do any work
- think through the task they are about to perform
- assess hazards
- **respond** by making changes if they believe that there is unacceptable risk of injury or environmental harm.

We are pleased with the degree to which Take Time – Take Charge has been accepted by our people – both employees and contractors. Independent surveys of eight sites to assess the program's launch, confirmed a high level of awareness of the program and its objectives. Respondents believe that management supports the program and that it will make a difference.



Below: Nathan Talbot, contract Sampling Technician, conducting sampling on one of our monitoring bores to check for ground water contamination.



During 2001, we undertook health hazard surveys ... Our aim was to confirm that health hazards at our sites are understood and are being effectively managed.

To be successful, the program needs to be supported by effective workplace relationships - specifically between frontline supervisors and their workgroups. Accordingly, a key program for 2002 is rolling-out the Frontline Supervisor Environment, Health and Safety Training program, we developed during 2001.

Over time, we expect that Take Time – Take Charge will help change the way our people approach their work and the way they comprehend hazards. We are committed to actively supporting the program through 2002 and beyond.

GROUND WATER CLEAN-UP AT KWINANA

We have succeeded in remediating a long-standing groundwater contamination issue at our Kwinana Nickel Refinery in Western Australia. The problem arose in the 1970s and '80s when ammonium-sulphate bearing process liquor seeped into the ground from our refining operations, contaminating the ground water. As the ground water aquifer under the refinery ultimately flows into the sea in Cockburn Sound, the ammonium-sulphate contamination, which breaks down to biologically available nitrogen, had the potential to impact on sea grass in the sound.

A ground-water recovery program, we began in 1998, coupled with significant upgrading of our process containment systems and major improvements in our operating practices, has significantly reduced ground-water contamination. We estimate that only 15 to 20 per cent of the original contaminant mass identified in 1991 remains in ground water beneath the refinery.

Natural sources of nitrogen entering the waters of Cockburn Sound, as estimated by the Department of Environmental Protection, total 2,000 to 3,150 tonnes per year. Man-made sources contributed an additional 320 tonnes per year. Based on these inputs, the ongoing contribution to nitrogen flowing into the sound attributable to contamination at the refinery – as at June 2001 – is now only around 0.13 per cent of the total input. This contamination level is considered unlikely to impact on the sound.

The refinery completed recovery of ground water from under the site in June 2001, with the approval of the Western Australian Department of Environmental Protection. Ground-water clean-up associated with Kwinana Nickel Refinery since 1995 has cost \$50.7 million to 31 December 2001.

In addition to completing the clean-up at Kwinana, we began remediating ground water at Baldivis, a closed tailings facility about seven kilometres east of our Kwinana refinery. The Baldivis facility is close to Lake Cooloongup, an inland saltwater lake with local environmental significance. Ammonium sulphate solution seeped from tailings into the ground water. This contaminated ground-water poses a potential environmental risk to the lake.

Our response to the contamination at Baldivis, was to develop a ground-water management program to minimise the potential environmental impact on Lake Cooloongup. The Department of Environmental Protection accepted our program in 1995.



This program includes dewatering and rehabilitating the tailings facility and recovering the contaminated ground water. We completed rehabilitation of the tailings facility surface in 1998. We began recovering the ground water and pumping it to our Kwinana refinery for treatment in October 2001.

There is an estimated 50,000 tonnes of ammonium sulphate in the ground water at Baldivis. Technical improvements to the recovery process will result in approximately 75 per cent of the ammonium sulphate being recovered by 2008. This work will cost approximately \$33.4 million. The recovered ammonium sulphate is sold.

FRONTLINE SUPERVISION

During 2001, we developed and piloted a front-line supervisor environment, health and safety training program. This program meets requirements of Element 8 of the Frontline Management Initiative. It covers environment, safety and health legislation; the management systems we use; and the role of supervisors in successful environmental, safety and health management. We plan for all our frontline supervisors to complete this training during 2002-03. The program meets the Western Australian 'applicable training' regulatory requirements for supervisors in the mining industry.

HEALTH MANAGEMENT

During 2001, we undertook health hazard surveys at all but two of our mining and processing operations. We had surveyed our Kalgoorlie Nickel Smelter in 2000 and will survey our Queensland Fertilizer Operations in early 2002.

PREVIOUS



Our aim was to confirm that potential health hazards at our sites are understood and are being effectively managed. The surveys reviewed the potential for exposure to emissions, chemicals, dust, radiation, fibrous materials and noise. Manual handling, and issues relating to work in unusually hot and cold conditions were also surveyed. We used company and independent consultant occupational hygienists to undertake the surveys, which involved a high degree of participation by our people, and included considerable task observation and site inspection.

The surveys confirmed that our existing exposure management processes are effective in maintaining exposure and health risks to within acceptable limits – especially with known respiratory carcinogens such as asbestos, nickel and silica.

Key issues

HOME

ORPHAN SITES

We own, or lease, several mine sites that are no longer operational. We call these 'orphan' sites. During 2001, we consolidated responsibility for these sites under one manager to improve our management of their rehabilitation and relinquishment.

We have had difficulty in relinquishing or selling orphan sites due to not having agreed government-approved 'closure criteria'. This is an industry issue for all companies. Such closure criteria define the environmental indicators to demonstrate successful rehabilitation of a site, a pre-requisite for relinquishing a site to the State.

Not having closure criteria before starting to mine makes rehabilitation and closure of orphan sites difficult as stakeholder expectations can change during progressive rehabilitation. We believe closure criteria must be developed jointly by the regulating authority and the minerals company. They must be quantitative and be subject to objective verification. They also need to be understood by all stakeholders.

Our attempts at closure have often been frustrated by a lack of closure criteria. We believe that developing these criteria, as proposed by the Austalia and New Zealand Minerals and Energy Council (ANZMEC) 2000 Strategic Framework for Mine Closure, will meet our requirements and we strongly support its implementation. We continue to support the Australian Minerals Council in its efforts to raise the issue with government.

UPDATE ON YEELIRRIE

In 1972, we discovered a uranium and vanadium resource on Yeelirrie Pastoral Station in Western Australia. With our joint-venture partners, we undertook exploration and feasibility studies on the deposit until 1983. The resource is yet to be developed and is on a monitored care and maintenance program while we continue to assess development opportunities. Given public focus on uranium mining, we believe it is important to discuss this site and its status in this report.

Site infrastructure consists of three mining slots and five ore and waste stockpiles within a fenced restricted access, supervised area, calcrete-capped haul roads, light-vehicle access roads and uncapped drill holes. We will rehabilitate the drill holes in 2002.

Left: A water truck is used for dust suppression near the Mount Keith waste-rock stockpiles.

Below: Geoff Blechnyden (left), Plant Operator, with Bonny Nicholson, Environmental Assistant, discussing rehabilitation work near Kambalda.



ORPHAN SITES

Site	Location	Date last operational	Anticipated relinquishment date
Carson Hill	Angels Camp, California, USA	1990	2003
Hog Ranch	Nevada, USA	1993	2001
Goodall	Northern Territory, Australia	1992	Sold 2001
Koolanooka Iron Ore Mine	Morowa, Three Springs Region, Western Australia	1972	2002
Windarra	Laverton District, Western Australia	1994	2003
Siberia	Kalgoorlie Region, Western Australia	1982	To be determined
Forest Hill	Guysborough County, Nova Scotia, Canada	1989	Sold early 2002
Kalgoorlie Research Plant	Kalgoorlie, Western Australia	1983	Care and maintenance
Ngalbain Location 68	St Ives, Western Australia	Never operational	Not planned

Hyper-saline water from the Mariners mine at Kambalda has killed vegetation around

We have completed some rehabilitation work including:

- installing safety bunds around the crest of slots dug during preliminary evaluation
- replacing stock fencing around slots and stockpiles
- regrading runoff catchment bunds
- redrumming metallurgical residues stored in the stockpile areas then burying the drums at an approved site at the Kalgoorlie Research Plant
- transferring higher-grade uranium products held in secure storage at Yeelirrie to Olympic Dam.

We established a ground-water and dust-emission monitoring program in 1998, in accordance with our state-approved radiation management plan. Our monitoring shows that radiation levels are within acceptable limits. This information is provided to Western Australian regulatory authorities in quarterly and annual reports. Our ongoing care and maintenance program includes maintaining the fence around the supervised area to restrict access by the public and stock.

SITE DIVESTMENT

During 2001, we sold our talc business to Luzenac, part of the Rio Tinto group, and our gold operations at Agnew and St Ives to Gold Fields Limited of South Africa. In early 2002, we transferred our shareholding in Central Norseman Gold Corporation Ltd to Croesus Mining.

We disclosed unresolved environmental non-compliance incidents to the purchasers in each of these sales. The contracts of sale had the purchasers take over the sites and operations as going concerns and required them to acknowledge, and have accountability for, ongoing environmental management issues.

A total of three environmental non-compliances were unresolved across these sites and businesses when they were sold.



For further information refer to the site reports on our website.

KAMBALDA NICKEL OPERATIONS: LAKE TEE

In 1991, our Kambalda Nickel Operations began dewatering the ground in which our Mariners mine was later developed. With the approval of the Western Australian Department of Minerals and Energy, we piped this water to a small nearby seasonal lake, known as Lake Tee. In 1996, department regulations, an instrument given effect by the 1985 Western Australian Environment Protection Agency Act, were amended. Dewatering associated with mine operations in excess of 50,000 tonnes per year became a prescribed activity and so required a licence from the department.

We subsequently sought, and were granted, a licence to continue disposing of mine water into the lake. As we developed the mine, the volume of water being removed increased and subsequently exceeded the lake's capacity to dispose of water through evaporation. As a result, the lake filled above its normal maximum waterline. We notified the department and sought their approval to dispose of mine water into Lake Fore, and ceased pumping to Lake Tee.

Several hectares of vegetation died within the Lake Tee catchment and a greater-than-planned volume of salt and mine sediment was deposited onto the lake.

In response, and in concurrence with the department, we:

- Engaged a PhD student to examine the significance of the impact, and to monitor the recovery of the affected area.
 He commenced work in January 2000, and the project is ongoing.
- Completed the initial phase of soil and ground-water monitoring to assess the level of salination of soils and ground water within the Lake Tee catchment. We have submitted the results to the department.

We continue to work with the department to ensure that our impact is adequately remedied.



VANADIUM PENTOXIDE CATALYST

As do all operators of sulphuric acid production plants, we generate spent catalyst and 'fines' from our facilities at Kalgoorlie, Olympic Dam and Mount Isa.

The catalyst, containing six to nine percent vanadium pentoxide, is used in acid production to promote oxidation of sulphur dioxide to sulphur trioxide. The catalyst breaks up during use and is periodically screened to remove excessively 'fine' material. The catalyst also loses activity over time and must be periodically replaced with fresh material.

The 'fines' and spent catalyst retain their vanadium pentoxide component and contain contaminants accumulated on the catalyst during its working life. The spent catalyst and fines are considered toxic to humans and are also an environmental hazard.

As a result of poor planning, we now have the growing unbudgeted cost associated with disposing of this waste. As an interim measure, we are storing spent catalyst at our sites while we develop a technically and environmentally acceptable, and fully costed strategy for the ongoing disposal of this waste stream. We have more than 50,000 litres of spent catalyst at our sites.

PREVIOUS HOME TOP **SEARCH NEXT** CONTENTS PRINT 44 WMC Sustainability Report 2001



LEGAL ACTION

During 2001, we defended the following actions, and will continue to do so in 2002:

Kalgoorlie Nickel Smelter prosecution

It is alleged that on 12 June 1996, emissions from our nickel smelter at Kalgoorlie in Western Australia caused groundlevel concentrations of sulphur dioxide at a designated monitoring station in Kalgoorlie to exceed statutory limits. The prosecution was heard in May 1998 and dismissed.

The Department of Environmental Protection appealed against the decision before the Supreme Court. The appeal was upheld and the case was reheard in July and August 2001. The findings had not been issued at the time of publication of this report.

Kalgoorlie Nickel Smelter health claim

We are defending a claim from a sub-contractor who worked at our nickel smelter in Kalgoorlie for an eight-week period during 1996. The claimant alleges that he suffered injuries from exposure to smelter emissions.

There were no further environment, health or safety related prosecutions or claims for 2001.

Pastoral report

RESPONSIBLE LAND MANAGERS

To simplify our access for mineral and water exploration, we hold leases over 14 pastoral properties adjacent to our operations. These holdings total 2.03 million hectares in Western Australia and 1.16 million hectares in South Australia. In managing these pastoral properties we:

- operate our leases in a cost-effective manner while preserving land condition and key environmental and heritage values
- provide indigenous and other communities with appropriate land access where pastoral, security, safety, environmental and heritage issues are not unduly compromised
- show we are a responsible and progressive land manager.

IMPROVING LAND CONDITION

Conservative stocking rates

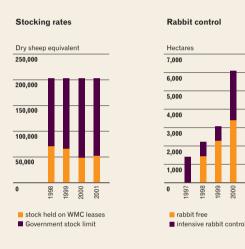
Prior to our acquiring the leases, our Western Australian pastoral properties were used to graze sheep. Our South Australian properties varied from sheep to cattle grazing. Several were severely overgrazed prior to our management. As a result, we have spelled many paddocks for up to five vears to allow them to recover.

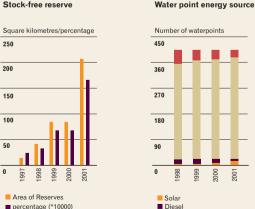
Pastoral land managers can most effectively balance economic return and land condition by maintaining appropriate stocking rates. To protect sensitive habitats and allow degraded areas to recover, stocking rates on our properties are typically around one-third of state government limits. We are also progressively reserving land that is recognised for its environmental value. For example, we transferred over 10,000 hectares from our Stuart Creek pastoral lease to the South Australian National Parks and Wildlife Service. This land was added to the Wabma Kadarbu National Park, which protects sensitive mound springs near Lake Eyre. In Western Australia, we have de-stocked a 45,000-hectare buffer zone adjacent to the Wanjarri Nature Reserve near Mount Keith and manage it specifically for conservation.

Left: At our Arid Recovery Project at Olympic Dam operations, Katie Oxenham (left), Kirrily Blaylock and Michelle Williams prepare to set monitoring traps for bettongs, bilbies, stick-nest rats, and western barred bandicoots.

Below: By monitoring grazing areas on pastoral properties we manage, we can lower stocking rates to let vegetation recover.







200



Controlling feral animals, weeds and fire

Feral goats cause most damage on our Western Australian properties, while in South Australian it is rabbits.

Goats are aggressive foragers and cause considerable damage. As there is a reasonably good market for exporting live goats, some pastoralists separate pregnant goats when mustering to ensure an ongoing supply for the next muster. However, on our properties, all goats trapped or mustered are removed, including those from the adjacent Wanjarri Nature Reserve. A feral goat management plan we conducted in conjunction with the Western Australian Department of Agriculture and Conservation and Land Management, removed 2,500 goats over the 2000-01 summer. By installing more trap-yards during 2001, we expect to double this number during 2001-02.

Rabbits are controlled, and in some cases have been eradicated from the most heavily infested areas of our South Australian pastoral leases, enabling many trees and other vegetation to regenerate.

We routinely control noxious weeds, such as Bathurst burr, double gee and saffron thistle. We use fire as a control mechanism on parts of our Western Australian properties in line with Conservation and Land Management regional objectives.

We are reviewing strategies for controlling other feral animals such as cats and foxes. We plan to report our progress in 2003.

DIVERSIFICATION

We are trialling options to reduce our dependence on traditional livestock and improve environmental conditions. In South Australia, we generate income by sustainably harvesting increased kangaroo populations in lightly stocked regions. Kangaroo harvesting is the principal land use over one-third of our South Australian pastoral properties. We are also trialling a project to take advantage of the developing live-camel export market. Camels are better adapted to arid environments and are believed to cause less environmental impact than conventional stock.

MONITORING AND RESEARCH

We assess our improved land management using more than 100 recently installed vegetation monitoring sites in South Australia and Western Australia. We also sponsor research into protecting or reintroducing threatened species on our leases including mallee fowl, mulgara, stick-nest rat, bilby, burrowing bettong, western-barred bandicoot, salt pipewort and rare mound spring invertebrates.

GREENHOUSE

To reduce expense, diesel use, and carbon dioxide emissions on our pastoral properties, we are replacing diesel pumps with solar pumps. Two-thirds of our pastoral homesteads have been converted from diesel electricity generation to solar hybrid systems, with a 60 per cent reduction in our fuel consumption. Our increased use of solar technologies will provide even greater fuel savings in the future.

Sunrise at the Corridor Sands heavy-minerals pilot plant near Chibuto, Mozambique We are conducting a feasibility study into the project.



Future Plans

We believe that we have an obligation to our people to strive to achieve an incident- and injury-free workplace. We need to eliminate fatalities from our business. We must ensure that our activities do not adversely impact on our host communities. We also strive for excellence in our environmental management. We want to achieve injury rates equal to the best companies in the best industries. This will require us to reduce our injury rates by 80 per cent.

Our target for 2002 is to achieve a lost-time frequency rate of less than 1.3 injuries per million hours worked, and a combined, lost-time plus medical treatment injury rate of less than seven. We also aim to reduce our environmental incidents to less than 75 for the year – a reduction of 43.2 per cent on our 2001 performance.

To achieve these targets, we plan to:

- Continue to promote workplace environment, health and safety through the Take Time Take Charge program.
- Engage our employees in leadership training.
- Continue to roll-out our supervisors environmental, health and safety training program.
- Continue integrating our environmental, health and safety management system into our operations.
- Enhance our audit and assessment program to incorporate requirements for site self-assessment and independent verification auditing.
- Upgrade our risk management programs to achieve better understanding and greater control over the significant potential hazards associated with our operations.

PREVIOUS CONTENTS HOME **SEARCH NEXT** PRINT TOP 46 WMC Sustainability Report 2001

Environmental and safety data tables

SAFETY STATISTICS 2000 2001

	LTIs	LTIFR	MTIs	MTIFR	(LT+MT) IFR	LTIs	LTIFR	MTIs	MTIFR	(LT+MT) IFR
Kambalda Nickel Operations	5	5.9	14	16.5	22.4	3	5.0	10	16.7	21.7
Kwinana Nickel Refinery	3	3.9	6	7.7	11.6	5	5.3	10	10.6	15.9
Kalgoorlie Nickel Smelter	8	9.9	12	14.8	24.7	5	5.4	16	17.2	22.6
Leinster Nickel Operations	10	5.4	39	21.0	26.4	6	3.2	31	16.5	19.7
Mount Keith Nickel Operations	2	1.4	8	5.7	7.1	3	2.1	8	5.6	7.7
Nickel Management	0	0	2	6.9	0	1	4.6	2	9.1	13.7
Nickel total	28	4.7	81	13.6	18.2	23	3.8	77	12.8	16.7
Agnew Gold Operations	2	2.7	9	11.9	14.6	2	2.3	10	11.6	13.9
Central Norseman Gold	6	8.9	12	17.9	26.8	1	1.8	6	10.6	12.4
St Ives Gold	8	4.5	49	27.4	31.9	1	0.5	33	15.0	15.5
Gold total	16	4.8	70	21.0	25.7	4	1.1	49	13.4	14.5
Olympic Dam Operations	3	0.7	47	11.5	12.2	8	2.0	54	13.4	15.4
Copper-Uranium total (inc. Corporate)	3	0.7	47	11.0	11.7	8	1.9	54	12.8	14.7
Hi–Fert Fertilizers	1	2.7	4	10.9	13.6	4	12.5	2	6.3	18.8
Three Springs Talc Operations	0	0	5	28.0	28.0	0	0	1	10.4	10.4
Queensland Fertilizer Operations	5	3.3	19	12.4	15.7	6	3.5	25	14.4	17.9
Copper/Fertilizer (inc. Corporate) total	9	1.4	75	11.8	13.2	18	2.8	82	12.9	15.7
Exploration Division total	0	0	3	5.9	5.9	4	8.1	3	6.1	14.2
Projects	0	0	3	10.5	10.5	0	0	0	0	0
Business Strategy & Development	0	0	6	7.5	7.5	4	4.9	3	3.7	8.6
Corporate (other)	1	0.9	3	2.8	3.8	1	0.9	1	0.9	1.9
WMC total	54	3.1	235	13.4	16.5	50	2.8	212	11.8	14.6

Lost-time injury - An injury that results in at least one full shift being lost at some time after the shift during which the injury occurred.

LTIFR Lost-time injury frequency rate – The number of lost-time injuries per million hours worked.

Medically-treated injury – An injury that requires treatment by a medical practitioner or equivalent and/or is beyond the scope of standard first aid preventing the person returning to their normal duties. MTI

MTIFR Medically-treated injury frequency rate - The number of medically-treated injuries per million hours worked. Leanne Noble (left), Geological Assistant, discussing progress with underground driller Rowland Underwood at our Perseverance underground mine at Leinster. Jonathan Boneham, contract driller at rear.



ENVIRONMENTAL DATA

Total – Australian operations¹	1997–98	1998	1999	2000	2001
Balance of disturbed land at the beginning of the year (hectares)	9,122	9,086	9,529	10,090	10,972
Land disturbed during the year (hectares)	407	640	500	595	465
Land rehabilitated during the year (hectares)	482	465	350	175³	153
Net land disturbed during the year (hectares)	-75	175	150	420³	312
Net change in disturbed land due to improved estimates and sales/acquisitions (hectares)	n/a	268	411	462³	-2,5564
Balance of disturbed land at the end of the year (hectares)	9,047	9,529	10,090	10,972³	8,728
Ore treated (million tonnes)	22.013	22.719	24.586	28.687	29.855
Mill tailings (million tonnes)	20.788	21.331	23.454	25.781	25.049
Total industrial water use (megalitres) ³	24,396	24,400	27,518	31,906	32,591
Total industrial energy used by operations (terajoules)	14,046	15,259	16,273	21,121³	20,779
WMC electrical generation conversion losses (terajoules)	7,537	7,638	245	1,462	1,355
Total carbon dioxide emissions (tonnes)	1,698,295	1,822,827	2,076,484	2,728,125³	2,993,770
Total sulphur dioxide emissions (tonnes)	38,486	37,866	33,780	43,273³	47,217
Remaining non-compliance incidents ²	41	36	40	41	20

¹ Includes Queensland Fertilizer Operations. 2 Data includes all WMC operations. 3 Previously reported data has been revised. 4 Includes land sold with St Ives Gold, Agnew Gold Operations and Three Springs Talc.

Total – Australian operations (excluding Queensland Fertilizer Operations)

	<u> </u>				
Ore treated (million tonnes)	22.013	22.719	24.586	27.726	27.962
Industrial water use per tonne of ore treated (kilolitres) ¹	1.108	1.074	1.119	1.027	1.024
Industrial energy use per tonne of ore treated (megajoules)	638	672	662	658	646
Carbon dioxide emissions per tonne of ore treated (kilograms)	77	80	84	84	87
Sulphur dioxide emissions per tonne of ore treated (kilograms)	1.748	1.667	1.374	1.441	1.309

¹ Previously reported data has been revised.

Australian offices

Total industrial water use (megalitres)	31	30	45	39	33
Total industrial energy use (terajoules)	69	67	56	47	43
Total carbon dioxide emissions (tonnes)	9,097	9,032	7,511	6,739	6,459
Total sulphur dioxide emissions (tonnes)	20	20	16	15	15

International offices

Total industrial water use (megalitres)	2	2	3	6	5
Total industrial energy use (terajoules)	1	1	2	2	3
Total carbon dioxide emissions (tonnes)	349	349	406	517	497
Total sulphur dioxide emissions (tonnes)	2	2	2	3	2
	1997–98	1998	1999	2000	2001

FITNESS FOR WORK TESTING STATISTICS

	Random drug and alcohol tests	Non-medical positive results
Kambalda Nickel Operations	239	11
Kwinana Nickel Refinery	87	11
Kalgoorlie Nickel Operations	546	17
Leinster Nickel Operations	1,097	23
Mount Keith Nickel Operations	8,986	89
Nickel	10,955	151
Olympic Dam Operations Site	1,602	63
Hi-Fert	151	6
Queensland Fertilizer Operations	880	35
Copper/Fertilizer (inc Corporate)	2,633	104
Exploration Division (Australia only)	18	0
Corporate offices	33	0
Total	13,639	255

Projects and Engineering personnel are tested when at individual sites and therefore have no individual testing results.

WMC GROUP OPERATIONS AND PROJECTS 2001





- 1 Mount Keith Nickel Operations
- 2 Leinster Nickel Operations
- 3 Kalgoorlie Nickel Smelter
- 4 Kambalda Nickel Operations
- 5 Kwinana Nickel Refinery
- 1 Agnew Gold Operation (sold during 2001)
- 2 St Ives Gold (sold during 2001)
- 3 Central Norseman Gold Corporation

Opper - Uranium

Olympic Dam Operations

▲ Industrial Minerals

Three Springs Talc (sold during 2001)

■ Fertilizers

- 1 Townsville
- 2 Mount Isa
- 3 Phosphate Hill
- 4 Brisbane
- 5 Newcastle
- 6 Kadina
- 7 D 11:
- 7 Port Lincoln
- 8 Adelaide
- 9 Portland
- 10 Geelong