BHP BILLITON

HEALTH SAFETY ENVIRONMENT AND COMMUNITY REPORT 2002

POLICY INTO PRACTICE

bhpbilliton

'Without the private sector, sustainable development will remain only a distant dream. We are not asking corporations to do something different from their normal business; we are asking them to do their normal business differently.'

UN Secretary General Kofi Annan
Address to the World Summit on Sustainable Development
Johannesburg, South Africa, September 2002

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Member of DJSI – 2003

About this Report

This Health, Safety, Environment and Community (HSEC) Report is the first to present the HSEC performance of BHP Billiton on a consolidated basis.

BHP Billiton was created through the Dual Listed Companies (DLC) merger of BHP Limited (now BHP Billiton Limited) and Billiton Plc (now BHP Billiton Plc), which was concluded on 29 June 2001.

Our previous HSEC Report, which included separate performance summaries for BHP Billiton Limited and BHP Billiton Plc, was released in December 2001.

BHP Billiton Limited and BHP Billiton Plc continue to exist as separate companies but operate on a combined basis as BHP Billiton. Throughout this Report, the terms BHP Billiton, the Company, the Merger and the Group refer to the combined group, including both BHP Billiton Limited and subsidiary companies and BHP Billiton Plc and subsidiary companies. The term 'the merger' has a corresponding meaning.

The performance summary in the Report covers facilities owned and operated by BHP Billiton during the 12-month period to 30 June 2002. Joint venture projects where we are not the operator are excluded unless expressly stated. Where the Company has closed or sold an asset, performance for the reporting period has been estimated on a pro-rata basis. HSEC performance for BHP Steel is included for this reporting period but will not be included in future Reports.

All dollar amounts in the Report are US unless otherwise indicated.

We are continually improving our reporting systems and endeavour to present useful and accurate information. While every effort has been made to ensure the accuracy of the information, including the figures, in this Report, the data is derived from our many operations around the world and, in some cases, grouped data is not strictly comparable. Anyone seeking to rely on information in this Report or seeking to draw detailed conclusions from the data should contact the Company for verification and assistance.

This HSEC Report has been prepared in accordance with the 2002 Global Reporting Initiative (GRI) Sustainability Reporting Guidelines. It represents a balanced and reasonable presentation of our organisation's economic, environmental and social performance. A comprehensive GRI Content Index has been prepared and independently reviewed by URS Corporate Sustainable Solutions. The index can be found on the insert provided in this HSEC Report. It outlines how each specific requirement of Part C of the 2002 GRI Guidelines has been addressed in the Report

Your comments on the contents of the Report would be greatly appreciated and can be noted on the enclosed Feedback Form.

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BHP Billiton Plc. Registration Number 3196209. Registered in England and Wales. Registered Office: 1–3 Strand, London WC2N 5HA United Kingdom.

Message from the Chief Executive

This is the first consolidated report by BHP Billiton on our health, safety, environment and community (HSEC) performance. Throughout the merger process and since, we have strengthened our commitment to meeting our responsibilities to our employees, host governments and local communities.

Our approach is reflected in our Charter, which confirms our 'overriding commitment to health, safety, environmental responsibility and sustainable development'. Supporting the Charter is our integrated HSEC Policy, which outlines our principles in relation to these issues and defines our goal of 'zero harm to people and the environment'.

Over the past year our activities have been focused on putting this policy into practice.

The HSE Committee of the Board has provided sound guidance in this regard. It is my pleasure to welcome Mr Ben Alberts as a new member of the committee. Mr Alberts has extensive experience in the resources industry and is a former member of the BHP Billiton Board.

HSEC Management Standards have been implemented to ensure consistent execution of our policy commitments wherever we operate. We have also set five-year targets across the areas of health, safety, environment and community, with the aim of driving continual improvement. These targets and our performance against each of them are presented in this Report.

As you will see from our scorecard, we have made good progress against many of our targets. However, our achievements provide little satisfaction while we continue to have fatal accidents in our operations. It is with deep regret that we report the deaths of 13 employees or contractors who worked for us during the year. This is a totally unacceptable outcome, and we are working relentlessly to eliminate fatal accidents from our business.

The past year also marks the end of our involvement with the Ok Tedi copper mine in Papua New Guinea through the transfer of our shareholding to PNG Sustainable Development Program Limited. The terms of the exit agreement will provide for the application of dividends flowing from our former equity holding to community development programs in Papua New Guinea.

Our commitment to sustainable development is not only expressed through our internal HSEC standards, procedures and processes, but also through our active involvement in external initiatives. Foremost among these has been our membership of the Global Mining Initiative (GMI), which was established in 1998 by 10 of the world's largest mining companies, with the aim of developing a better understanding of the industry's role and responsibilities in the transition to sustainable development.

We have played an active role in the formulation and realisation of the core components of the GMI process, being the Mining, Minerals and Sustainable Development study, establishment of the International Council on Mining and Metals (ICMM), and the GMI Conference, which was held in May 2002 in Toronto, Canada. These are explained in detail elsewhere in this Report. We are now working with the ICMM to develop action plans for the industry based on the recommendations arising from the GMI process.

On 4 September 2002, the Company was accepted into the Dow Jones Sustainability World Indexes and Dow Jones STOXX Sustainability Indexes for 2002/03, placing us in the top 10 per cent of the 32 companies allocated to our sector. The DJSI enables investors to select leading companies on the basis of economic, social and environmental indicators, without significantly deviating from the market in terms of sector allocation.

The Company has also formally committed to the United Nations Global Compact and its associated principles, which address globalisation issues under the three key areas of human rights, labour standards and the environment. We will use future editions of this Report to communicate our progress.

We remain committed to open and honest reporting of our performance in all areas of HSEC, and have prepared this Report in accordance with the 2002 Global Reporting Initiative (GRI) Sustainability Reporting Guidelines. It represents a balanced and reasonable presentation of our organisation's economic, environmental and social performance. The progress we have made in putting our policy into practice throughout the Company will provide the basis for continual improvement in our HSEC performance over the coming year.

Brian Gilbertson
Chief Executive

BHP BILLITON CHARTER

WE ARE BHP BILLITON, A LEADING GLOBAL RESOURCES COMPANY.

Our purpose is to create value through the discovery, development and conversion of natural resources, and the provision of innovative customer and market-focused solutions.

To prosper and achieve real growth, we must:

- actively manage and build our portfolio of high-quality assets and services
- continue the drive towards a high-performance organisation in which every individual accepts responsibility and is rewarded for results
- earn the trust of employees, customers, suppliers, communities and shareholders by being forthright in our communications and consistently delivering on commitments.

We value:

- **Safety and the Environment** – An overriding commitment to health, safety, environmental responsibility and sustainable development.
- **Integrity** – Doing what we say we will do.
- **High Performance** – The excitement and fulfilment of achieving superior business results and stretching our capabilities.
- **Win-Win Relationships** – Having relationships that focus on the creation of value for all parties.
- **The Courage to Lead Change** – Accepting the responsibility to inspire and deliver positive change in the face of adversity.
- **Respect for Each Other** – The embracing of diversity, enriched by openness, sharing, trust, teamwork and involvement.

We are successful in creating value when:

- our shareholders are realising a superior return on their investment
- our customers and suppliers are benefiting from our business relationships
- the communities in which we operate value our citizenship
- every employee starts each day with a sense of purpose and ends each day with a sense of accomplishment.

Brian Gilbertson
Chief Executive

1 July 2002

bhpbilliton

WORKING RESPONSIBLY AT BHP BILLITON: OUR HEALTH, SAFETY, ENVIRONMENT AND COMMUNITY POLICY

At BHP Billiton, we are committed to sustainable development. Health, safety, environment and community responsibilities are integral to the way we do business.

We commit to continual improvement in our performance, efficient use of natural resources and aspire to zero harm to people and the environment.

Wherever we operate we will:

Develop, implement and maintain management systems for health, safety, environment and the community that are consistent with internationally recognised standards and enable us to:

- identify, assess and manage risks to employees, contractors, the environment and communities
- strive to achieve leading industry practice
- meet and, where appropriate, exceed applicable legal and other requirements
- set and achieve targets that include reducing and preventing pollution
- develop our people and provide resources to meet our targets
- support the fundamental human rights of employees, contractors and the communities in which we operate
- respect the traditional rights of indigenous peoples
- care for the environment and value cultural heritage
- advise on the responsible use of our products.

Seek opportunities to share our success by:

- working with communities to contribute to social infrastructure needs through the development and use of appropriate skills and technologies
- developing partnerships that focus on creating sustainable value for everyone.

Communicate with, and engage, employees, contractors, business partners, suppliers, customers, visitors and communities to:

- build relationships based on honesty, openness, mutual trust and involvement
- share responsibility for meeting the requirements of this Policy.

We will review regularly and report publicly our progress and ensure this Policy remains relevant to the needs of our stakeholders. We will be successful when we achieve our targets towards our goal of zero harm and we are valued by the communities in which we work.

Brian Gilbertson
Chief Executive

1 July 2002

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HSEC Targets and Scorecard

BHP Billiton Targets (Baseline – 1 July 2001 to 30 June 2002)	Comment
Management Systems All sites to have undertaken self-assessments against the BHP Billiton HSEC Management Standards by 30 June 2002.	Achieved. Self-assessments completed.
All sites to achieve ISO 14001 Certification by 30 June 2003.	In progress (55 per cent certified).
Legal Compliance Zero fines and prosecutions.	Not achieved. Six fines. Total US$177 949.
Risk Management Risk registers in place at all sites by 31 December 2002 and within BHP Billiton businesses and Corporate by 30 June 2003.	In progress.
Health and Safety Zero fatalities.	Not achieved. 13 fatalities compared with 15 in 2001.
50 per cent reduction in classified injury frequency rate by 30 June 2007.	In progress.
All sites to complete a baseline survey on occupational exposure hazards and establish associated monitoring and health surveillance program by 30 June 2003.	In progress. Approximately 30 per cent complete.
Reduction of occupational exposures below internationally accepted limits by 30 June 2004 and 20 per cent reduction in incidence of occupational disease by 30 June 2007.	In progress.
Environment Zero significant incidents (i.e. rated 3 and above on the BHP Billiton Consequence Severity Ranking Table).	Not achieved. One incident in Steel.
Energy & Greenhouse All sites with emissions greater than 100 000 tpa of carbon dioxide equivalent[1] to have energy conservation plans with specific targets and greenhouse gas management programs in place by 30 June 2003.	In progress.
Aggregate Group target for reduction in greenhouse gas emissions per unit of production to be set by 30 June 2002.	Achieved. Target of 5 per cent reduction in GHG intensity set for the period 2002 to 2007.
Water All sites with fresh water consumption greater than 500 ML per annum[2] to have water management plans in place by 30 June 2003.	In progress.
Aggregate Group target of 10 per cent reduction in fresh water consumption per unit of production by 30 June 2007.	In progress. Baseline set.
Waste All sites to have waste minimisation programs in place by 30 June 2003.	In progress.
Aggregate Group target of 20 per cent reduction in waste (excluding waste rock, tailings, coal reject and slag) per unit of production by 30 June 2007.	In progress. Baseline set.
Land Management All sites[3] to have land management plans in place by 30 June 2003 to protect and enhance agreed beneficial uses.	In progress.
Product Stewardship Life-cycle assessments prepared for all major BHP Billiton minerals products by 30 June 2004 (incorporating participation in industry programs as appropriate).	In progress.
Community Public HSEC performance reporting at a local level (including incidents, community complaints, and relevant site-specific emissions) by 30 June 2002.	Not achieved. Substantial progress – site-based reports available on our website www.bhpbilliton.com
All sites[3] to have a Community Relations Plan in place by 30 June 2002.	Achieved. 68 plans in place.
No transgressions within the Group's activities of the principles embodied within the United Nations Universal Declaration of Human Rights.	Achieved. No transgressions identified during the period.
Aggregate contribution to community programs, including in-kind support, equivalent to 1 per cent of pre-tax profit, calculated on a three-year rolling average.	Achieved. Expenditure totalled US$40.3m. Equivalent to 1.4 per cent of pre-tax profit.

1. 41 sites have emissions greater than 100 000 tpa carbon dioxide equivalent and, combined, account for 97 per cent of the Group's greenhouse gas emissions.
2. 42 sites have fresh water consumption greater than 500 ML per annum and, combined, account for greater than 96 per cent of the Group's consumption.
3. Excludes petroleum platforms, exploration and development projects, closed sites, and offices with no significant community or land management issues.

Executive Summary

The merger between BHP and Billiton has provided significant advantages in terms of the new Company's ability to deliver improved HSEC performance and contribute to sustainable development outcomes for all our stakeholders.

One of the key advantages of the Company's diversified portfolio is that it provides the stability of cash flow required to take a long-term view on all aspects of our business, including environmental and community issues. It also gives us increased access to expertise and best practices that can be shared across the organisation, creating a faster rate of improvement.

Our approach to sustainable development is underpinned by our Charter, which values 'an overriding commitment to health, safety, environmental responsibility and sustainable development'. The Charter is supported by an integrated HSEC Policy that outlines our principles in relation to these issues, under the goal of 'zero harm'. The Charter and Policy are implemented via detailed Management Standards, the requirements of which must be met at all operations.

The work of the Health, Safety and Environment Committee of the Board continued during the year, with several members participating in site reviews. The Committee also provided guidance in relation to the development and implementation of the Company's health and safety programs.

An auditing process has been established to monitor implementation and ensure improvement plans are in place. The results from this program are very encouraging, with solid progress across the organisation. Substantial progress has particularly been made in the implementation of the HSEC Management Standards, with 55 per cent of our operations having now achieved certification to the international environmental management standard ISO 14001.

In addition to our internal HSEC endeavours, we have been active members of the Global Mining Initiative (GMI). Established in 1998 by 10 of the world's largest mining companies, the purpose of the GMI has been to develop a better understanding of the industry's role and responsibilities in the transition to sustainable development.

The core components of the GMI were an independently managed Mining, Minerals and Sustainable Development study of the global industry's current and potential contribution to sustainable development; the International Council on Mining and Metals (ICMM), which was established in 2001 to provide a global leadership body for the industry on sustainable development; and the GMI conference, which was held in May 2002 in Toronto, Canada. We are now working with the ICMM to develop work plans to address the key recommendations arising from the GMI process.

On 1 July 2002, we formally committed to the United Nations Global Compact. We have also prepared this Report in accordance with the core requirements of the Global Reporting Initiative.

Safety is an area in which our focus has intensified during the year. All our safety performance indicators have improved, and we are pleased to report a 9 per cent reduction in our injury frequency rate. It is, however, with great regret that we report the deaths of 13 employees or contractors. We will relentlessly pursue any opportunity to achieve our goal of zero fatalities.

During the past year, our Customer Sector Groups (CSGs) reported a general improvement in their overall safety performance. Energy Coal intensified safety efforts and implemented a 10-point strategy focused on fatality prevention, safety behaviour and safety leadership development. Stainless Steel Materials saw an improvement in their injury frequency rate. Aluminium reported improved safety performance, principally through the application of behavioural safety systems, but progress was held back by contractor safety performance, which is being addressed. Base Metals took the unprecedented step at Escondida of halting all operations for 24 hours in order to realign the organisation around safe production principles. Carbon Steel Materials reported excellent results in reducing their injury frequency rate, reducing the number of incidents involving mobile equipment and improving overall light vehicle safety. Petroleum achieved an improvement in their injury frequency rate.

The significant occupational illnesses within the Company are noise-induced hearing loss and occupational respiratory disease, and we are focusing on reducing exposures where possible. Stainless Steel Materials, for example, achieved significant reductions in dust exposure. Carbon Steel Materials successfully implemented programs to reduce dust and emissions. When exposures cannot be reduced, we ensure effective use of personal protective equipment. The major community health issues for the Company are endemic infections that seriously impact communities in which we operate in southern Africa. All our businesses in the region are involved in major programs to help manage the impact of HIV/AIDS. Aluminium is also participating in a significant regional malaria control program.

Environmental performance across the CSGs continued to improve; however, one significant incident occurred at Port Kembla Steelworks. In the important area of emissions, we have set ourselves a target of a 5 per cent reduction in greenhouse gas intensity for the period 2002 to 2007.

During the period, we completed the transfer of the Company's equity in the Ok Tedi copper mine to an independent company established to deliver sustainable community development programs.

In line with our Charter values, we are committed to contributing 1 per cent of our pre-tax profit to community programs, based on a three-year rolling average. Our contributions during the year represented 1.4 per cent of our pre-tax profit, significantly exceeding our target. Many of the programs focus on helping communities to maximise and sustain the benefits of our activities through employment opportunities, training, education and health care.

Having made progress overall in our HSEC performance through the year, future efforts will be reinforced by the incorporation of HSEC initiatives into the Company's strategic framework.

BHP Billiton Profile

BHP Billiton is one of the largest diversified resources companies in the world, with a portfolio of high-quality, long-life assets and a significant pipeline of growth projects. The Company operates in around 20 countries (see map at the back of this Report). The Group's headquarters are in Melbourne, with a major office in London and supporting offices around the world.

The Company was formed in June 2001 through a Dual Listed Companies (DLC) merger between BHP Limited (now BHP Billiton Limited) and Billiton Plc (now BHP Billiton Plc). Under the terms of the DLC merger, BHP Billiton Limited and BHP Billiton Plc have identical Boards of Directors and are run by a unified management team. Primary listings are on the Australian and London Stock Exchanges, along with a secondary listing on the Johannesburg Stock Exchange and an American Depositary Receipts listing on the New York Stock Exchange.

The Company has adopted a business model with the following main features:

Customer Sector Group structure
Our Customer Sector Groups (CSGs) are based on customer-oriented groupings of commodities. This is a reflection of our business focus being primarily on the needs of our customers, rather than on extraction and product delivery. Each of the CSGs is a substantial business in its own right, and several are leaders in their field. They have autonomy to optimise their businesses, with clear accountabilities. The CSGs are:

- Aluminium (bauxite, alumina, aluminium)
- Base Metals (copper, lead, zinc, gold, silver)
- Carbon Steel Materials (iron ore, metallurgical coal, manganese)
- Diamonds and Specialty Products (diamonds, titanium minerals, metals distribution, Exploration and Technology)*
- Energy Coal (thermal coal)
- Petroleum (oil, gas, liquefied natural gas, liquefied petroleum gas)
- Stainless Steel Materials (nickel, chrome).

* Announced as a CSG August 2002. HSEC performance not reported separately for period reviewed.

During the year, we completed our exit from uranium production through the sale of our Smith Ranch operation in Wyoming, USA. The sale was part of our planned divestment of non-core businesses.

The steel division was demerged from the Company following the granting of shareholder approval on 26 June 2002 and now operates as a separate entity, known as BHP Steel Limited. HSEC performance for BHP Steel is included for this reporting period but will not be included in future Reports.

Common business processes and practices
The Company is implementing a common set of business processes and practices, termed the BHP Billiton Way. The aim is to deliver operational improvements through rigorous application across the Group of the same proven improvement processes. Benefits are delivered through knowledge sharing and alignment; the evolution to a global corporate culture; cost reduction; production/yield increases; capital elimination/deferral; enhanced health, safety, environmental and community performance; and faster and more efficient project implementation.

Financial performance
BHP Billiton has an annual turnover of US$17.8 billion, attributable profit of approximately US$1.7 billion and an enterprise value of US$38.9 billion (30 June 2002). The Company's gearing ratio and earnings before interest, tax, depreciation and amortisation (EBITDA) to interest cover meet our stated performance standards, being gearing of 35 per cent to 40 per cent and EBITDA to interest cover of eight times. Our analysis suggests that our shareholder base is widely diversified, with approximately 40 per cent of shares held in Australia, 30 per cent in the UK and Europe, 18 per cent in North America, 8 per cent in South Africa and 4 per cent in Asia.

Our diversification across commodities, markets, geographic locations and shareholders enhances the stability of our cash flows. This underpins our capability for capital investment and growth throughout the business cycles. Since late June 2001, the Company has committed approximately US$2.4 billion to new growth projects, with about US$900 million in developing countries.

Stable cash flows also enable us to take a long-term approach to all aspects of our business from financial, social and environmental points of view, which helps us deliver value for all our stakeholders beyond that measured by the aggregation of individual CSG businesses.

FIGURE 1.
SUMMARY FINANCIAL INFORMATION FOR THE BHP BILLITON GROUP

US$ million, Year ending 30 June	1999/00 (restated)	2000/01	2001/02
Group turnover	18 402	19 079	17 778
Earnings before interest, tax, depreciation and amortisation (EBITDA) excluding exceptional items	4 775	5 299	4 915
Earnings before tax excluding exceptional items*	2 538	3 157	2 939
Attributable profit	1 506	1 529	1 690
Net operating assets	20 275	21 712	22 394
Taxation paid (net of refunds)	532	587	515
Royalties paid and payable	n/a	n/a	294
Dividends paid	361	751	811
R&D expenditure	n/a	n/a	26
EBITDA to interest cover	9.1	8.5	11.0
Debt to equity or gearing ratio	34.2%	38.4%	35.0%

* Data used to calculate contribution to community programs as % of pre-tax profit

FIGURE 2. DATA BY GEOGRAPHIC REGION

As at 30 June Unless otherwise stated	Group turnover US$ billion 2000/01	 2001/02	Net operating assets US$ billion 2000/01	 2001/02	Employees (Average numbers during period) 2001/02
Australia	8 254	7 729	8 000	8 153	17 967
UK and Europe	1 987	2 080	734	623	728
North America	2 126	2 351	1 699	1 814	3 165
South America	2 350	2 255	6 167	6 805	6 575
Southern Africa	3 107	2 696	4 311	4 134	17 735
Rest of the World	1 255	667	801	865	4 867
Total	19 079	17 778	21 712	22 394	51 037

FIGURE 3

CSG Earnings Before Interest and Tax (EBIT)
At 30 June 2002

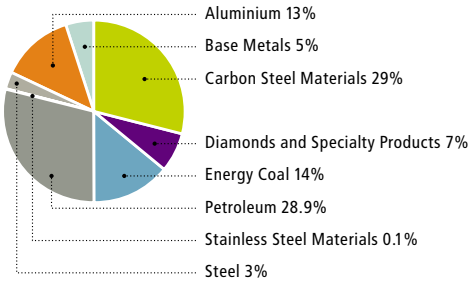


FIGURE 4

Diversification by Geographic Region (Net Operating Assets)
At 30 June 2002

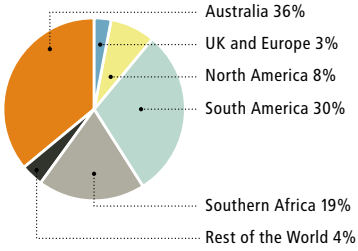


FIGURE 5

Diversification by Market (Turnover)
At 30 June 2002

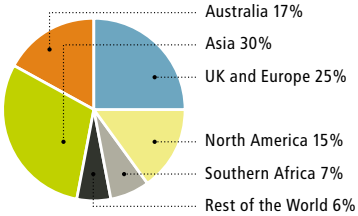
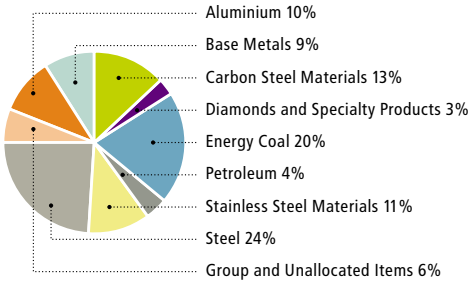


FIGURE 6

Employment by CSG
(Data based on Group total employment of 51 037)
Average in year to 30 June 2002



Vegetated bund wall, Port Hedland, Western Australia

HSEC Governance

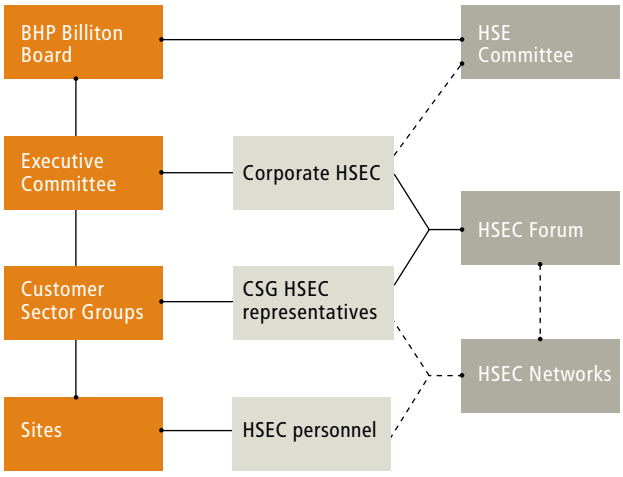
Introduction
The year in review has seen continued growth in interest in the non-financial aspects of our performance, from traditional stakeholders and also from those in the investment community who have begun to assess more thoroughly the social and environmental aspects of our business. Government and community interest in corporate social responsibility has also grown in the light of high-profile corporate accountability failures.

Against this backdrop, it is clear that strong governance in both the financial and non-financial arena is a critical aspect of running a successful corporation. This section outlines our approach to HSEC governance.

Structure and responsibilities
At every level of the organisation, line managers are responsible for HSEC matters. Although they are supported by functional personnel who provide specialist advice and support in managing all aspects of HSEC, ultimate responsibility rests with the general and senior management teams. Executive remuneration is also directly linked to the financial and non-financial performance of the Company. Non-financial performance indicators include safety, environment and community targets.

As shown in Figure 7, the Company's peak HSE governance body is the HSE Committee, which is a subcommittee of the Board. Membership of the committee comprises one executive Director (the Chief Executive); two non-executive Directors (one of whom is committee Chairman); the Vice President Health, Safety and Environment; and recognised international experts in the fields of safety, occupational and community health, and the environment.

FIGURE 7. HSEC ORGANISATION STRUCTURE



HSEC management across the Company is coordinated and monitored through the BHP Billiton Executive Committee, with HSEC issues included in the agenda for each meeting. The peak functional group is the HSEC Forum, comprising Corporate representatives and HSEC functional heads from each of the Customer Sector Groups. The Forum is involved in setting direction for the HSEC function, identifying priority issues, monitoring HSEC performance and building consensus for the way forward. Development of HSEC practices and the response to issues of Company-wide significance are managed through specialist networks.

Our HSEC audit program is a critical component of the HSEC governance program (see page 10). The program has been specifically designed to check that our Charter, HSEC Policy and Management Standards are being effectively implemented across the Group.

Policy, Standards and Systems
The Company has combined health, safety, environment and community matters in one policy and one set of Management Standards. Wherever we operate, HSEC matters are addressed in our decision-making processes, alongside other business considerations.

Knowing that much of our success as a global company depends on how effectively we work with our employees and the communities in which we operate, we see the HSEC Policy as being central to our future success. The Policy underpins our management systems worldwide and sets the foundation from which we operate. It is based on the principles contained in our Charter. This means that, while we strive to deliver strong financial returns to shareholders, we fully recognise and deliver on our wider responsibilities to our stakeholders.

The HSEC Management Standards were among the first management initiatives introduced when BHP Billiton was formed; and implementation is now well under way, providing a strong basis for continual improvement in performance. The Standards, listed in Figure 8, were developed to ensure consistent interpretation and implementation of the HSEC Policy. They form the basis for the development and application of HSEC management systems at all levels of the Group. The scope of the Standards covers all operational aspects and activities that have the potential to affect, positively or negatively, the health and safety of people, the environment, or the community. They cover the entire life cycle of our assets, from exploration through to construction, commissioning, operation, decommissioning, closure and rehabilitation.

The objectives of the Standards are to:

- support the implementation of the Charter and the HSEC Policy across the Group
- provide a risk-based HSEC management system framework, broadly consistent with international standards such as ISO 14001, OHSAS 18001 and SA 8000
- set out the expectations of the Group for the progressive development and implementation of more specific HSEC management systems at all levels of the Group
- provide consistent auditable criteria against which HSEC management systems across the Group can be measured
- provide a basis from which to drive continuous improvement.

FIGURE 8. HSEC MANAGEMENT STANDARDS (TITLES AND INTENT STATEMENTS)

1. Policy, Leadership and Commitment
Intent: BHP Billiton's Directors, managers, employees and contractors, by means of their attitude and actions, demonstrate consistent, visible and proactive leadership and commitment to the HSEC Policy.

2. Responsibility and Authority
Intent: The responsibility and authority of BHP Billiton employees and contractors, as they relate to HSEC, is defined, documented and understood.

3. Risk Management
Intent: HSEC-related risks are identified, assessed, documented and managed.

4. Legal and Other Requirements
Intent: Relevant legal and other requirements are identified, understood and complied with as a minimum. Where laws do not adequately protect health, safety, environment or the community, standards shall be applied that are consistent with the values expressed in the BHP Billiton Charter and HSEC Policy.

5. Planning and Objectives
Intent: Business planning includes HSEC considerations, and objectives and targets are established to drive continuous improvement in performance.

6. Projects and Major Business Transactions
Intent: HSEC risks and opportunities are considered for all phases of projects, mergers, acquisitions and divestments, and other major business transactions.

7. Plant and Equipment Integrity
Intent: Plant and equipment, including that owned or operated by contractors, are designed, constructed, commissioned, operated, maintained and decommissioned so as to minimise adverse HSEC effects.

8. Management of Change
Intent: Changes to operations, processes, equipment, systems, services and personnel are assessed for any potential HSEC risks; and appropriate action taken to ensure existing performance levels are not compromised.

9. Training, Awareness and Competence
Intent: BHP Billiton managers, employees, contractors and visitors are appropriately trained, aware and competent to conduct their activities safely and in a socially and environmentally responsible manner.

10. Suppliers and Contractors
Intent: The contracting of services and the purchase, hire or lease of equipment and materials are carried out so as to minimise any adverse HSEC consequences and to enhance community development opportunities.

11. Human Rights and Indigenous Affairs
Intent: Activities and operations are conducted in a manner that supports fundamental human rights, respects the traditional rights of indigenous peoples, and values their cultural heritage.

12. Communication, Consultation and Participation
Intent: To consult with employees, contractors and external stakeholders on HSEC matters and encourage their participation in, and commitment to, HSEC performance improvement initiatives and practices.

13. Product Stewardship
Intent: The responsible production, transport, storage, use, recycling and disposal of BHP Billiton's products are promoted.

14. Documentation, Records and Document Control
Intent: Management systems documentation, document control and records management support effective implementation of these Standards.

15. Work Procedures and Operational Control
Intent: Procedures are established and maintained such that activities are carried out in a manner that minimises adverse HSEC effects.

16. Emergency Preparedness and Response
Intent: Operations have procedures and resources to effectively respond to reasonably foreseeable emergency situations associated with their activities.

17. Performance Measurement, Monitoring and Reporting
Intent: HSEC performance is monitored, analysed and reported to identify any existing or emerging trends and to measure progress towards the attainment of HSEC goals and objectives.

18. Incident and Non-Conformance Investigation and Management
Intent: Incidents and non-conformance are identified, reported and investigated; corrective and preventative actions are taken; and lessons are shared.

19. Behavioural Safety
Intent: All BHP Billiton personnel consistently practice, and are committed to, safe working behaviour and work practices based on sound systems and procedures developed under these Standards; and managers actively promote and encourage the involvement and motivation of personnel in the use of behavioural processes to improve safety performance.

20. Health and Occupational Hygiene
Intent: Employees and contractors are protected from health hazards associated with their work environment. Community health issues associated with our operations are identified and effectively managed.

21. Audit, Self-Assessment and Management Review
Intent: HSEC audits and assessments are conducted to check implementation of these Standards and systems and to verify performance. Management reviews are conducted to ensure the continuing suitability, adequacy and effectiveness of the management systems.

The requirements of the Standards apply to all BHP Billiton sites and operations throughout the world. These include facilities that are owned or operated by us, development projects, and major activities by contractors on our sites or under our management.

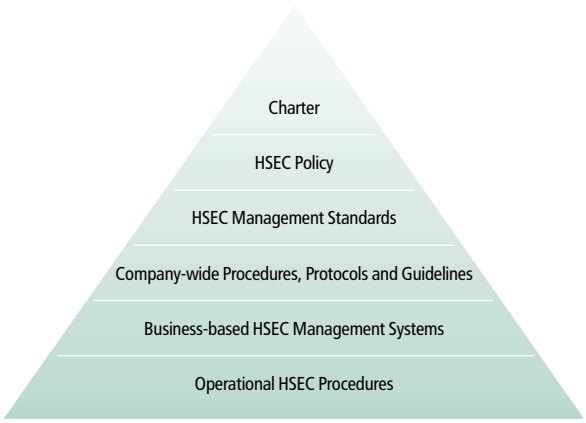
Where we have no operational responsibility but have an equity stake, or where significant BHP Billiton assets are involved, the Standards are made available to the operator so that comparable HSEC management standards can be applied.

Each of the 21 HSEC Management Standards includes a set of clear performance requirements. The Standards are reviewed annually by the HSEC Forum and, if required, revised and reissued. During the year, each BHP Billiton site completed a self-assessment against the Standards and prepared performance improvement plans to progress to full compliance with the Standards.

Hierarchy of systems and documents

The BHP Billiton Charter, HSEC Policy and HSEC Management Standards are mandatory at all our sites and operations, under a hierarchical management system where systems and documents must meet and support the requirements of those of higher levels, as shown in Figure 9. During the year, a number of detailed procedures and guidelines were prepared, based on knowledge and best practices from around the Group. All our operations are able to access leading thinking through these procedures and guidelines, accelerating their rate of improvement.

FIGURE 9. HIERARCHY OF SYSTEMS AND DOCUMENTS



Business conduct

The BHP Billiton Guide to Business Conduct applies to all our employees, regardless of their specific job or location. Consultants, contractors and business partners are also required to act in accordance with the Guide. It provides directions and advice on conducting business internationally and interacting with governments, communities and business partners. Clear guidelines are provided on general workplace behaviour, including issues related to discrimination. It also states our position on a wide range of ethical issues including conflicts of interest, financial inducements, bribery, inside trading and political contributions. Managers and supervisors are held accountable not only for their own actions, but also for the actions of their staff. Employees who violate these policies or standards may be subject to disciplinary action, up to and including dismissal.

Resolution of business conduct issues has been decentralised since the implementation of the DLC merger, taking into account the increased diversity of countries, cultures and languages across the Group. In the event that issues cannot be resolved at a local level, the next level of escalation is regional points of contact or Help Lines based in southern Africa (Johannesburg), Europe (London), Australasia (Melbourne) and South America (Tintaya, Peru). The final level of escalation is via the Global Ethics Panel.

The Guide is available in six languages. Internal performance requirements regarding business conduct have been established under our HSEC Management Standards. Conformance with the Guide will be incorporated in the Company's HSEC audit program.

Auditing

Our HSEC Management Standards include a requirement for an auditing process to check that our Charter, HSEC Policy and Standards are being applied and to verify performance. The audits are designed to address the degree of implementation of our HSEC management systems and their effectiveness in meeting the Group's needs and those of the business being audited. Recommendations for improvement are to be made if required.

The HSEC Audit Protocol is based on the HSEC Management Standards and systems and performance management principles. The audit program is a triennial peer review process, with audit teams drawn from the HSEC function, operations personnel and external sources. It provides an objective view of site activities and systems and assists site managers through the identification of gaps in HSEC management programs. These gaps are addressed through monitored Performance Improvement Programs. The process provides assurance to the Group and the Board that HSEC risks are being satisfactorily managed and identifies leading practices that can be shared across the Company.

Part of the Global Community

Introduction
BHP Billiton is committed to maintaining and promoting dialogue with stakeholders in the resources industry and remaining responsive to the global community's concerns and aspirations. Our Charter, HSEC Policy, Management Standards and Guide to Business Conduct all promote a commitment to acting with honesty, integrity and fairness in our interactions with all our stakeholders – shareholders, employees, contractors, customers, suppliers and the communities in which we operate. We have progressed our efforts in this area over the past year through our individual actions and in collaboration with others.

During the period, the BHP Billiton Forum on Corporate Responsibility (FCR) has expanded to include a South African member. The FCR brings together representatives of our senior management team, the leaders of several key non-government organisations and community opinion leaders to discuss and debate social and environmental matters. Members of the FCR have an opportunity to provide advice and challenge the views of our senior management on broader sustainable development issues. While the Company is not bound by its advice, the FCR provides a means for direct and open dialogue about issues of interest to the wider community.

Industry collaboration
At the industry level, we have been active members of the Global Mining Initiative (GMI). The GMI was initiated in 1998 when 10 of the world's largest mining companies came together with the objective of developing a better understanding of the industry's role and responsibilities in the transition to sustainable development. The GMI consisted of three core components:

1. The Mining, Minerals and Sustainable Development (MMSD) study (www.iied.org/mmsd) was an independently managed process of consultation and analysis of the industry's current and potential contribution to sustainable development. The analysis was based on over 175 commissioned pieces of research associated with extensive regional and global consultative processes.
2. The Global Mining Initiative conference was held from 13–15 May in Toronto, Canada. Participants included 20 CEOs or Chairmen from the world's largest mining companies; mining-related officials from 25 governments including state ministers, industry association and academic participants; and leaders from 74 non-government organisations. The report and recommendations of the MMSD study provided the context for the conference.
3. The International Council on Mining and Metals (ICMM) was established in 2001 to provide a global leadership body for the industry from a sustainable development perspective.

Although the Toronto conference effectively marked the end of the GMI, many participants noted that it was really just the end of the beginning, as many of the conclusions and recommendations contained in the MMSD report would provide the basis for future action by the industry, unilaterally or in partnership with key stakeholders. In his address at the GMI conference, BHP Billiton's Chief Executive, Mr Brian Gilbertson, outlined a number of key areas where the Company's objectives were aligned with the recommendations contained in the MMSD report. He also specifically noted the Company's support for World Wide Fund for Nature's project to investigate potential models for mine site certification.

In addition to the GMI, we have retained our involvement with a wide range of industry groups, participating in meaningful discussions and debate on health, safety, environmental and community issues. These include the World Business Council for Sustainable Development, the ongoing work of the International Council on Mining and Metals, and various associations and bodies in countries in which we operate, such as the Business Council of Australia, the Minerals Council of Australia and the UK's Business in the Community program. Our individual businesses are also active through their sectoral organisations at national and international levels.

We also collaborate with governments, non-government organisations and academic institutions worldwide to undertake and support research on improving HSEC performance. For instance, we are actively working on a malaria control program with the governments of Mozambique, South Africa and Swaziland, in partnership with the World Health Organization (see case study, page 31).

On 1 July 2002, we formally committed to the United Nations Global Compact and its associated principles. The Compact was developed by the United Nations to help realise UN Secretary General Kofi Annan's vision of making globalisation more inclusive, stable and equitable – 'giving a human face to the global market'. The Compact principles address the three key areas of human rights, labour standards and the environment. Our letter of commitment to the Secretary General can be found on our website www.bhpbilliton.com. We look forward to participating in the Global Compact process and reporting our progress through future editions of this Report.

Indigenous relations
We aim to work cooperatively with indigenous peoples to ensure that our presence provides lasting benefits and causes as little disruption as possible to their communities. We will ensure we respect the rights of indigenous peoples to keep their culture, identity, traditions and customs. We strive to ensure that host communities benefit from our operations being sited there (see case study, page 40).

Indigenous relations principles are embedded in our Charter, HSEC Policy and HSEC Management Standards. The HSEC Policy specifically states, 'Wherever we operate we will . . . respect the traditional rights of indigenous peoples . . . and value cultural heritage'.

Our HSEC Management Standards detail the performance expectations for all operations in this area. They also require that the effectiveness of our communication, consultation and participation processes be regularly reviewed, in collaboration with stakeholders, to effect continual improvement.

BHP Billiton Health, Safety and Environment Committee

David Brink – Chairman
MScEng(Mining), DCom(hc)

David is a Director of BHP Billiton and, prior to the DLC merger, was a Director of Billiton Plc. He holds an RSA Mine Managers' Certificate of Competency (Metalliferous) and an RSA Mine Surveyors' Certificate of Competency. David started his career in deep-level mining in 1962, and moved on to manage a shaft sinking, tunneling and exploration contracting company in 1970, with operations mainly in South Africa and Australasia. Since 1983 he has been involved in construction and heavy engineering and, from 1994, in pulp and paper, life assurance and banking as a non-executive Director.

Dr David Jenkins
BA, PhD(Geology)

David is a Director of BHP Billiton. He retired from British Petroleum in 1998 after 37 years, having served as Chief Executive Technology for BP Exploration from 1987 and, from 1997, as Director for Technology and Chief Technology Advisor to the CEO. David is a Director of Chartwood Resources Ltd, providing consultancy services to the oil industry. He is an ex-officio Director for the Information Store Inc, Chairman of SAIC's Energy Advisory Panel, a member of the Technology Advisory Committee of Halliburton and the Advisory Board of Landmark and Consort Resources, and an adviser to Celerant Consulting and Science Applications International Corporation.

Brian Gilbertson
MSc, MBL

Brian is Chief Executive of BHP Billiton and was formerly Executive Chairman and Chief Executive of Billiton Plc. He has had an extensive career in the mining industry and management. Brian is a Director of the South African Reserve Bank.

Professor Albert Davies
BSc, PhD, CEng Eur-Ing, ASCA, FIMM, FSAIMM

Albert gained experience as a prospecting team leader in East Africa and developed a cassiterite and columbite mine in West Africa. He holds a First Class Certificate of Competency in Mine Management and has managed coal mines in the UK. Albert was a government inspector of mines and quarries in the UK for 28 years, becoming HM Deputy Chief Inspector. He has advised government organisations in Australia, Bolivia, Europe and South Africa and has served on the Commission of Inquiry into health and safety in the South African mining industry. Albert has been a consultant to mining and contracting companies and legal firms for 14 years.

Professor Jim Joy
BSc, MSc

Jim is Professor of Mining Safety and Director of the University of Queensland's Minerals Industry Safety and Health Centre, Australia. The Centre develops and delivers OH&S and Risk Management information to engineering students and operates as a national industry research centre. He has been a consultant to the mining industry, facilitating risk assessments and major accident investigations and, over the past 10 years, has undertaken projects in the US, Indonesia, China, South Africa, UK, Canada and New Zealand. Jim has devised mining safety system concepts, tools and management models, and has written many papers on risk management topics.

Dr David Slater
CB, BSc, PhD, CChem, CEng, FRSC, FIChemE

David is a chemist by training and taught chemical engineering at Imperial College in the 1970s. He has extensive experience in safety and environmental risk management, both in consultancy and in UK Regulatory Agencies. Through the 1970s and 1980s, David led the pioneering application of risk assessment techniques to the offshore oil and petrochemical industry. He had a leading role through the 1990s in developing and implementing risk-based pollution control legislation in the UK and Europe. This culminated in introducing the risk assessment that brought a measure of rationality into the BSE ('Mad Cow' disease) debate. He is now a Director of several companies including Cambrensis Limited and a Principal Partner of Acona Limited.

Dr Colin Soutar
MD, FRCP, FFOM

Colin is Chief Executive of the Institute of Occupational Medicine (IOM), Edinburgh, Scotland, an independent occupational health and safety research organisation consulting to governments and industry. He has broad experience in research in occupational health disciplines, particularly the health effects of dusts. Colin trained at Guys Hospital, London University, and pursued a career in hospital medicine, leading to a Consultant appointment in Respiratory Medicine. He was appointed Head of Medical Branch at the IOM in 1979, and Chief Executive in 1990. Colin has published 90 articles in scientific journals and is a member of several government expert committees.

Ed Spence
CEng, FIEE

Ed is Managing Director of Integral Safety Ltd in the UK. His clients include the UK Health and Safety Executive and the Australian and Norwegian equivalents, as well as several major oil companies.
Ed is a chartered engineer and a Fellow of the Institution of Electrical Engineers. He worked with BP from 1975, becoming HSE Manager for BP Exploration (Europe) in 1989 and then retiring in 1996 to establish Integral Safety Ltd. He also sits on the Engineering Department Advisory Board of Aberdeen University, Scotland, and lectures part-time to the MSc course in Safety Engineering, Accident Analysis and Safety Management.

Ben Alberts
BSc Eng (Agric), BSc Eng (Mining), Pr Eng, FSAIMM

Ben was with Iscor Ltd in South Africa for 35 years, working on iron ore, chrome ore and coal mines, both open pit and underground. He was CEO of the Iscor mining division for 17 years, with responsibility for 13 mines. He is a past President (and also an Honorary Fellow) of the South African Institute of Mining and Metallurgy. Ben is Chairman of the Council of the University of Pretoria, South Africa's largest residential university, and a former Director of BHP Billiton.

Colin Bloomfield
BE(Mining), GradCertMgt

Colin is Vice President Health, Safety and Environment of BHP Billiton. He has worked with the Company for over 17 years, mostly in technical and management roles. He holds a First Class Certificate of Competency in Mine Management and has managed underground coal mines in Australia. Since 1998, he has undertaken corporate roles, including Project Director for the BHP Billiton merger integration, and was appointed to his current role in July 2001. Colin is a member of the Minerals Council of Australia Executive Committee and is a Director of Risk Management Technologies Pty Ltd.

David Brink

Dr David Jenkins

Brian Gilbertson

Professor Albert Davies

Professor Jim Joy

Dr David Slater

Dr Colin Soutar

Ed Spence

Ben Alberts

Colin Bloomfield

Performance Summary

The performance of BHP Billiton in the areas of health, safety, environment and community (HSEC) is driven by the Company's commitment to its people, the effective management of risk and the pursuit of operational excellence. The integration of HSEC responsibilities and objectives with the Company's key management objectives is clearly articulated in the Company's strategic framework.

This section presents the key aspects of the Company's HSEC performance in 2001/02, with comments on performance trends.

Safety performance

Regrettably, 13 fatalities occurred in our operations during the period, as shown in Figure 10. Although this is two less than last year for the combined operations of BHP and Billiton, we recognise that there is much more to do if we are to ensure that every employee returns home safely after work. Operating without fatalities is a goal that is achievable and will be relentlessly pursued.

Injuries that caused lost work days during the year are recorded as Lost Time Injuries (LTIs), and a rate accounting for the number of hours worked is presented as the Lost Time Injury Frequency Rate (LTIFR) per million work-hours. The LTIFR for the period was 2.24, an improvement on the previous year's rate of 2.47, as shown in Figure 11.

In the future, we will be reporting classified injury frequency rates. A classified injury is any workplace injury that has resulted in the person not returning to their unrestricted normal duties on any workday after the day on which the injury was received.

During the year we received two fines related to safety infringements. Ambrosia Lake received fines of US$165 for minor safety infractions. Port Kembla Steelworks received a fine of A$200 000 in October 2001 as the result of an incident in which a person was injured while cleaning a conveyor. The incident occurred in August 1998.

FIGURE 10

Fatalities
2000/01 to 2001/02

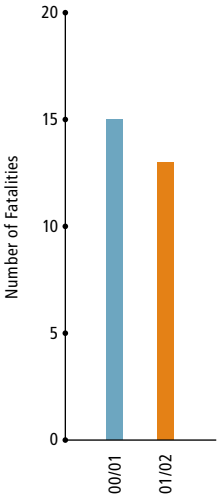
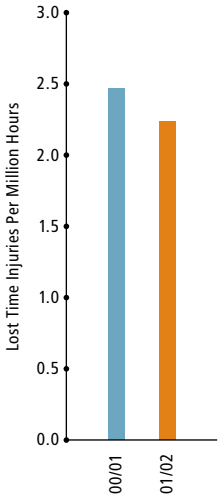


FIGURE 11

Lost Time Injury Frequency Rate
2000/01 to 2001/02



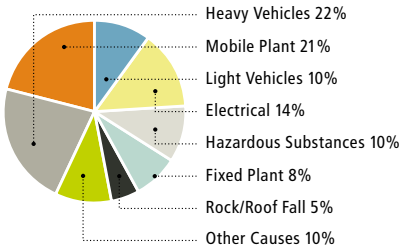
Review of potentially fatal hazards

The principal causes of significant incidents (classified as those that did or could have resulted in a fatality) have remained consistent over recent years, with mobile equipment (mobile plant, light vehicles, heavy vehicles) being the major cause, as shown in Figure 12.

With the goal of reducing significant incidents, groups of experts from throughout the Company have prepared a set of performance expectations in nine separate aspects of our operations. These are to be implemented during 2002/03. Conducting this exercise has in itself provided a valuable forum for learning and sharing knowledge across the Company.

FIGURE 12

Significant Incidents by Cause
July 2001 to June 2002



Safety leadership

In working towards our goal of achieving zero harm to people, the Company established the following principles for safety leadership.

– The safety of our people is a value that is not compromised.
– Safety excellence is recognised as good business.
– Leaders at all levels are safety role models.
– Effective safety leadership is a prerequisite for promotion.
– People are aware of the hazards and risks in their workplace and act accordingly.
– Compliance with safety standards and procedures is absolute.
– 'At risk' behaviours are not acceptable and are addressed when observed.
– Effective skills to lead and work safely are developed through ongoing training and mentoring.
– Repeat incidents are evidence of an out-of-control operation.

In line with these principles, six major activities to help improve our safety performance were implemented during the period. These were:

- conducting an executive leadership workshop for senior management
- promoting and rolling out the Company's HSEC Management Standards
- adopting broader safety performance indicators
- implementing a fatal incident management procedure
- further developing the high potential incident reporting process
- developing Company-wide control protocols for potentially fatal risks in the business.

In the year ahead, we will continue to drive improvement through effective safety leadership, line accountability, behavioural change and awareness programs (see case study, page 27).

Reporting and knowledge sharing

Reporting to senior management in relation to serious incidents is now more extensive, and the results of investigations are provided on a monthly basis.

An intranet was launched to facilitate the sharing of information and lessons learned from incidents involving mobile equipment. This was developed in response to data showing that incidents involving mobile equipment continue to be the major cause of fatalities within the Company. Research findings and new solutions to problems are also provided on the intranet, in a format that is readily accessible throughout the Company.

Health performance

Through our operations and our products we can affect the health of employees, communities and customers in both positive and negative ways. Across the Company, measures are in place to reduce the impacts and deliver beneficial outcomes for each group.

The focus of our occupational health initiatives is to assess and reduce the level of exposure to hygiene risks at all our sites. By continually improving our occupational health and hygiene programs, we are striving to reduce relevant exposures and occupational illness within the Company. These goals are reflected in our health targets. All sites are required to complete a baseline occupational hygiene exposure survey and implement an associated medical surveillance program by 30 June 2003. We are well progressed toward this target. At 30 June 2002, the hygiene survey had approached completion at 30 per cent of our sites. The results of these surveys are being used to progressively eliminate or reduce hazards at their source.

Currently, the significant occupational illnesses within the Company are noise-induced hearing loss and occupational respiratory disease. Data from our operations indicates that nearly one-third of our employees are potentially exposed in the workplace to noise levels exceeding 85 dBA time-weighted average, and at least one-fifth are potentially exposed to levels above other occupational exposure limits. So that the actual exposure of our employees is below internationally accepted occupational exposure limits, several measures are taken. These include engineering and design to reduce exposure, administrative controls (e.g. job rotation) and personal protective equipment (PPE). Compliance in the use of PPE across the Company has been reported as consistently in the upper quartile. We will continue to work to improve this figure, with the aim of protecting our employees in all circumstances where exposure may occur.

During the period, it was reported that 1.7 per cent of our employees were affected by an occupational illness. This comprised 1.3 per cent being diagnosed with noise-induced hearing loss, 0.2 per cent with an occupational respiratory disease and 0.2 per cent with other occupational illnesses. We have set a target of reducing occupational illness throughout our workforce by 20 per cent by 30 June 2007. We are fully aware of the long latency that can be associated with the development of occupational disease and the need to have stringent occupational hygiene procedures in place to continually improve the protection of our employees over time.

There are numerous health initiatives generated for employees throughout the Company. Many sites operate health and wellness programs to assist employees to optimise their level of personal health (see case study, page 31). Education on relevant health issues is provided at many sites, in particular for community health issues that have a significant impact on the workforce. In this respect, strong focus has been given to the major endemic infections that seriously impact health in communities in which we operate. Our commitment to managing the threat of malaria and HIV/AIDS in particular is reflected in case studies presented in this Report (see pages 30 and 31).

We recognise our responsibilities in relation to the potential health effects of our products on consumers. Collaborative industry group work on life cycle analysis is in progress, with a particular focus on the health effects of metal products such as aluminium, nickel and lead (see case study, page 34).

During the period, health and safety initiatives by several of our operations were recognised with awards by external groups and organisations (see Appendix C, page 47).

Joao Lampiao at the Beluluane Clinic near the Mozal smelter, Mozambique. The clinic is supported by the Mozal Development Trust.

Substantial progress was made during the year in the implementation of the HSEC Management Standards and associated management systems. By the end of the reporting period, 55 per cent of our sites had achieved ISO 14001 certification of their management systems; and we remain on target for 100 per cent certification by the end of June 2003. During the period we also completed the transfer of our equity in the Ok Tedi copper mine to an independent company established to promote and deliver sustainable community development programs in Papua New Guinea (see case study, page 32).

Our environmental performance is measured in terms of resource use, environmental impacts and management systems, at all sites controlled or managed by the Company. This year is the first in which we present consolidated performance data for the combined Group. Much effort has gone into ensuring that the data produced are complete and accurate. However, due to the differing classification and calculation methodologies used by BHP Limited and Billiton Plc sites prior to the DLC merger, performance over past years is less comparable for some key parameters. Similarly, analysis of performance trends of the Customer Sector Groups (CSGs) cannot provide reliable data due to the Company's different organisational structure prior to financial year 2001.

A summary of the Company's environmental performance over the last three years is presented in Figure 13. The performance by each CSG across key parameters for the reporting period is presented in Appendix B on pages 45 to 47.

During the year we completed Company guidelines on Decommissioning, Closure and Rehabilitation; Waste and Emission Management; and Oil Spills.

Since 1998, we have taken part in an annual Business in the Environment survey of FTSE 100 companies (the 100 largest public companies listed on the London Stock Exchange). This year we slightly improved our score, moving to 85 per cent from 83 per cent the previous year. We scored well in most of the management sections, but received a lower score in the global warming section due to not having a performance target. We have now established a greenhouse reduction target (see pages 4 and 20) and will be able to provide it for the forthcoming survey period.

During the period, environmental initiatives by several of our operations were recognised with awards by external groups and organisations (see Appendix C, page 47).

Spending on the environment

Our total reported environmental expenditure during the year was US$111 million. This includes rehabilitation costs and environmental management expenses, mainly related to environmental monitoring, the use of contractors for environmental works, and other labour requirements. The total amount also includes costs associated with research and development in environmental management, conducted either internally or in collaboration with industry associations and academic institutions. The amount, however, excludes costs associated with the operation of pollution control equipment, which is frequently integrated within overall plant operations.

Our HSEC research and development activities during the period were focused on projects related to water consumption and usage, energy consumption and greenhouse gases, and waste management and emissions. The broad range of initiatives included our own research studies and collaborative projects with industry organisations and universities.

FIGURE 13. SUMMARY OF ENVIRONMENTAL PERFORMANCE 1999/00 TO 2001/02

	Unit	1999/00	2000/01	2001/02
Land Use				
Newly disturbed	Hectares	4 170	4 930	4 520
Land rehabilitated	Hectares	2 090	2 120	2 230
Land requiring rehabilitation [1]	Hectares	77 770	81 320	82 910
Resource Consumption				
Fresh water	Megalitres	154 000	160 300	147 100
Recycled water [2]	Megalitres	64 100	99 700	543 000
Energy	Petajoules	382	390	396
Waste Disposal				
Hazardous waste [3,4]	Tonnes	626 000	512 700	1 034 000
General waste	Tonnes	288 700	213 700	107 400
Air Emissions				
Oxides of sulphur (SO_x) [5]	Tonnes	78 500	89 900	56 330
Oxides of nitrogen (NO_x) [5]	Tonnes	118 600	112 300	55 750
Fluoride	Tonnes	1 713	1 795	1 680
Greenhouse gases [6]	Kilotonnes CO_2-e	62 600	57 200	60 020

1. Rehabilitation requirements assuming immediate closure of all operations.
2. Recycled water: Not all sites reported recycled water in previous years.
3. Hazardous waste (99/00, 00/01): Sites applied different classification of waste prior to the DLC merger.
4. Hazardous waste (01/02): Data includes slags recently re-classified as hazardous waste in South Africa.
5. Transport and logistics operations were divested during the year. See page 21.
6. Greenhouse gases (99/00, 00/01): Different methodologies of reporting were used prior to the DLC merger.

The Company follows UK generally accepted accounting principles (GAAP) in relation to providing for site rehabilitation. The provision for site rehabilitation as of 30 June 2002 was US$1613 million. This figure excludes cost allowances for human resources and community programs associated with closure and rehabilitation.

Environmental incidents and fines

Port Kembla Steelworks received two fines during the period. A fine of A$60 000 was imposed in September 2001 as the result of a significant environmental incident that occurred in March 2000, where an overflow resulted in an out-of-specification water discharge. A fine of A$1500 was also received due to an accidental emission of untreated gas. These fines are presented in Appendix A on page 45.

A significant environmental incident occurred at Port Kembla Steelworks in October 2001, due to an overflow of out-of-specification water to a local watercourse (see case study, page 38).

During the year, 93 240 litres of hydrocarbons were accidentally discharged to land and water. Included in this total were hydrocarbons released from primary containment facilities but captured in secondary containment facilities. A breakdown of discharges of hydrocarbons by CSG is presented in Appendix B.

Resource use

Land

For reporting purposes, rehabilitation is defined as restoring disturbed land to a level suitable for its original or agreed alternative use, following consultation with stakeholders (see case study, page 36). At 30 June 2002, the area of newly disturbed land totalled 4520 hectares, compared to 4930 the previous year. The area rehabilitated totalled 2230 hectares, a slight increase from 2120 hectares the previous year.

Trends in land use by the Company over the last three years are shown in Figure 14, while land use data for each CSG over the period is presented in Appendix B. Our Energy Coal operations in South Africa and Australia, in particular, made substantial progress in rehabilitation works.

Biodiversity

We recognise that our activities as a resources company may impact on the natural environment, including the diversity of flora, fauna and their habitats. To this end, we require our sites to consider the preservation and conservation of biodiversity in existing and new projects, and also in the closure of the operations. For example, at the Ravensthorpe project in Western Australia, the mine planning and project design process has taken priority species into account, resulting in minimal disturbance to habitats.

Energy

Our operations use energy from various sources, such as coal and coke, diesel, natural gas, purchased electricity, and electricity generated on site. Nearly half of the energy consumed by our sites came from coal and coke, as shown in Figure 15. Of the electricity component, 6 per cent came from renewable energy, which represents 1.7 per cent of our entire energy consumption.

Total energy consumption of 396 petajoules for the period represents a small increase compared to the previous year (390 petajoules), partially due to increased production at our aluminium smelter in Mozambique.

The trend in the Company's energy use over the last three years is shown in Figure 16, while energy use by each CSG for the period is presented in Appendix B.

FIGURE 14

Land Disturbance and Rehabilitation
1999/00 to 2001/02

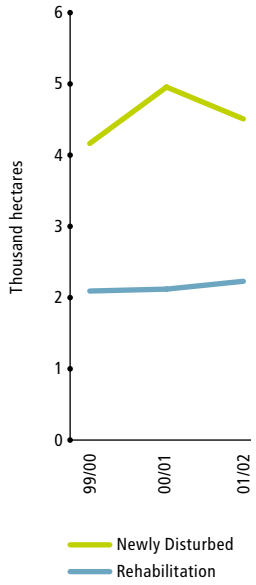


FIGURE 15

Energy Used by Type
2001/02

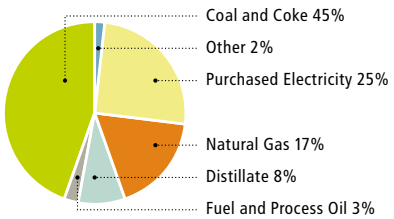
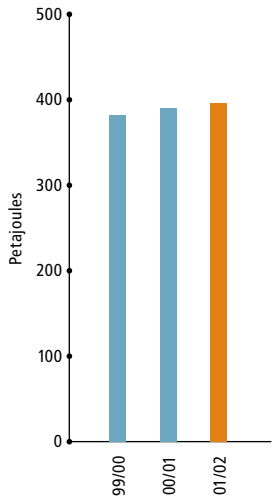


FIGURE 16

Total Energy Used
1999/00 to 2001/02



The energy intensity of a range of our products (i.e. energy consumption per unit of production) is presented in Figures 17 to 20. The energy intensity of these products has not changed significantly over the past three years.

Water

Water is an essential component of our exploration, mining and processing activities, with operations often being located in areas with extreme climatic conditions. The water we consume for production comes from various sources, including purchased water, ground water, storm water, water extracted from rivers, and recycled water.

We recognise the importance of managing water effectively and efficiently, and see water conservation as a key aspect of water management plans (see case study, page 35).

Our fresh water consumption over the period totalled 147 100 megalitres. Trends in the Company's water use over the last three years are shown in Figure 21, while water use by each CSG for the period is presented in Appendix B.

Consumption this year decreased slightly, partly due to a decrease in our production of copper concentrate, and better water management at our sites.

To encourage water conservation, our sites are required to report on the use of recycled water for production. It is encouraging to note the high proportion of recycled water used, compared to fresh water, as presented in Figure 22.

FIGURE 21

Fresh Water Consumption
1999/00 to 2001/02

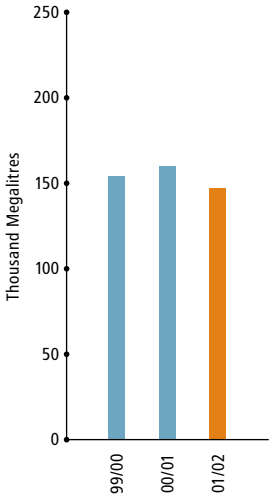


FIGURE 22

Fresh and Recycled Water Use
2001/02

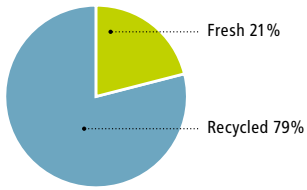


FIGURE 17

Energy Intensity – Aluminium Smelting
1999/00 to 2001/02

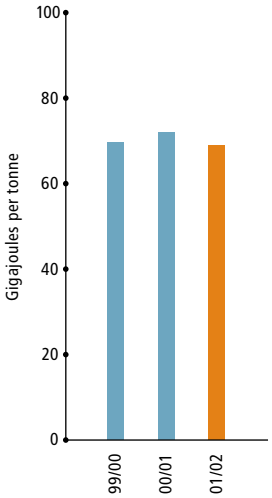


FIGURE 18

Energy Intensity – Raw Steel
1999/00 to 2001/02

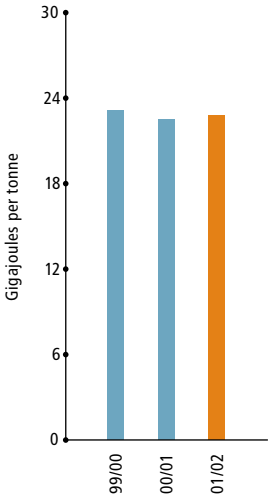


FIGURE 19

Energy Intensity – Queensland Coal
1999/00 to 2001/02

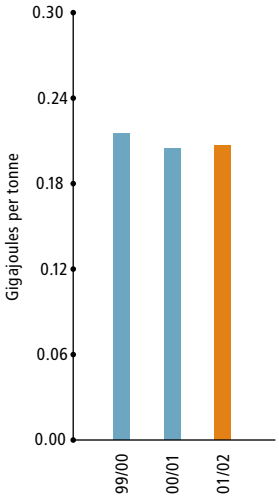
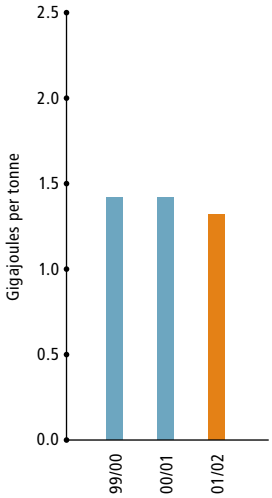


FIGURE 20

Energy Intensity – Petroleum Products
1999/00 to 2001/02



Product stewardship

We recognise that our environmental responsibilities extend beyond production and processing. As part of our commitment to improving our environmental performance, we want to ensure that we understand our product attributes. To this end, a number of our CSGs have been working on product stewardship initiatives. Through their own projects or by participating in industry research programs, they are establishing life-cycle assessment (LCA) profiles of their products.

For example, the Aluminium CSG is conducting LCA studies with the International Aluminium Institute, the Stainless Steel Materials CSG has completed LCA studies for nickel with the Nickel Development Institute and for chrome with the International Chromium Development Association, and the Base Metals CSG has initiated a pilot study into lead and its uses in collaboration with an international industry consortium.

We are on track to reach our target of completing life-cycle assessments for all our major minerals products by 30 June 2004.

Emissions

Greenhouse gas emissions

In 2001/02, we refined our methodology in line with the Intergovernmental Panel on Climate Change (IPCC) guideline and the World Business Council for Sustainable Development/World Resources Institute (WBCSD/WRI) Greenhouse Gas Protocol. Hence the Company's internal greenhouse protocol now includes indirect emissions from purchased electricity and imported steam.

To enable performance comparisons between years, it has been necessary to re-calculate previous years' emissions at some sites, using the revised protocols. As a consequence, the comparisons presented should be considered indicative only.

Including indirect emissions, our greenhouse gas emissions for 2001/02 totalled 60.0 million tonnes of carbon dioxide equivalent. The indicative trend in the Company's greenhouse gas emissions over the last three years is shown in Figure 23, while greenhouse gas emissions by each CSG for the period are presented in Appendix B. Emissions in 2001/02 were slightly lower than our 1999/00 emissions, but higher than last year's figure.

The decrease in emissions from 1999/00 to 2000/01 is mainly due to the public listing of OneSteel. The increase from last year is partly due to higher fugitive emissions in some of our underground coal mines. The different sources of greenhouse gas emissions are presented in Figure 24.

The greenhouse gas intensity of some of our diverse range of products over a three-year period is presented in Figures 25 to 28. The decrease in greenhouse intensity for our coal operations in Queensland, Australia, from 1999/00 is mainly due to energy efficiency improvement.

Our sites with emissions greater than 100 000 tonnes of carbon dioxide equivalent per annum are required to have energy conservation and greenhouse gas management programs in place by the end of financial year 2003. We are on track to achieve this target.

Over the period 2002 to 2007, the Company has agreed to take the following actions.

Intensity reduction target

We aim to achieve an improvement in the greenhouse intensity of our operations' emissions (including emissions from purchased electricity) per unit of production of not less than 5 per cent.

FIGURE 23

Greenhouse Gas Emissions
1999/00 to 2001/02

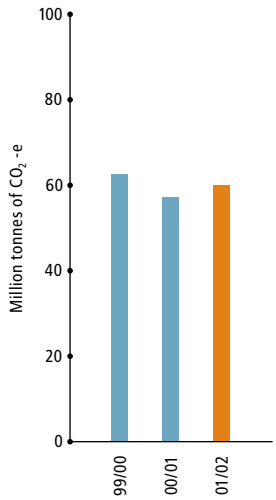
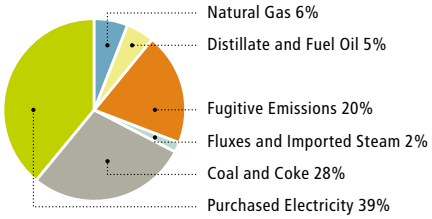


FIGURE 24

Source of Greenhouse Gas Emissions
2001/02



Collaboration with customers
We are committed to working with customers to improve energy efficiency in the downstream consumption of our Energy Coal products in particular.

Emissions reduction in developing countries
We are assessing opportunities to use the Kyoto Protocol's Clean Development Mechanism to reduce emissions and promote sustainable development.

Pricing carbon in decision-making
Carbon pricing sensitivity analysis will be considered in our investment decisions for new projects and investments that emit more than 100 000 tonnes of carbon dioxide equivalent per annum.

Research funding
We are funding research into geological sequestration and clean coal technologies.

Oxides of sulphur and nitrogen
Emissions of oxides of nitrogen (NO_x) over the period totalled 55 750 tonnes, compared to 112 300 tonnes the previous year. Emissions of oxides of sulphur (SO_x) totalled 56 330 tonnes, compared to 89 900 tonnes the previous year.

Trends in the Company's NO_x and SO_x emissions over the last three years are shown in Figures 29 and 30, while emissions by each CSG for the period are presented in Appendix B.

The substantial decrease in reported emissions this year is mainly due to the divestment of our transport and logistics operations, which occurred progressively between January and June 2002 (these assets continue to operate under new ownership).

In addition, we refined our methodologies to include the use of more accurate emission factors, based on accepted international guidelines.

FIGURE 29

NO_x Emissions to Air
1999/00 to 2001/02

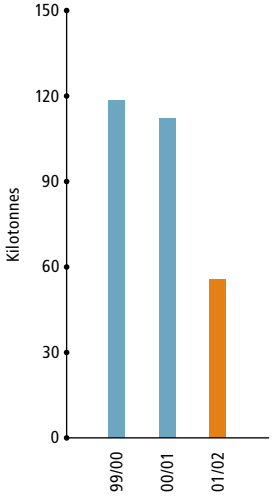


FIGURE 30

SO_x Emissions to Air
1999/00 to 2001/02

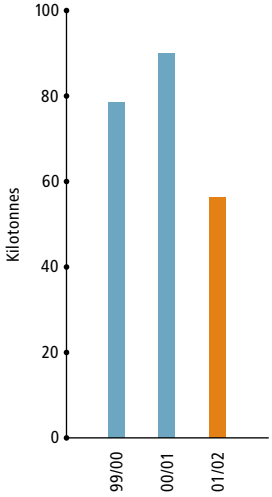


FIGURE 25

Greenhouse Intensity – Aluminium Smelting
1999/00 to 2001/02

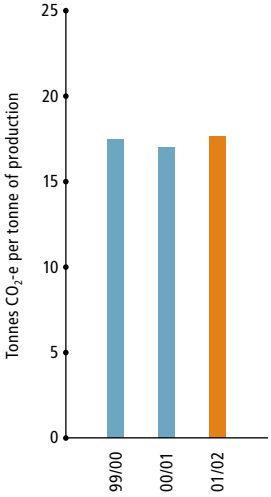


FIGURE 26

Greenhouse Intensity – Raw Steel
1999/00 to 2001/02

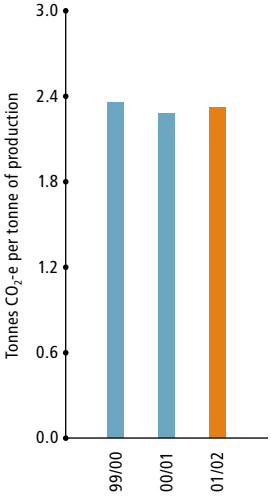


FIGURE 27

Greenhouse Intensity – Queensland Coal
1999/00 to 2001/02

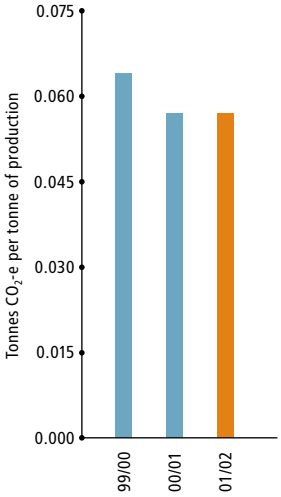
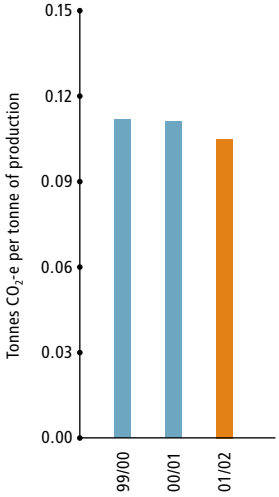


FIGURE 28

Greenhouse Intensity – Petroleum Products
1999/00 to 2001/02



Fluoride

Fluoride emissions are produced during the production process at aluminium smelters. Our fluoride emissions for the period totalled 1680 tonnes. This was a slight decrease over the previous year's total of 1795 tonnes. The decrease was largely due to the installation and implementation of improved fluoride emission controls at our smelters. The trend in the Company's fluoride emissions over the last three years is shown in Figure 31, while emissions by each CSG for the period are presented in Appendix B.

Waste

Through their different activities, our sites generate a variety of wastes. Such wastes are in the form of general waste and hazardous waste. For reporting purposes, we classify general waste as non-hazardous waste that is accepted at normal landfills or waste incinerators, including papers, timbers and domestic wastes. Hazardous waste, as defined by relevant legislation and protocols, is waste not accepted at normal landfills. This includes waste oil, chemical wastes and baghouse dust.

Classifying process waste as hazardous or non-hazardous depends largely on the national legislation in which our operations reside. For example, the slag from our Manganese and Chrome operations in South Africa is classified as hazardous waste.

The total amount of waste disposed of during the period was 1.13 million tonnes. Of this, 1.03 million tonnes was classified as hazardous waste (including slags classified as hazardous in South Africa) and 0.11 million tonnes was classified as general waste.

Indicative trends for the amount of waste disposed of by the Company over the last three years are shown earlier in Figure 13, while waste disposal by each CSG for the period is presented in Appendix B. Figure 32 shows waste disposal by type (excluding overburden, tailings and slags). A direct comparison with waste generation in previous years cannot be accurately made, as different waste classifications were used by the sites prior to the DLC merger.

FIGURE 31

Fluoride Emissions to Air
1999/00 to 2001/02

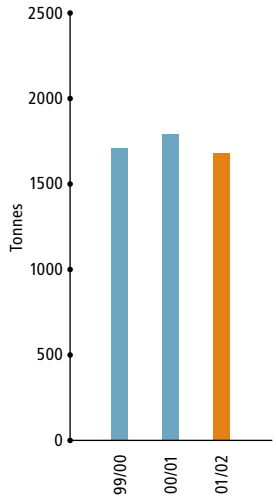
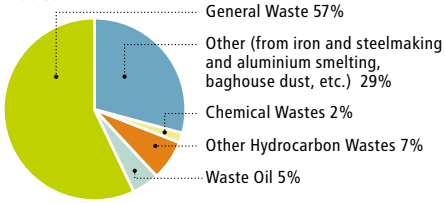


FIGURE 32

Waste Disposed by Type
(excluding overburden, tailings and slags)
2001/02



Katrien Engelbrecht, Leading Hand, tends the West Coast Fossil Park Nursery, established as part of the reclamation of the Chemfos phosphate mine, South Africa

Social performance

The quality of social performance data improved substantially over the reporting period. The implementation of HSEC Management Standards and the requirement for community relations management plans has increased awareness of the need to more effectively capture and report data relevant to this aspect of our operations.

To assist with the effective implementation of the Management Standards, new guidelines were completed on Community Development Principles, Community Programs, Community Relations Plans, Consultation and Participation Processes, Human Rights, Site-Based HSEC Reporting to External Stakeholders, and Stakeholder Identification.

Most sites reported that they have set key performance indicators (KPIs) related to their interactions with local communities. The majority of other relevant sites indicated that the KPIs were in preparation. The KPIs vary from site to site but typically cover such issues as local labour, indigenous employment, community contributions, response times to community complaints and the effectiveness of stakeholder consultation programs.

During the period we reinforced our public commitment to uphold the principles of the United Nations Universal Declaration of Human Rights within our Company's sphere of influence, by formally committing to the United Nations Global Compact. Consistent with this commitment, we have continued to collect performance data relevant to such issues as child labour, wages and working hours, diversity and gender equity, community complaints, and economic benefits. A self-assessment toolkit is in preparation to assist sites in appraising their conformance with the Universal Declaration. The toolkit will be rolled out across the Group over the next 12 months.

Employees

Demographics

During the year ended 30 June 2002, the average number of permanent employees was 51 000, compared with 59 000 in the previous period, a reduction of 13.5 per cent. The reduction is largely due to asset sales, the OneSteel spin-out, and rationalisation programs following the DLC merger. In addition, the Company employed 36 340 contractors (full-time equivalents), a reduction of 30 per cent from the previous period. The majority of our employees are based in Australia (17 967) and southern Africa (17 735).

Our employee numbers reported in our next HSEC Report will be reduced by 12 200, reflecting the demerger of BHP Steel.

Labour standards

We recognise the right of employees at all our operations to freely choose to join labour unions. Although we have a range of employment arrangements applying throughout our businesses, the majority are based on collective bargaining.

Child labour – We continued to monitor Company practices in relation to child labour. All employees were above the minimum age in the jurisdictions in which they worked. Our youngest employees, 16 years of age, were apprentices working in Australia, Asia and Africa.

Remuneration and working hours – All Company employees earned greater than the stipulated minimum wage in the countries in which they worked. The average working week, excluding overtime, ranged from 35 hours at some Australian operations (Goonyella, Peak Downs and Hay Point) to 48 hours at others (Tintaya in Peru and Cerro Colorado and the Spence project in Chile).

With the shift to a truly global organisation, work-life balance has emerged as an important issue in the Company. More employees are travelling internationally for work-related purposes, and there is often a requirement for employees to be available for extended hours to make contact with sites in different time zones. The Company is assessing ways of dealing effectively with this issue. Anecdotal evidence suggests that these demands affect work-life balance and are an important factor in the retention and satisfaction of our staff.

Indigenous and local employment

Indigenous employment remained an important issue during the period. A total of 31 of our 68 sites with significant land management or community relations issues had an indigenous employment program in place during the year. However, some sites could not formally collect data on racial or ethnic background due to privacy issues. It is therefore not possible to present an overall estimate of the Company's indigenous employment level.

A number of our operations have set specific targets for indigenous employment and are publicly reporting their progress against these targets. For example, in 2001, the Pilbara Iron Ore operations set a target of 12 per cent indigenous employment by 2010, consistent with the proportion of indigenous people in the Pilbara population (see case study, page 40). At the time the target was set, the proportion of indigenous employment in our Pilbara operations was estimated to be 3 per cent. The interim target for the coming year has been set at 5 per cent, and performance against the target has been included in the management team's performance goals.

Training and employment commitments to indigenous Northern Aboriginal people continue to be a high priority at the Ekati Diamond Mine™ in the Northwest Territories of Canada. Over the period, 699 indigenous Northern Aboriginal employees worked at Ekati™, an 8.5 per cent increase from the previous year. More than 90 employees enrolled in the Workplace Learning Program, which aims to improve literacy, numeracy and computer skills (see HSEC Awards, page 58). In addition, 31 Aboriginal Summer Students and 23 Aboriginal apprentices worked at Ekati™, and ongoing financial support for Aboriginal students was provided through scholarship programs established under Impacts and Benefits Agreements.

Gender

The number of women working with the Company remained a relatively small percentage of the overall workforce at about 9 per cent. This record is not significantly different to those of other companies in the resources sector.

In Australia, BHP Billiton Limited is required by legislation to report annually on Equal Opportunity for Women in the Workplace. The Australian workplace profile (as at 31 March 2002) indicated that there is an under-representation of women in senior management roles. Further, across the board, men were paid slightly more than women on average. Research conducted by the Company and anecdotal feedback indicates that, where male and female employees have similar work experience and length of service, female employees at BHP Billiton Limited are paid equally to their male peers.

Community relations plans and complaints

A total of 68 of our sites had a community relations plan in place or were covered by a regional plan developed by the business group. This represents 100 per cent of our sites that have significant land management or community relations issues (i.e. not including such sites as petroleum platforms, exploration and development projects, closed sites, and offices).

All sites are required to have community complaints registers in place to record and track the management of community concerns. During the year, community complaints were recorded at 35 sites. The total number of complaints was 540. Of these, approximately 50 per cent related to dust or odour issues. Other complaints were related to noise, traffic, vibration and other environment-related issues.

Consultation and interaction

The majority of sites had a staff representative responsible for community relations issues. Of a total of 68 sites with significant land management or community relations issues, 47 had a formal Community Consultative Group (CCG) in place. The CCGs vary in form; however, they usually involve local community leaders, government representatives and other stakeholders. The groups generally focused on environmental issues relevant to the Company's operations, employment issues or general social issues including the Company's support for community development programs.

Taxes and royalties

During the period, Company operations throughout the world paid US$515 million in taxes, while US$294 million in royalties were paid or payable.

In line with the recommendations of the Mining, Minerals and Sustainable Development (MMSD) report, and in the interests of good governance, we are putting systems in place to enable us to report royalties and taxes on a country-by-country basis in future HSEC Reports.

Community contributions

The majority of sites implemented community support programs during the period. These took the form of donations, in-kind assistance and community development programs. The Company's direct contribution through these programs totalled US$37 million. When combined with in-kind assistance of US$3.3 million and our Corporate community development programs, the total contribution is US$40.3 million, which equates to 1.4 per cent of pre-tax profit (three-year rolling average) significantly exceeding our target of 1 per cent.

There were more than 120 separate community development projects undertaken during the year. Many of these related to health or education issues prevalent throughout the local and wider communities and included HIV/AIDS awareness campaigns, the supply of school facilities, literacy programs and environmental programs.

BHP Billiton continued to collaborate at the Corporate level with leading community organisations on a range of social and environmental partnerships.

In the poverty-stricken Espinar Province in Peru, 250 young (18 and over) college students have commenced a two-year leadership training program in business management and enterprise development as part of a program being delivered by World Vision.

The Company is building the capacity of the micro-enterprise development organisation Opportunity International in Australia and Indonesia so this organisation can continue to be a major force in successful small business development for people in chronically poor communities around the world.

In Australia, we are working with The Smith Family to provide essential school requisites and family support for over 1200 financially disadvantaged children in Townsville and Wollongong, through the Learning for Life program. The Company also continued its relationship with Young Achievement Australia as national sponsor of the 'Business Skills' program, with our employees providing valuable mentoring in enterprise education to secondary students.

The Company's major environmental partnership is with Conservation Volunteers Australia. Now into its second year, 'Revive our Wetlands' has incorporated over 10 000 volunteer days on projects to revitalise 100 of Australia's critically important wetland habitats.

In the UK, the Group supports the work of One World Action, who provide expertise and practical help to organisations committed to strengthening the democratic process and improving people's lives in poor and developing countries. In all cases, they work through local partners on projects that ensure local needs are genuinely understood and met. As well as supporting their partners' work on the ground, One World Action represents their interests in Europe, putting forward their views in debates on policy towards poorer countries, and helping them to forge closer links with decision makers in Britain and the European Union.

Audit and self-assessment

A total of 21 HSEC audits were conducted during the year to assess the level of implementation of the HSEC Management Standards. The audit program involved 54 of our HSEC and operations personnel and four external auditors. The average level and range of conformance for each of the Standards is presented in Figure 33, which shows an overall conformance of 3.5 out of 5.

Sites not audited during the year were required to undertake self-assessments against the HSEC Standards. The results from these 46 self-assessments have been combined to give an overall conformance of 3.4 out of 5.

These results are also expressed in terms of the level of conformance with the Australian Minerals Industry Code for Environmental Management, as presented in Figure 34, which shows an average conformance for the Group of 3.3 out of 5.

Building on the experience of our Cannington operation's 'Broadening our Horizons' audit project (which last year won a Prime Minister's Award for Excellence in Community Business Partnerships), our Beenup minerals sands project has facilitated an independent community audit as part of their closure program.

The audit was conducted by the Beenup Consultative Group to measure the progress towards closure and rehabilitation of the mine site, which is located in the south-west of Western Australia. Comprising representatives from the local community, business and conservation groups, and the local council, the consultative group has been integral to the closure process, working through conceptual planning, development and implementation of the Rehabilitation Plan.

The audit provides a measure of progress and opportunity for continuous improvement of the Rehabilitation Plan. In addition, the audit was developed by the consultative group to make certain the plan remains aligned with community expectations, to ensure that we are doing what we said we would do, and to provide a formal feedback mechanism on rehabilitation progress and performance to the broader community.

FIGURE 33

Conformance score against each of the HSEC Management Standards
Total audits = 21. Overall conformance = 3.5

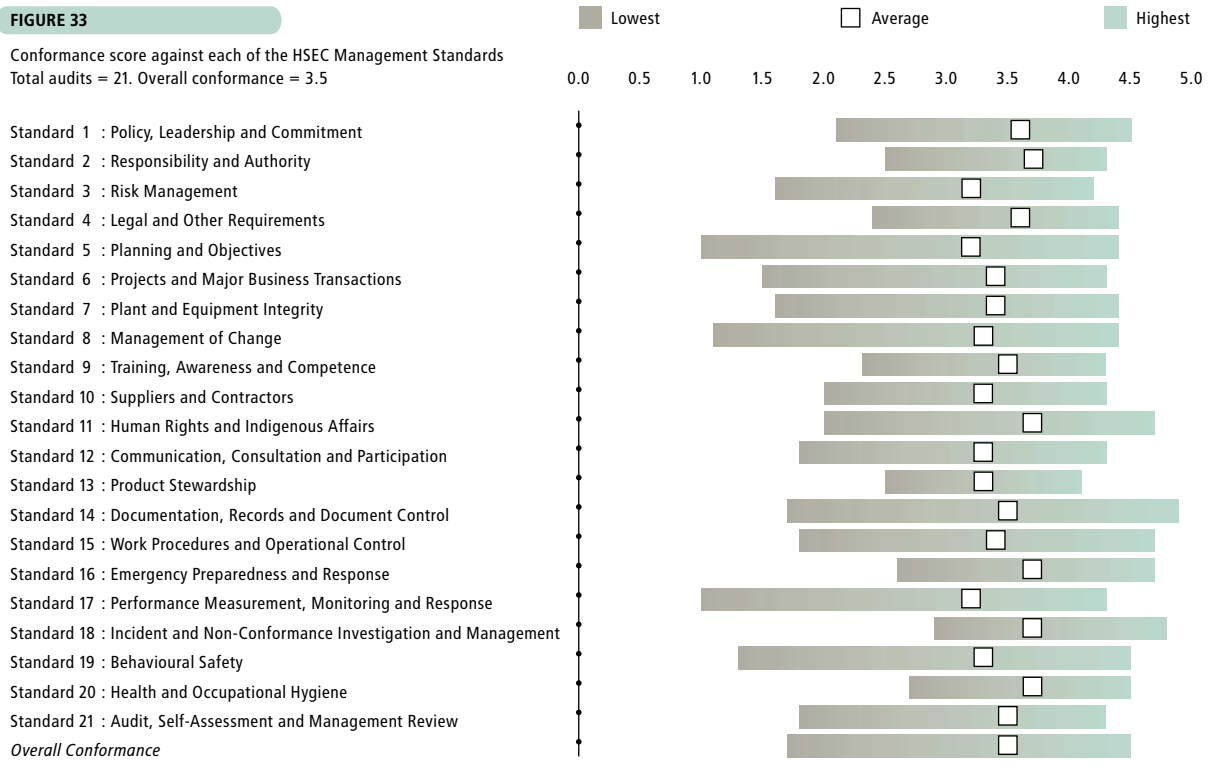
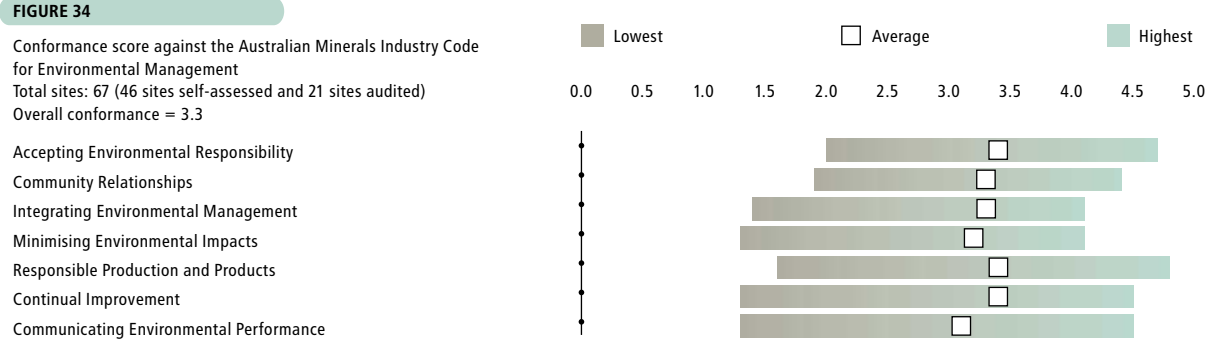


FIGURE 34

Conformance score against the Australian Minerals Industry Code for Environmental Management
Total sites: 67 (46 sites self-assessed and 21 sites audited)
Overall conformance = 3.3



Case Studies

The following case studies present examples of HSEC issues, initiatives, projects and programs across the Group, and highlight some of the challenges faced by our operations in translating policy into practice.

The traumatic impact of each workplace injury or death is the primary incentive to achieve our goal of zero harm

In the 12 months to 30 June 2002, 13 people died while working at BHP Billiton sites. The scale of the tragedy is compounded by the effect on each victim's family, friends and colleagues. The impact can be devastating, and underscores the reason we have set such a challenging goal.

Although the number of deaths at or around Company sites has steadily declined over recent years, reducing by 50 per cent since 1995/96, this is still not acceptable performance to us; and we are working, as a matter of urgency, to achieve our goal of zero harm.

Any workplace death is unacceptable, and we will continue to be uncompromising in our efforts to provide a safe working environment. This commitment is embedded in our Charter. We believe that we can reach a position whereby we operate without any fatalities.

Over the past financial year, our HSEC Management Standards, which form the basis for the development and application of all our HSEC management systems, have been formally implemented throughout the organisation.

Our safety improvement strategy is based on leadership, line accountability, and safe conditions and behaviour in the workplace. Those in leadership positions are expected to be safety role models, to the extent that effective safety leadership is a prerequisite for promotion. During the year, the executive leadership team attended a workshop on strategies for safety leadership. This was conducted in conjunction with an independent review of safety behaviours throughout the organisation. The review determined the existing level of knowledge of what it means to be a safety role model and provided the basis for further learning initiatives.

Compliance with safety standards and procedures is mandatory at all our sites, and we are striving to ensure that 'at risk' behaviour is addressed when observed. Programs are in place to promote awareness of hazards and risks, and ongoing training and mentoring is provided to help people develop the skills to work safely.

As the gradual, rather than dramatic, move in the Company's fatality rate indicates, strategies to improve safety performance usually require a shift in behaviour and can take time to produce a result. This underlines the importance of our health and safety training programs and why we maintain the emphasis on their implementation. We will continue to provide the resources necessary to implement safety performance initiatives and focus individual attention on safe practices and behaviour.

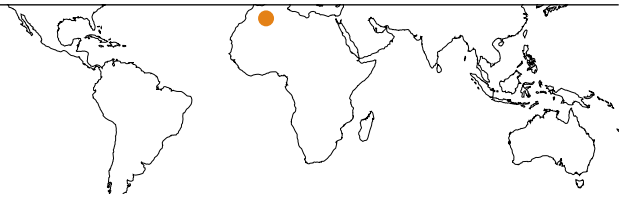
We have enhanced our methods for measuring and investigating safety incidents and managing risks. For example, a broader range of safety performance indicators has been adopted. These go beyond the conventional Lost Time Injury measure to cover workplace injuries that result in employees being restricted in their work duties. We have also developed protocols for identifying and managing key safety risks, covering the most common causes of significant incidents; and these are to be adopted throughout the Company.

Investigations into significant incidents, including fatalities, are now based on a single, high-quality benchmark, using our Incident Cause Analysis Method (ICAM), which is recognised as industry best practice. Along with this, to ensure that we maximise opportunities for learning from past events, we have improved our procedures for reporting significant incidents and developed a Company-wide system for sharing information about safety incidents and ideas. Being continually mindful that each fatality has a devastating and wide-ranging impact beyond the workplace provides a powerful motivating factor in the drive to achieve our goal of zero harm.



Hazards associated with the interaction of heavy and light vehicles are illustrated by this near-miss incident

Safe Driving initiative aims to reduce the risk of harm while travelling in vehicles in Algeria



Our two oil and gas developments in the Sahara Desert of Algeria – the Ohanet and ROD projects – are both in remote locations, and travelling around them presents a significant challenge, mainly because of the climatic and geographic conditions. Asphalt roads are limited and most driving is on graded gypsum tracks, with some cross-country driving also required. To manage the hazards, we have implemented a Safe Driving initiative.

The initiative aims to minimise risks and thereby increase the safety of employees, contractors and the general public, and also to protect wild and domestic animals, preserve the local environment and protect archaeologically important sites. The program includes the following main elements.

Vehicle specification, equipment and maintenance
Our vehicle management program has been continually improved and now covers 40 vehicles, of which 35 are 4WD. Only high-quality vehicles are used, and these are ordered to stringent specifications, including a roll bar, heavy-duty suspension, desert tyres, additional fuel tank, winch, reversing alarms and communications equipment. Survival packs containing food, water, a first aid box and a comprehensive toolkit must also be included.

Each vehicle is checked before it is used, and more detailed inspections are carried out weekly, monthly and annually by trained mechanics. Vehicles used for extensive off-road driving are serviced more frequently.

Driver training and competence
All users of Company vehicles in Algeria must comply with strict requirements. A local or international driving licence is mandatory, and the driver must have completed the internal defensive driving and off-road driver skill training courses, passed the annual driving assessment and have a basic knowledge of first aid.

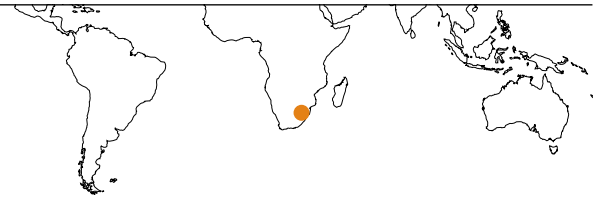
Driving rules
In addition to local traffic rules, we have implemented driving rules to enhance the safety of drivers and passengers. The prescribed speed limits are 10 kilometres per hour within site and base locations, 40 kilometres per hour on graded tracks and off-road, and 80 kilometres per hour on asphalt roads. To monitor adherence to these limits, each vehicle is fitted with a device that records speed, acceleration and deceleration. The records are reviewed regularly, and disciplinary procedures are in place to ensure drivers observe the rules. As well, a driver must not commence a journey until all people in the vehicle have their seatbelts fastened.

Journey management
Journeys are managed through a Travel Coordinator at the Hassi Messaoud base or the field location. All trips are ideally undertaken in daylight hours. For remote locations, two vehicles travel together. Before commencing a journey, the driver must provide departure and arrival points, estimated time of departure and arrival, and travellers' names. Contact must be made with the Travel Coordinator at predetermined intervals throughout the journey and immediately upon arrival. If a vehicle is running late, overdue vehicle procedures are initiated.

All the measures outlined above can help to mitigate road accident risks, but there is no room for complacency, and safe driving remains a high priority for all our personnel in Algeria.

Jimmy Moreham (foreground), paramedic, and Abdul Bassett, driver, stand ready with fully equipped emergency 4WD vehicle, Ohanet Project, Algeria

Our Ingwe operations in South Africa are succeeding in reducing the generation of respirable dust in our coal mines



Coal dust is produced by the cutting process at the coalface and, if not controlled, can represent a threat to the health of coal miners. Initiatives at Ingwe have focused on reducing dust generation at the main source, the continuous miner that is used to cut coal at the 'face'. In 1996, dust concentrations measured near the continuous miner operator were as high as 20 mg of dust per cubic metre of air. The levels are now less than 3 mg/m^3, representing a reduction of more than 80 per cent. The improvement has been achieved through collaboration with research institutions, mining machinery manufacturers, and dust filtration and spray system specialists.

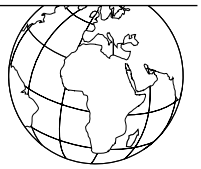
Dust suppression sprays on continuous miner, Douglas Colliery, South Africa

It was several years ago that we began to experiment with a variety of mechanisms and techniques to reduce the concentration of the dust to which continuous miner operators, cable handlers and shuttle car operators were being exposed. After making unsatisfactory progress, we participated in the newly formed South African Coal Industry dust reduction working group, under the leadership of the South African Council for Scientific and Industrial Research.

Significant improvements followed implementation of this group's recommendations, among which was the introduction of higher powered and more efficient irrigated dust scrubbers and directional water spray systems. With assistance from the South African Safety in Mines Research Advisory Council, we then participated in further advanced research into heading ventilation systems to reduce dust concentrations. Prototype systems were developed and validated, before being implemented underground.

By adopting these improved technologies, increasing our focus on machinery maintenance and becoming more disciplined in terms of good ventilation practice, we reached compliance with statutory requirements. With further improvements, we have steadily reduced our dust concentrations to less than half of the allowable dust limit in South African coal mines. We are now working on further advances to achieve dust levels consistently below the 3 mg/m^3 level.

Helping people to behave safely at work is a key to improving safety performance



Kevin Bassett and Sean Hepburn conduct an audit at BHP Steel's Western Port plant, Australia

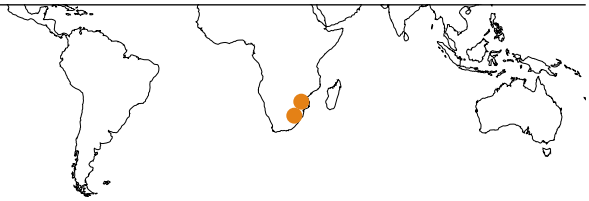
BHP Steel has achieved the world's best improvement in safety performance since our accelerated safety initiative commenced eight years ago. This is according to Dupont, the recognised leader in safety systems. It was in 1994 that Dupont proclaimed that 96 per cent of all injuries were caused by unsafe acts. Historically, BHP Steel had focused on safety systems and engineering fixes as the means for managing safety. Changing the behaviour of people was not a major part of our approach to safety improvement. To do so created a new challenge.

The first step was to define the parameters required for the safe behaviour of the Company's leaders. Strong safety leadership is a prerequisite for achieving good safety performance and the most visible way to achieve this is through the involvement of senior management in safety auditing. The audit process has been split into systems audits and behavioural audits. Known as Safe Act Observations (SAOs), the behavioural audits focus on people as they go about their work. The key steps are:

- watching people work
- looking for safe acts to positively reinforce
- looking for unsafe acts
- having a conversation with people about their concerns and how they might be injured
- gaining a commitment from the people to work safely in the future.

To achieve zero harm, it is essential that we have safe employees working in safe workplaces. A safe workplace can be achieved by implementing strong safety systems and identifying and controlling hazards. At BHP Steel, people are also making the choice to behave safely by adhering to the safety system and then looking for ways to improve their work environment. This has been achieved by involving everyone in the process. SAOs are an excellent means for gaining involvement; however, it is also important that everyone makes, or is helped to make, the choice to work safely, all the time.

The challenge of managing the impact of HIV/AIDS in South Africa and Mozambique



The Company has a number of operations in communities where the incidence of HIV/AIDS is among the highest in the world. As a consequence, we have a responsibility to manage the impact of this situation in order to care for our employees and to protect the viability of our operations. In line with the values expressed in our Charter, we also assist the broader community to overcome the significant effects of this epidemic. In recognising that there is no single solution to this issue, we are liaising with a variety of community, research and industry groups.

Our sites operating in southern Africa have recognised the severity of the problem, and various strategies have been implemented to limit the impact both on the future of the business and our employees. Some aspects include recruiting employees from local communities, thus minimising the use of migrant workers, and encouraging private home ownership, thus reducing the number of workers residing in high-density accommodation (a known factor in increasing the risk of exposure to the disease). Today, the overwhelming majority of employees and their families live in housing of their choice.

Our operations have developed broad educational and awareness programs to ensure our workforce is provided with relevant information on HIV/AIDS. A healthy lifestyle is promoted to assist all employees and to help keep those who are HIV-positive in an optimum state of health. Counselling is available to all employees. Free condoms are readily available at all sites.

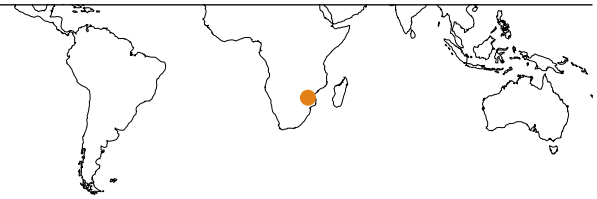
Many of our operations, in consultation with relevant trade unions, have arranged anonymous testing of employees for HIV through saliva-based tests, followed by voluntary testing programs. In general, these programs have been well supported and have given all sites involved a clear understanding of the prevalence of infection in the workforce. In all cases, the testing shows the incidence is lower than that of the local community, with an average infection rate across our workforce of 14 per cent. The reported national average prevalence rate at antenatal clinics in South Africa is 25 per cent.

The Company contributes to each employee's remuneration package to enable them to become a member of a medical aid fund. Consequently, nearly every BHP Billiton employee in southern Africa is a member of a medical aid fund. This means members and their dependants have access to private health care, including medication for opportunistic diseases associated with HIV/AIDS. Most funds provide anti-retroviral drugs as part of HIV/AIDS therapy. We continue to work with leading scientists, pharmaceutical companies and medical aid funds to enhance access to affordable anti-retroviral drugs for employees.

In living our Charter with respect to this significant health issue, we are further developing trusting relationships with our employees and the communities in which we operate. HIV/AIDS awareness programs have been extended to schools and the sex worker industry, while appropriate infrastructure support is given to health care clinics, AIDS centres and orphan care centres. At an industry level, we are participating in initiatives with other employers, the South African Government and labour unions to find workable solutions to the increasing prevalence of infection.

HIV/AIDS community awareness theatre group supported by BHP Billiton

Malaria control program in Mozambique brings benefits to the community and the Company



BHP Billiton's Mozal aluminium smelter in southern Mozambique is located in an area where malaria has been a long-time cause of illness and death. In collaboration with the governments of Mozambique, Swaziland and South Africa, and with the backing of the World Health Organization, the Company has played a key role in establishing a regional malaria control program.

Cristiano Nhapembe conducts anti-malarial spraying at a house near the Mozal smelter

The program has been developed under the Lebombo Spatial Development Initiative (LSDI), introduced by the three governments to enhance social conditions and the economic competitiveness of the region. It was recognised that the success of the LSDI was threatened by the high incidence of malaria, which not only causes tragic loss of life, but also contributes to economic decline by lowering productivity and discouraging tourism.

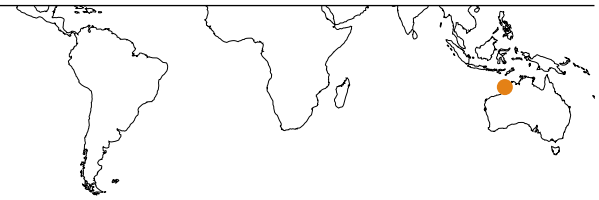
After extensive international research, an insecticide spraying program was seen as the best long-term solution. The program, coordinated by the Regional Malaria Control Council (RMCC), commenced in 2000.

Through the Mozal Community Development Trust, the Company has funded extension of the program to include a 10-kilometre control zone around the Mozal smelter. During 2001, the RMCC organised the spraying of more than 240 000 structures, including 64 000 in the Mozal zone.

Window trap surveys have shown a significant decline in mosquito numbers, and malaria cases at local clinics have decreased. Overall parasite prevalence in children in the control zone in southern Mozambique has reduced by 40 per cent. Reported cases of malaria among Mozal employees have fallen by more than 50 per cent. More than 80 per cent of cases have been very mild, and there have been no employee deaths reported.

The spraying program is being conducted in conjunction with other community-based initiatives, such as establishing a malaria laboratory, upgrading local health clinics and conducting community education activities. Apart from reducing the pain and suffering associated with the disease, the control program is helping to remove a major impediment to the sustainable development of the region.

Tailored exercise program aims to improve health and fitness of crew on board *Griffin Venture* FPSO



Crew exercising on the FPSO helideck

The Company's Griffin Venture *FPSO (floating production, storage and offloading vessel) is located offshore from Onslow on the northwest coast of Western Australia. An exercise program has been developed for the crew, tailored to their specific health needs and working environment. The program, which is promoting the importance of healthy eating, moderate drinking, and staying fit, flexible and in a healthy weight range, has attracted a keen response.*

The fitness program was selected as the FPSO's health initiative for this financial year primarily because an analysis of reported back injuries showed they frequently resulted from a lack of fitness or suppleness, or poor body posture, rather than a lack of knowledge of correct lifting techniques.

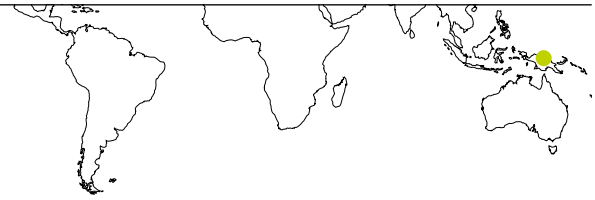
A consulting physiologist visited the *Griffin Venture* to develop the program and initiate exercise classes. Individual fitness assessments have been undertaken, based on personal health and fitness goals. Almost the entire crew has taken part in the assessments, including many who had initially been sceptical. Some are aiming to lose weight or improve their flexibility or aerobic capacity, while others are looking to strengthen abdominal or lower back muscles to prevent back damage.

A group exercise target was established, based on calories burned. This was included in our HSE key performance indicators. The Company decided to donate one cent per calorie to a charity selected by the crew. So far, A$10 000 has been donated through this program.

While the results of each individual's assessment remain confidential, a group profile has been established so that common issues can be identified and managed. These include high blood pressure, high cholesterol, poor hamstring flexibility and poor aerobic fitness.

To encourage involvement in the program, the FPSO's gym equipment has been updated, and targets have been set to improve the rate of participation in aerobic exercises such as using the gym bikes and rowing machines and walking or jogging around the helideck. Individuals have their own targets, based on their personal fitness assessment. The overall objective is for a general improvement in the crew's aerobic fitness, flexibility and sense of wellbeing, and a continuing decrease in back injuries and other lifting injuries.

Establishment of Sustainable Development Program completes our withdrawal from Ok Tedi



The withdrawal of BHP Billiton from the Ok Tedi copper mine in Papua New Guinea (PNG) was completed in February this year with the transfer of our 52 per cent equity stake to a company that will promote sustainable development projects for the benefit of the people of PNG.

As reported previously, we sought early closure of the mine because of its environmental impact; however, this proposal was not agreed to by the other shareholders in Ok Tedi Mining Limited (OTML) – the PNG Government and Inmet Mining Corporation. The Government preferred to continue operation of the mine because of the significant social and economic benefits it provides. We recognise the importance of those benefits and respect the wishes of the PNG people.

Unable to gain agreement for early closure, we sought a responsible withdrawal from the project; and this led to the transfer of our shareholding in OTML to PNG Sustainable Development Program Limited (Program Company). This new independent company is to utilise future dividend payments from its 52 per cent shareholding in OTML to fund sustainable development projects in PNG, particularly the Western Province.

The Program Company, based in Singapore, is managed by an independent board of seven directors comprising people of high standing with relevant, internationally recognised experience. Three are nominated by BHP Billiton, in consultation with external parties, including the BHP Billiton Forum on Corporate Responsibility, and three by PNG agencies. These six directors agree on the seventh member of the board, who resides in Singapore.

We are providing financial support to the Program Company in the form of an interest-free funding facility until it has built up its own funds. One-third of future dividends flowing to the Program Company will be allocated to sustainable development projects throughout the remaining 10-year economic life of the mine. The remaining two-thirds will be set aside for projects to be implemented for up to 40 years after the end of mine life.

Criteria have been established for the selection of projects, which will fall within the broad categories of health and education, food production and agribusinesses, forestry and small to medium enterprises. The Program Company will publicly report progress of the projects on an annual basis.

The arrangements for our exit include a number of obligations that OMTL has accepted to minimise future environmental impacts of the mine's operations, including continuation of the dredging of sediments from the Lower Ok Tedi (or the implementation of a superior mitigation method) for the life of the mine. Additionally, OTML is required to retain a skilled and environmentally responsible mine management team and to set aside cash funds on an annual basis for rehabilitation following closure of the mine.

As we will no longer benefit financially from the Ok Tedi mine operations, BHP Billiton has been indemnified by the Program Company against future liabilities, including legal claims.

In summary, establishment of the Program Company achieves our goals of managing our withdrawal in a way that minimises future environmental impacts and maximises the social and economic benefits for PNG, and protecting our shareholders from any liabilities arising from ongoing operation of the mine.

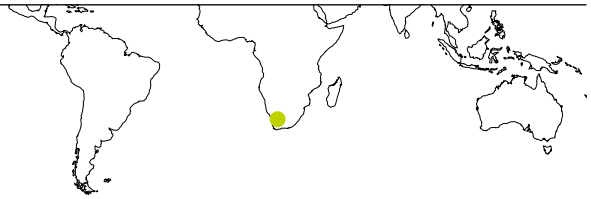
The three current directors of the Program Company nominated by BHP Billiton

Tricia Caswell

Jim Carlton AO

Professor Ross Garnaut AO (Chairman)

Rehabilitation of the Chemfos mine site in South Africa is an excellent example of how sustainable development can be achieved



The Chemfos phosphate mine in Western Cape Province, South Africa, operated as an open cast mine from the 1940s until 1993. Since then, decommissioning, closure and rehabilitation have been taking place. The reclamation of the site and the resulting developments that have taken place demonstrate how a mining operation can achieve sustainable development, by taking necessary care of the environment, assisting communities in a responsible manner, carefully and imaginatively considering the land use options, and persevering to implement the project 'vision'.

The rehabilitation program has involved a number of environmental, social, commercial and capacity building initiatives. Despite being in a hot, arid area with sandy, nutrient-poor soils, the site has been successfully revegetated with a wide variety of local indigenous plant species. A high level of specialist botanical expertise was utilised in the planning and implementation of the revegetation program to ensure its long-term sustainability.

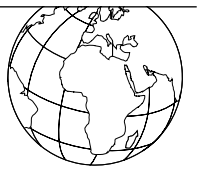
This is a poor region, which has suffered from low education standards and high unemployment. To enhance socio-economic conditions, the old mining village has been redeveloped and named Green Village, with public housing, a school, church, health clinic and recreation facilities. Power and water supplies and other essential infrastructure have been upgraded. The local people were heavily involved in the redevelopment, which also provided training and employment opportunities. The village is now a viable, self-governing community.

Over the years, the region has become renowned for the discovery of thousands of fossils, including those of many extinct animals. Another key component of the rehabilitation program has been the establishment of the West Coast Fossil Park, which is now recognised as a world-class eco-tourism, research and educational facility.

The Chemfos rehabilitation project has won four national awards from the South African Landscapers Institute and has been widely recognised as an example of excellence in sustainable development in the mining industry.

Maria Mathys at Green Village, redeveloped from the former Chemfos mine employee accommodation

Pilot project to assess environmental impacts of our nickel and chrome products throughout their life cycles



Stainless Steel Materials has initiated a pilot project to establish life cycle assessment (LCA) profiles of our main nickel and chrome products, as well as stainless steel made with those products. The project follows our participation in major LCA studies of nickel and chrome products by the Nickel Development Institute (NiDI) and the International Chromium Development Association (ICDA), respectively.

The ultimate aim of the pilot project is to reduce the environmental footprint of our nickel and chrome production and maximise the environmental benefits of their use in stainless steel products.

The LCA studies by NiDI and ICDA have provided the most complete and accurate measures of environmentally significant inputs (resources and energy) and outputs (air, water and waste) involved in the mining, smelting and refining of nickel metal, nickel oxide, ferronickel and ferrochrome. The companies that participated in the studies included the major producers of the world's nickel and chrome from primary sources.

Both studies were conducted to ISO 14040 standards, and the findings were reviewed by independent groups of consultants, academics and industry experts. Our work for the studies was undertaken at our Yabulu nickel refinery in Australia, Cerro Matoso mine and ferronickel smelter in Colombia and ferrochrome operations in South Africa.

Following the LCA studies, we felt the next step was to determine the real value of nickel and chrome to society. This led to the pilot project, which aims to:

- establish LCA profiles for nickel metal from Yabulu, ferronickel from Cerro Matoso and ferrochrome from Samancor
- benchmark a notional stainless steel made from our nickel and ferrochrome products against the industry average LCA for stainless steel
- compare a stainless steel application with a competing material
- assess the strengths and weaknesses of our processing operations in relation to health and environmental matters.

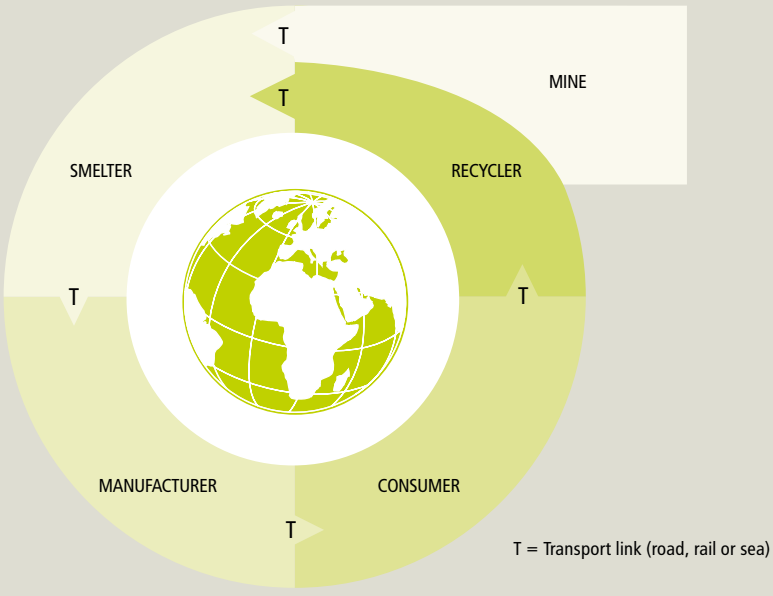
The project reflects our ongoing commitment to product stewardship and could form the basis for larger projects that may ultimately deliver enhanced outcomes for the Company, the nickel and chrome industry, and the wider community.

Towards 'Green Lead'

We believe that the exposure of people and the planet to lead can be greatly reduced if best practice is applied to all aspects of its mining, transport, manufacture, use and re-use. To this end, Base Metals is planning a pilot LCA study of lead and its use in batteries (the end-use of most of the world's lead production). The global project is being conducted with an international consortium, including a German lead smelter, an American battery manufacturer and an Asian battery recycling company.

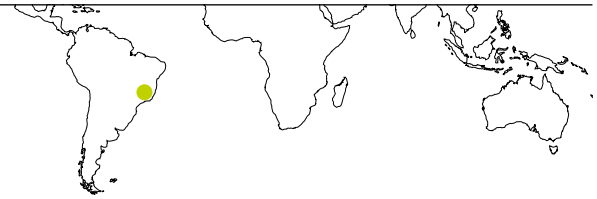
Known as the Green Lead™ project, the study was initiated at our Cannington silver-lead-zinc mine in north-west Queensland. A broad group of stakeholders, including non-government organisations, governments and communities, will be invited to contribute their opinions. All aspects of the study will be reviewed and validated by independent experts.

A key outcome planned is a Product Stewardship Protocol that documents the measures required to eliminate, offset or minimise any adverse consequences of the impacts of lead and to maximise its benefits to society – an example of sustainable development in action. Further information can be found at www.greenlead.com.



Green Lead cycle illustrating the life cycle analysis of lead

Environmental Committee formed to assess Santa Isabel dam project in Brazil



The Company is a member of a consortium that was successful in winning the rights to the Santa Isabel hydro-electric dam concession on the Araguaia River. An Environmental Impact Assessment (EIA) has been prepared for the project and the consortium has formed an Environmental Committee to review it. However, at the time of writing, the Brazilian Environment Protection Agency had rejected the initial proposal. The consortium will work with the Brazilian Government to ensure an environmentally acceptable outcome.

Araguaia River, Brazil, with car ferry in foreground

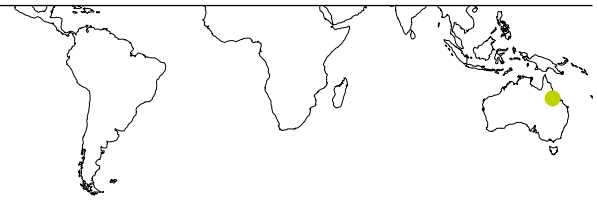
The Government announced the granting of the concession in November 2001. The other members of the consortium are Alcoa, Votorantim, Camargo Correa and Cia Vale do Rio Doce. The Company is also participating in another consortium that has successfully bid for the Estreito power concession and plans to participate in a further bid later in the year.

Building the Santa Isabel dam would involve flooding around 159 square kilometres, of which only 57 square kilometres are outside the existing riverbed. Most of the land to be flooded is cleared and used for cattle grazing. The project will not affect any indigenous lands or require the relocation of indigenous people.

The project is very efficient in terms of its power generation to reservoir area and, as a result, compares favourably with conventional thermal power stations when its potential for greenhouse gas emissions is considered. Potential emissions will be further reduced through the removal of remnant vegetation ahead of flooding. As well, the water body will be relatively shallow and well mixed, reducing the potential for anoxic (oxygen-deficient) conditions.

Detailed plans are being developed to manage other environmental and social issues, including the need to relocate some rural and urban families. We have stated that we will only proceed with the project if these issues can be managed consistent with our Charter and HSEC Policy.

New water recycling system at Yabulu Refinery delivers operational and environmental benefits



Monitoring water at the entrance to Blind Creek, Halifax Bay, adjacent to Yabulu Refinery

Our Yabulu nickel refinery in north Queensland, Australia, is situated on Halifax Bay, adjacent to the Great Barrier Reef Marine Park. In its processing operations, the refinery uses about 21 million litres of water a day, sourced primarily from local bore fields. Since the refinery was commissioned in 1974, excess water has traditionally been stored in tailings ponds. Over the last decade, additional infrastructure and improved site drainage have increased water flow to the ponds. Pond spill risk was managed by permitted release of excess water to Halifax Bay. We wanted a better solution.

While the excess water was being released in accordance with Environmental Protection Agency (EPA) licence conditions, and continuous monitoring indicated no significant impact on the marine environment, we decided an environmentally sustainable water management solution was required.

Working closely with the EPA, we set a goal of stopping all routine discharge of excess water to the ocean. The solution is a custom-designed water recycling facility that treats up to 12.5 million litres of water per day from one of the tailings ponds and produces recycled water suitable for use throughout the refinery's processes.

The A$25 million facility is the first industrial recycling application in Australia of the latest in reverse osmosis technology. Waste water is drawn from the tailings pond and pumped to the facility, where it is micro-filtered before undergoing multi-stage reverse osmosis treatment. This causes the mineral salts to be separated, and the clean water is recycled through the refinery's operations.

More than 50 per cent of the refinery's processed water can now be recovered and re-used. This has removed any need for routine release of excess water to the ocean since September 2001 and has significantly reduced the reliance on external water supplies. By achieving our goal of zero ocean discharge, the new water recycling facility has further reduced the already low risk of any harm to Halifax Bay and the Great Barrier Reef Marine Park – in all, a win for the Company and the environment.

Our commitment to rehabilitating disturbed land extends from the exploration phase to mine closure and beyond

Test vegetation plot, Ekati™

Final raking around rehabilitated drill site, Witputs Project

Geomembrane liner under construction, Poirier

We take a 'whole-of-life' approach to the planning, development, operation and closure of our mines. That includes accepting environmental responsibility for our actions, integrating environmental management into the way we work, and minimising the environmental impacts of our activities. A key aspect of this approach is engaging with other stakeholders to achieve mutually acceptable outcomes. Here are three examples of our commitment being put into practice.

Reclamation of kimberlite tailings at the Ekati Diamond Mine™, Northwest Territories, Canada

Ekati Diamond Mine™, Canada's first diamond mine, is pioneering research into mine site rehabilitation in subarctic wilderness environments, particularly the reclamation of processed kimberlite that remains after diamond extraction.

Our plan is to revegetate the 500-hectare tailings containment facility as a wetland area. The research has focused on amending the kimberlite to favour plant growth, and testing suitable native vegetation species.

There are many challenges. The tailings lack nutrients and contain trace elements that can retard plant growth. Winter temperatures can reach minus 55°C, the growing season is short, and wildlife such as caribou will have access to the site. Plants will be selected that do not accumulate harmful levels of trace elements and can survive the impact of grazing animals and the harsh weather. We are currently conducting extensive research, including utilising the knowledge of local indigenous groups, as the basis for a progressive reclamation program.

Rehabilitation of exploration sites at the Witputs Project, Sperrgebiet, Namibia

This project comprises four prospecting licences in the southernmost part of the Namib Desert, an area rich in alluvial diamonds and renowned for its pristine beauty and desert-adapted flora and fauna. Working closely with the Ministry of Environment and Tourism, we conducted an environmental assessment and developed an environmental management plan that would allow for effective exploration with minimal impact.

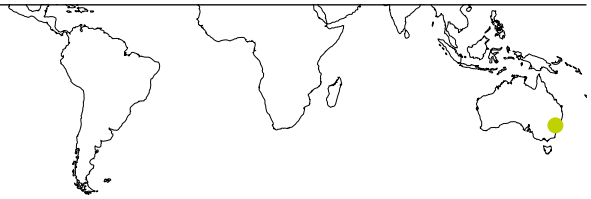
We subsequently undertook a 37-hole drill program, during which all exploration sites and new access roads were progressively rehabilitated. Drill cuttings and sludge were cleared, holes refilled with remaining rock samples, and the areas raked to promote quicker recovery. In the short time since, there is no evidence of exploration activity at many of the sites. This has been highly commended by inspection teams, as even small impacts in desert environments can remain visible for decades.

Post-closure restoration of the Poirier mine site, northern Quebec, Canada

Poirier was an underground copper and zinc mine operated between 1965 and 1975 by Rio Algom (which we acquired in 2000). The site was sold in 1985 and changed hands several times until 1994, when the owner could not afford the required remediation work. As the original operator, Rio Algom stepped in to plan reclamation of the site, in collaboration with the Quebec Ministry of Natural Resources and Ministry of Environment.

A comprehensive reclamation program was implemented, including installation of a geomembrane liner over the tailings, a one-metre thick soil cover, revegetation, and ongoing environmental monitoring and inspections. The liner, covering nearly 50 hectares, is one of the largest applications of geomembrane technology for sulfidic tailings in North America.

A project to produce electricity from methane would further cut greenhouse gas emissions in Australia's Illawarra region



In the Illawarra region of New South Wales, Australia, the Company owns and operates five underground coal mines that produce coal primarily suitable for coking. The mines emit methane, a greenhouse gas. A pilot program to cut emissions by utilising the methane for electricity generation has proved successful. With funding support from the Commonwealth Government under the Greenhouse Gas Abatement Program, a power station is planned for construction at our West Cliff Colliery. This development will complement our earlier projects to capture methane from our underground workings.

The release of methane from our Illawarra coal mines is now largely confined to fugitive emissions in mine ventilation air exhaust. However, as a member of the Commonwealth Government's Greenhouse Challenge Program, we have been actively seeking ways to further reduce emissions.

It was recently decided to test the feasibility of collecting methane released in the air exhaust system and utilising it to generate electricity, thereby cutting emissions while offsetting power costs. Following a review of technologies with potential to combust methane using mine air exhaust as the primary fuel source, a specialised combustion unit that can burn air containing very low concentrations of methane was identified as the most promising option.

Although this system is currently used for industrial pollution control at over 700 locations around the world, there has been little direct experience using mine air exhaust as the primary fuel source. In conjunction with the Australian Coal Association Research Program, we evaluated the system on mine air exhaust at our Appin mine. A test unit, incorporating embedded heat exchangers, operated using a small quantity of Appin's air exhaust, which contained 0.2 to 0.8 per cent methane. This pilot project demonstrated that the technology can successfully operate on mine air exhaust in this range and capture a high proportion of the energy released (more than 85 per cent) in the form of hot water.

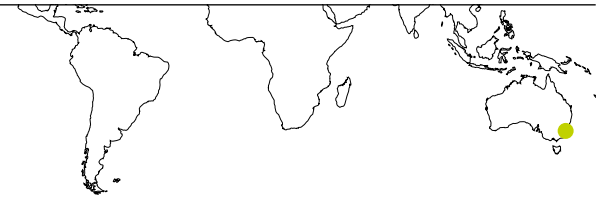
A 3.5-megawatt steam cycle power station incorporating this proven technology is planned for our West Cliff Colliery, using approximately 17 per cent of the mine air exhaust as the primary fuel source. The Commonwealth Government has committed up to A$6 million towards the project through the Australian Greenhouse Office under its Greenhouse Gas Abatement Program.

It is planned that the power station will be commissioned by the end of calendar year 2004, when it reaches its full potential of reducing carbon dioxide equivalent gases by 200 000 tonnes a year. This amount includes the savings from the methane capture plus the offset from the power that we would otherwise have had to purchase. The reduction in carbon dioxide equivalent gases equates to the amount of greenhouse gases emitted by around 50 000 cars in Australia per year.

In the longer term, there is potential for greenhouse emissions to be reduced further by extending application of the technology more widely across West Cliff and our other mines in the Illawarra region.

Richard Danell, Project Leader, and Roger Bowman, Coal Preparation Manager, plan the linkage from West Cliff Colliery's mine air ventilation exhaust duct to the new methane utilisation plant

Accidental discharge of waste process water from Port Kembla Steelworks



On 22 October 2001, a blockage of cooling sprays in coke ovens at Port Kembla Steelworks in New South Wales, Australia, resulted in discharge of waste process water into the Steelworks' main drain and then into nearby Allans Creek, which runs into Port Kembla Harbour. Later, a number of dead fish were observed in the creek.

Monitoring fish species in Allans Creek, Port Kembla

An incident management process was immediately activated. The Company advised the New South Wales Environmental Protection Authority and worked with representatives of the EPA to determine appropriate action. Production operations were suspended at the coke ovens battery. Additional salt water was diverted to the main drain to dilute the process water. Remedial action to remove process water was taken as quickly as possible. A detailed investigation into the cause of the incident was undertaken.

Under normal circumstances, a gas cooling system in the coke ovens operates as a closed circuit, recycling 'flushing liquor' that is used to reduce the temperature of gas produced during the coke-making process. However, cooling sprays became blocked with emulsified tar and process water was contaminated with the tar.

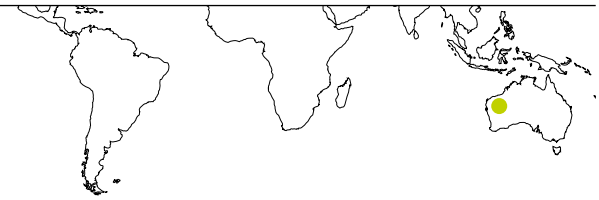
Fresh water was introduced to cool the gas until the blockages could be cleared. Water overflowed to an emergency retention basin for a period of 11 hours. Attempts were made to store process water, but eventually a need arose to discharge to the main drain.

The primary cause of the incident was related to the installation of a spray in the ammonia removal section of the gas processing plant, which damaged the equipment. This allowed ammonium sulphate solution to be entrained in the gas and eventually mixed with the flushing liquor, causing tar in the flushing liquor to emulsify.

All process and environmental risks of the gas processing system are being reviewed to ensure that the checks in place are appropriate to address the potential for future environmental incidents.

Since the incident, a study of the fish population in Allans Creek has been undertaken. This indicates an improved diversity of fish species in the creek since the last fish study undertaken some years previously.

BHP Billiton Iron Ore embraces ISO 14001 certification



BHP Billiton Iron Ore has conducted an intensive program to develop and implement an Environmental Management System (EMS) and gain ISO 14001 certification. The program was initiated in August 2001 after management identified certification as a business imperative. The goal was achieved within BHPBIO's target date of June 2002.

Some of the EMS promotional materials

The scope of certification is wide-ranging and includes Iron Ore's:

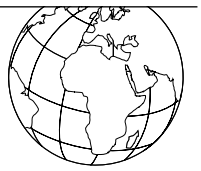
- business headquarters in Perth
- railway and ports operations at Port Hedland (north-west Western Australia)
- mining operations at Mt Whaleback (south of Port Hedland)
- management of contract mines
- asset development projects.

To align with business requirements, the EMS is based on our global HSEC Policy and Management Standards. The certification program focused on utilising existing business systems to meet environmental requirements. This was achieved by engaging key business areas in the EMS development project. These included Finance, Supply, Legal, Operations, Safety and Health, Quality Assurance, Public Affairs and Human Resources. During this process, the environmental function facilitated a good degree of integration among business systems and procedures.

To clearly identify and brand the EMS, a logo was developed together with the positioning statement, *The Future is in Our Hands*. This branding was introduced across all Iron Ore operations in the form of posters, training presentations, promotional materials and handouts, and remains part of the ongoing communication and awareness program on all sites. A key element of the program involved operational personnel being trained as 'key environmental communicators' and delivering environmental information at work group level. Of the total Iron Ore workforce of 3000 people, 80 per cent participated in EMS awareness and training sessions.

The project has highlighted many opportunities to reduce overall business risks and work duplication, and enhance communication across business areas. Going forward, Iron Ore is committed to ensuring that the EMS continues to be implemented in accordance with the HSEC Policy and Management Standards.

Our approach to community development now focuses on working with communities to assess local needs and respond with sustainable solutions



The communities in which we work are among our key stakeholders, as recognised by our Charter and HSEC Policy. In developing our social policies, the Company has been moving away from a simple 'hand-out' approach to a strategic process that collaboratively evaluates community needs and applies solutions that are sustainable over the long term, even after our operations in an area have ceased.

This approach is documented in our HSEC Policy, which states, 'Wherever we operate we will . . . seek opportunities to share our success by working with communities to contribute to social infrastructure needs through the development and use of appropriate skills and technologies, and developing partnerships that focus on creating sustainable value for everyone'.

Our management standards go into further detail, stating our operations 'shall work with local communities to identify needs and prioritise support for sustainable development activities. This shall include, where applicable: local employment and business development opportunities; training and education programs; capacity building for community organisations; health care and promotion; and conservation of environmental and cultural heritage values. Processes shall be in place to identify stakeholders and collaboratively identify their HSEC concerns, information needs and aspirations for community development'.

These aims are reflected in our Community Development Guidelines, which also underline the importance of monitoring the progress and impact of our community development programs, and sharing knowledge across the organisation so that we can learn from our mistakes and our achievements.

Following are three examples of programs that highlight how policy is being put into practice in an effective and sustainable way.

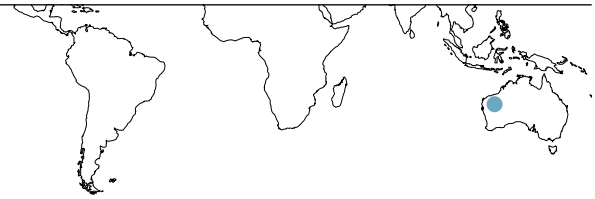
Zamzama Girls' Primary School, Dodo Panwar, Pakistan
A survey of the three villages around our Zamzama gas plant found that female illiteracy was a major problem. There was no girls' school within five kilometres of the plant. With the assistance of the communities and a local non-government organisation, the use of a building was organised and teachers were trained. Classes up to Grade 4 are now conducted, and all school-age girls from the villages attend the school, learning in both Sindhi and English. (See HSEC Awards, page 58.)

The Partnerships-in-Education (PEN) Schools Project, Kwa-Zulu Natal, South Africa
Raising the standard of education was identified as a priority need in the region around our Hillside and Bayside aluminium smelters. The PEN Schools Project was developed with the Zululand Chamber of Business Foundation and the Kwa-Zulu Natal Department of Education in collaboration with non-government organisations, universities and community representatives. The project is presently providing 39 schools in disadvantaged areas with 'whole school development' assistance over a 12-year period. (See HSEC Awards, page 57.)

The Community Environmental Education Program of Bento Rodrigues, Minas Gerais, Brazil
Bento Rodrigues near the Samarco mine is a very poor area historically beset by environmental problems, particularly a lack of clean water, as well as health, unemployment and educational issues. This program, based on involving and motivating the local community, has seen a range of initiatives being implemented, including the construction of a water treatment station, establishment of a locally managed agribusiness, and improvements to educational standards. (See HSEC Awards, page 58.)

Mr Mathunjwa, Headmaster, with students at Ilembe Primary School, part of the PEN Schools Projects

'Investment in Aboriginal Relationships' program delivers benefits in the Pilbara



BHP Billiton Iron Ore established this program in 2000, focusing on forging positive relationships with indigenous communities in the Pilbara region of Western Australia. The program encompasses employment, education, training and cultural development initiatives. A key objective is to help build sustainable communities that can actively participate in our business operations and the regional economy.

The Company has demonstrated its commitment to the program by participating in the Corporate Leaders for Indigenous Employment program, and signing a memorandum of understanding with the Commonwealth Department of Employment, Workplace Relations and Small Business. As well as these agreements, we have set a target that by 2010 indigenous employment in our Pilbara operations will increase from 3 per cent to 12 per cent, reflecting the proportion of indigenous people in the region.

A number of projects have been put in place to support progress towards this target. These include the following initiatives.

Indigenous employment agreements with contractors
In collaboration with our major contractors, we are introducing conditions of tender whereby they must commit to at least 5 per cent indigenous employment when entering contracts with the Company, with a target of 10 per cent. The 5 per cent level has already been achieved for bulk sample work at Area C.

Apprenticeship and traineeship scheme
This scheme commenced in 2001, with traineeships ranging from trade to administrative roles. From the two intakes to date, 30 indigenous participants are now employed at Port Hedland, Newman and Boodarie Iron.

Work contracts
We are facilitating employment opportunities through work contracts and enterprise development support. A contract has been secured by the Western Desert Puntukurnuparna Aboriginal Corporation in Newman and others are being negotiated in Port Hedland and at Area C.

Cross-cultural awareness training program
About 800 of our employees in Newman and Port Hedland have attended this program since it commenced in 2000. Workshops explore local Aboriginal history and culture, and cross-cultural issues. The feedback has been almost universally positive from our employees and other participants, including Aboriginal people, community organisations and government agencies. (See HSEC Awards, page 58.)

Cultural heritage project
In a collaborative project, Aboriginal heritage sites within Area C have been excavated and ancient stone arrangements moved to a safe location. Banyjima and Nyiyaparli communities are working with teams of archaeologists to determine the purpose and, through advanced dating techniques, the age of the stone arrangements.

Royal Lifesavers program
Swimming pools were installed last year at the remote communities of Jigalong and Yandeyarra. We supported the Royal Lifesavers program, which provides safety and hygiene training for pool users. Significant benefits have followed. Ear and skin infections in the children have greatly reduced, and school attendance has risen significantly.

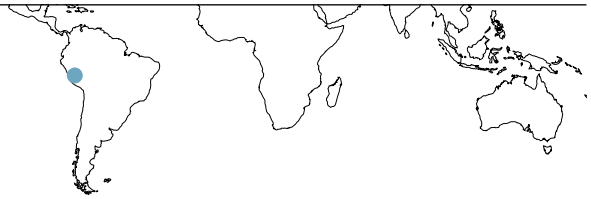
Port Hedland Education Partnership
Conducted in conjunction with local schools, community and government organisations and the Polly Farmer Foundation, this program aims to assist indigenous secondary school students to achieve their full potential, through mentoring, homework supervision and work experience. The program commenced in Port Hedland this year with 23 students and is to be extended to Newman.

Through such initiatives, our 'Investment in Aboriginal Relationships' program is creating wide-ranging opportunities for our indigenous stakeholders in the Pilbara.

L to R: Mapayi, Njamal Elder, Mike Jose, Senior Aboriginal Affairs Officer, and Daniel Romaine, Technical Training Officer, Port Hedland

William Kelly, Mechanical Trainee, Newman

A collaborative approach is helping to resolve long-standing community concerns at Tintaya



In December 2001, representatives from our Tintaya copper operations in Peru participated in a roundtable discussion with key community stakeholders in an attempt to resolve long-standing community concerns about environmental and land management issues. The meeting was convened by Oxfam Community Aid Abroad in response to requests from local community groups. A key outcome of the meeting was a decision to create a formal consultative process called the Mesa de Dialogo (Dialogue Table) through which the Company and the local communities are working collaboratively to seek resolution to the outstanding issues.

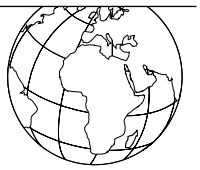
Mine management meeting with community representatives

To date, the Mesa de Dialogo has held four meetings and a series of working groups have been established to address key issues under the headings of Land, Environment, Human Rights and Sustainable Development. Participants have recognised that many of the issues of concern to the local communities had persisted due to a climate of distrust between the parties. The Mesa de Dialogo has helped to break down these perceptions, improve relations and enable identification of core issues and the development of potential solutions.

The resolution of land purchase issues has been a particularly high priority. Progress has been made in the development of a plan to resolve the issues through a targeted resettlement process with associated community development initiatives. It is recognised by all parties that this will be successful only if the communities are actively involved through a participative planning process.

The Company and the key community stakeholders are committed to outcomes at Tintaya that facilitate both the ongoing operation of the mine and realisation of the legitimate aspirations of the surrounding communities for sustainable development. The Mesa de Dialogo and associated working groups have provided the mechanism through which we can jointly develop solutions to past problems and identify new opportunities that are mutually beneficial.

Corporate Community Leadership Program enhances understanding of human rights and community development



Program participants inspect fish farm project in Koraput District, India

In February 2002, we participated in an innovative learning initiative known as the Corporate Community Leadership Program, which was developed and conducted in collaboration with Oxfam Community Aid Abroad (Oxfam CAA) and the University of Queensland. The program focused on increasing our awareness and understanding of social justice, human rights and community development issues, specifically in relation to the resources industry.

Fourteen BHP Billiton participants and four Oxfam CAA facilitators journeyed to India for two weeks, visiting remote villages around Semiliguda, Berhampur and Gopalpur. While there, participants were able to interact directly with the communities and see first-hand how large-scale infrastructure and small-scale development projects have impacted on people's rights and livelihoods – both positively and negatively.

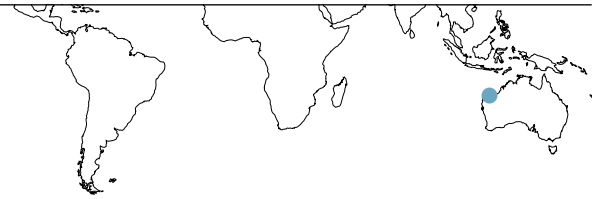
The Company's involvement in this initiative flows from our commitment to sustainable development, including our recognition that local communities are key stakeholders in the resource development process. It also reflects our support of the principles enshrined in the United Nations Universal Declaration of Human Rights.

A key learning from the Corporate Community Leadership Program is that leading-edge community development work is based on human rights. This approach goes beyond providing services and physical infrastructure and focuses on helping people, through building social capital and organisational capacity.

Participating in the program is a further step towards the Company obtaining a deeper understanding of community and social issues relevant to our business, and continuing the development of our skills and organisational capacity to achieve improved performance in the 'community' aspect of HSEC.

Oxfam CAA is part of the Oxfam International network, one of the world's largest confederations of humanitarian non-government organisations. The Corporate Community Leadership Program forms a key plank of Oxfam CAA's ongoing strategy of private sector engagement, in recognition of the increasingly important role of the private sector in poverty reduction and human development.

Major program initiated to improve dust management at our Iron Ore operations in Port Hedland, Australia



BHP Billiton Iron Ore and the Town of Port Hedland have grown in an interdependent way since we established iron ore processing and shipping facilities there in the 1960s. While the Company has always sought ways of improving its dust management performance, emissions generated from the crushing, stockpiling and shiploading operations were, at the time, generally accepted because of the economic benefits to the town. Times have changed. Growth in iron ore shipments and the planned addition of new products from our Area C development have raised community concerns about the effects of dust on the surrounding community. We are committed to addressing these concerns, and we are focusing on ways of reducing dust emissions while maintaining open communications with the community.

A dust management program now applies to all the Company's Port Hedland operations and involves a range of initiatives, including ongoing research and development, operational changes and enhancements, air quality monitoring and improved community consultation.

As part of our new port expansion project, BHP Billiton has committed up to 10 per cent of the project's capital cost to improve the management of dust emissions.

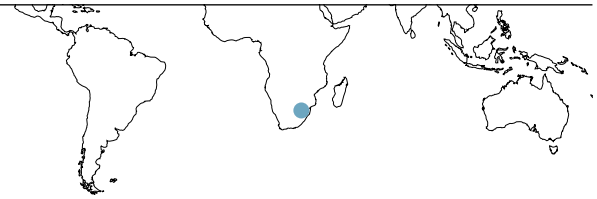
Operational initiatives and changes are based on leading industry practice. They include appointing dedicated personnel to coordinate dust mitigation works, initiating behavioural change among our employees and contractors, and developing engineering solutions related to ore moisture control and dust reduction at the plant. Environmental research is looking at such projects as minimising dust generation by landscaping open areas with native vegetation and extending and vegetating a bund wall. Air quality monitoring facilities and procedures are also being reviewed.

We are committed to improving communication about dust issues with employees, the community, regulators and other interested stakeholders as a means of sharing information and communicating outcomes from our dust management program.

The Company's aim is to exceed community expectations and regulatory requirements for dust and air quality while ensuring our business is sustainable. We realise that we need to demonstrate to the community and government that we can increase our throughput of ore without harming people or the environment. The dust management program provides a detailed scope of work to effectively reduce dust and its impacts while allowing us to continue building the business.

Dust suppression spray in operation at Port Hedland iron ore stockpiles

Employment equity initiatives aim to create a sustainable equal opportunity environment at all our operations in South Africa



As a major employer in South Africa, the Company is committed to achieving employment equity in our operations. Our Employment Equity Policy is in place across our operations and an Employment Equity Steering Group (EESG) has been established to deliver and monitor the equity process. Comprising all the heads of our South African businesses, senior human resources professionals and other influential executives, the EESG meets bi-monthly and reports to members of the BHP Billiton Executive Committee. Our ultimate aim is to achieve representation at all levels in our businesses consistent with the demographic profile of South Africa.

Recognising the country's history, which resulted in the majority of South Africans being excluded from participating in the mainstream economy, the Company adopted a strategy of change through empowerment. As well as employment equity, this covers transformation at the levels of ownership, management, sustainable socio-economic development, and procurement. The strategy is aligned to the BHP Billiton Charter and is in accord with the spirit of the South African Government's Employment Equity Act, which is aimed at assisting people in designated groups – black people (Africans, Coloureds and Indians), women, and people with disabilities.

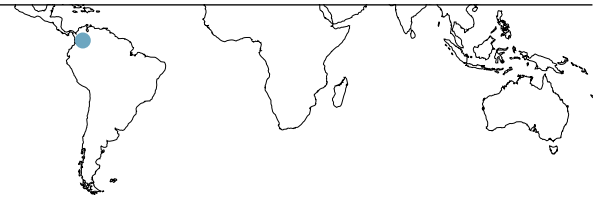
Members of the Employment Equity Steering Group

Our Employment Equity Policy, a key plank of the strategy, is aimed at redressing previous imbalances through accelerated development, training and education programs, and numerical goals and timetables. These goals have been set and an Employment Equity Strategy and other initiatives put in place to facilitate their delivery.

Positive results are already apparent. At our Hillside operation, initiatives include an Accelerated Development Program to facilitate the development and promotion of employees with potential; scholarships to help female employees achieve millwright status; practical vocational work for students; and on-site training for graduates to allow their skills to be identified and developed.

It is through initiatives such as these that Hillside has attained a 60 per cent success rate in filling promotions and appointments from the targeted designated groups since the plan was put in place.

Education is Cerro Matoso's commitment to a sustainable future in Colombia



Classroom at the new Centre of Municipal Educational Resources

Our Cerro Matoso nickel operation is located near the small town of Montelíbano in the remote Córdoba region of Colombia, South America. While there are many educators working in the region who are paid by the state and the local government, the infrastructure and the educational tools available to students are limited. This has led to a lack of sound education being offered to the local children and young people. As it was economically impossible to provide each public school with facilities such as laboratories, computer rooms and libraries, a unique central resource has been created for the use of all the schools and educational institutions in the area.

There are 18 000 students of primary and secondary school age in the Municipality of Montelíbano, which has 21 public schools and four private schools. Four of these offer education to high school finishing level.

The Centre of Municipal Educational Resources provides primary and high school students with a central educational resource that also gives them access to the latest technology. Facilities built so far include two laboratories, a computer science room and two classrooms. Plans are under way to more than double these facilities, to cater for 10 000 students by 2004.

In 1999, as part of Cerro Matoso's commitment to education and sustainability in the region, the operation threw its support behind the Centre with a range of initiatives, including the development of a five-year strategic plan. To guarantee independent administration of the project, a collaborative agreement was signed with local authorities.

With the cooperation of the Montelíbano Municipality, the Government of Córdoba and the Bishop of Montelíbano, development of the Centre gained momentum; and it began operation in June 2002. The project has attracted so much interest that other municipalities are considering similar initiatives to form a resource network across the entire region.

Mt Arthur Coal sets high standards in communicating directly and openly with communities

Brett Jenkins and Carl Bagnall from the Mt Arthur Coal project team

Mt Arthur Coal operates a new mine located near Muswellbrook in the Upper Hunter region of New South Wales, Australia. The early recognition of community issues led the project management team to establish and implement programs that have set new standards for developing industry-community relationships.

The project consists of constructing the new mine and integrating it with the Company's existing Bayswater Colliery, creating one of Australia's largest open-cut coal mines. When planning began in 1998, management knew that, if the project were to gain government approval, it would require the support of the local community. We recognised the value and importance of involving the community and integrating local knowledge into mine and infrastructure planning. A Community Participation Manager was appointed to work with project management to develop programs involving the total community of 15 000 people.

With over 20 mines in the region, the Muswellbrook community is well aware of the effects of mining and somewhat cynical of 'community consultation' processes due to poorly executed programs by previous operators. The challenge for Mt Arthur Coal was to overcome these past disappointments and prove that community concerns would be acted upon.

We established a wide-ranging community program, the key elements of which have included:

- identifying and involving stakeholder groups at an early stage
- maintaining direct personal contact with stakeholders
- providing multiple mechanisms for community participation and involvement
- ongoing communication and feedback
- fully integrating social information in mine and infrastructure planning
- an open and transparent process for providing information.

The project team put into action a planned program of focus group meetings, open days, information nights, workshops, public displays, media interviews, facts sheets and newsletters. But rather than rely only on these traditional methods of attracting community interest, they literally took the project to the streets.

Project team members made themselves available to visit people in their homes for face-to-face discussions, not only to explain the project, but also to find out the community's concerns and requirements. From these meetings a comprehensive series of community programs has evolved. They include a number of programs developed with the local indigenous community, focusing on employment, conservation and education.

This collaborative approach by the project management team, coupled with transparent communications and the development of 'first name' relationships, contributed to the New South Wales Government's Commission of Inquiry giving the green light to the project. The positive result is further evidence of the benefit of communicating directly and openly with the community.

Appendices

Appendix A Fines 2001/02

FINES AND PROSECUTIONS (IN RELATION TO ENVIRONMENTAL, HEALTH AND SAFETY REGULATIONS)

Issue	Customer Sector Group	Description	Fines (US$)
Health	Base Metals	The Escondida IV Project received fines totalling US$40 788 ($18 128 & $22 660) in March 2002, in relation to the dining room, which was under the control of a contractor.	$40 788
Health	Steel	The Malaysian operation received a fine of approximately A$300 in May 2002 for the presence of mosquito larvae and stagnant water on site.	$157
Safety	Base Metals	Ambrosia Lake Facility received a US$165 fine for minor safety infractions.	$165
Safety	Steel	Port Kembla Steelworks received a fine of A$200 000 in October 2001 for the lack of proper supervision and procedural training of an employee who was subsequently injured during routine maintenance of a coal pit conveyor unit. The incident occurred in August 1998.	$104 657
Environment	Steel	Port Kembla Steelworks received a fine of A$60 000 in September 2001 for an overflow of out-of-specification water. The incident occurred in March 2000.	$31 397
Environment	Steel	Port Kembla Steelworks received an on the spot fine of A$1500 following an untreated gas emission when an oven was charged prior to doors being replaced.	$785
		Total	**$177 949**

Appendix B Environmental Data Tables 2001/02

Data in these tables are aggregate figures based on site data reported by BHP Billiton's managed businesses for the BHP Billiton financial year 2001/02. Totals may differ due to rounding of data.

ACCIDENTAL DISCHARGES OF HYDROCARBONS (LITRES)

	Aluminium	Base Metals	Carbon Steel Materials	Stainless Steel Materials	Energy Coal	Petroleum	Steel	Others	Total
Discharged to land	6 720	12 290	66 610	0	4 360	1 320	0	130	91 430
Discharged to water	0	100	350	0	390	350	600	20	1 810

LAND – REHABILITATION AND DISTURBANCE (LAND AREA – HECTARES)

	Aluminium	Base Metals	Carbon Steel Materials	Stainless Steel Materials	Energy Coal	Petroleum	Steel	Others	Total
Newly disturbed	270	340	2 000	60	1 640	0	20	190	4 520
Land rehabilitated	440	110	710	70	820	0	20	60	2 230
Land requiring rehabilitation*	6 510	18 420	43 970	1 240	11 290	100	0	1 380	82 910

* Assumes immediate closure of all operations.

Appendix B continued

WATER CONSUMPTION (MEGALITRES)

	Aluminium	Base Metals	Carbon Steel Materials	Stainless Steel Materials	Energy Coal	Petroleum	Steel	Others	Total
Fresh water	12 300	50 700	33 700	16 400	7 400	200	26 300	100	147 100
Recycled water	2 400	27 400	25 300	56 500	11 100	0	415 600	4 700	543 000

TOTAL ENERGY USE BY TYPE (PETAJOULES)

	Aluminium	Base Metals	Carbon Steel Materials	Stainless Steel Materials	Energy Coal	Petroleum	Steel	Others	Total
Coal and coke	29.2	0.0	15.7	23.8	0.0	0.0	108.5	0.0	177.1
Purchased electricity	49.9	9.3	13.8	15.4	4.1	(0.1)	7.4	0.0	99.7
Natural gas	13.8	1.7	23.6	5.7	0.0	10.7	14.0	0.0	69.6
Distillate	1.3	6.1	13.5	0.7	5.9	2.5	0.2	3.0	33.2
Fuel and process oil	0.4	0.9	0.3	7.2	0.1	0.2	0.7	0.0	9.7
Other types	5.5	0.0	0.0	1.0	0.0	0.0	0.5	0.0	7.0
Total	**100.0**	**18.0**	**66.9**	**53.8**	**10.1**	**13.2**	**131.3**	**3.0**	**396.3**

One petajoule equals 10^{15} joules. Totals may differ due to rounding of data.

GREENHOUSE GAS EMISSIONS (KILOTONNES OF CO_2-e)

	Aluminium	Base Metals	Carbon Steel Materials	Stainless Steel Materials	Energy Coal	Petroleum	Steel	Others	Total
Carbon dioxide	17 210	1 980	6 980	6 670	1 500	840	13 310	220	48 710
Methane	0	0	6 940	0	2 240	220	40	0	9 440
Perfluorocarbons (PFCs)	1 870	0	0	0	0	0	0	0	1 870
Total	**19 080**	**1 980**	**13 920**	**6 670**	**3 740**	**1 060**	**13 350**	**220**	**60 020**

CO_2-e = Carbon dioxide equivalent (the basis of comparing the warming effect of greenhouse gases such as carbon dioxide, methane, perfluorocarbons, etc.)

OTHER GASEOUS EMISSIONS (TONNES)

	Aluminium	Base Metals	Carbon Steel Materials	Stainless Steel Materials	Energy Coal	Petroleum	Steel	Others	Total
Oxides of sulphur	29 520	1 180	1 120	8 100	620	470	13 550	1 770	56 330
Oxides of nitrogen	3 770	6 240	14 170	7 040	5 060	5 280	11 510	2 680	55 750
Fluoride	1 680	0	0	0	0	0	0	0	1 680

WASTE (TONNES)

	Aluminium	Base Metals	Carbon Steel Materials	Stainless Steel Materials	Energy Coal	Petroleum	Steel	Others	Total
Waste oil	230	2 490	4 830	170	1 030	250	90	10	9 100
Hazardous waste	19 000	3 000	1 900	12 900	5 100	5 900	23 800	0	71 600
Slag classified as hazardous waste	0	0	399 100	554 200	0	0	0	0	953 300
General waste	12 400	41 800	23 900	1 300	15 500	4 400	8 100	0	107 400

The data presented above do not include overburden, tailings and non-hazardous slags.

Appendix C **External Awards 2001/02**

STATE AND NATIONAL AWARDS RECEIVED FROM EXTERNAL GROUPS AND ORGANISATIONS

Site	Award	Description
Petroleum Customer Sector Group, Australia	Australian Petroleum Production and Exploration Association (APPEA) Safety Improvement Award	Annual award based on total recordable injury frequency rate and qualitative improvement in safety management practices
BHP Billiton/Mitsubishi Alliance, Australia Blackwater Underground Mines Rescue Team	Canadian National Safety Competition	First place in the Rope Section
Cerro Colorado, Chile	Benjamin Teplisky Award	Contribution to safety and sustainable development in mining
Tintaya, Peru	J T Ryan Award	Best safety indices in Peru over the last three years
Ferrometals, South Africa	National Association for Clean Air (NACA) – Annual Corporate Award	Support of clean air initiatives in the Mpumalanga Province
Cannington, Australia	Australian Minerals and Energy Environment Foundation Award for Environmental Excellence (Innovation category)	Environmental excellence
Chemfos Mine, South Africa	South African Landscapers Institute – Gold Award of Excellence	Rehabilitation excellence
La Plata Mine, USA	Reclamation Award, New Mexico	Innovative reclamation of the McDermott Dump
Cerro Colorado, Chile	Regional Environmental Commission – National Environment Award	Environmental excellence
Cannington, Australia	Prime Minister's Award (Queensland Large Business Category)	Excellence in community business partnerships

These awards are at State and National level. Numerous local awards were received by operations during the period.

Auditor's Verification Statement

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Verification Statement

Environmental Resources Management (ERM) was requested by BHP Billiton Limited to assess and comment upon the accuracy of the data used in the Annual Health, Safety, Environment and Community (HSEC) Report for the period 1 July 2001 to 30 June 2002.

ERM undertook this assessment by reviewing the on-site data collection process, the data management and collation process, and the synthesis of this data into the tables, graphs and statements that are presented in this Annual HSEC Report.

Ten sites were selected from the operations managed by BHP Billiton in order to determine the robustness of data collection processes at the operational level. The sites were selected to provide a representative sample of BHP Billiton's geographical spread, operational types, the age of operations, and social and environmental settings. The sites were the San Juan coal mine in the USA, the Cerro Matoso nickel mine, refinery and smelter in Colombia, the Liverpool Bay oil and gas facility in the UK, the Meyerton manganese operation and the Douglas coal mine in South Africa, the Mozal aluminium smelter in Mozambique, the Beenup mineral sands project, the Cannington silver-lead-zinc mine and the Blackwater coal mine in Australia, and a steel works in Thailand. The data collection process was examined at each of these sites and key personnel involved in data collection were interviewed.

The collation of the data at BHP Billiton's offices in Melbourne, Australia, was examined. Members of the team in Melbourne who were instrumental in analysing and drawing conclusions from the data were interviewed and their analytical activities were shadowed. Selected calculation steps were independently repeated by ERM to check the veracity of the interpreted data for samples of key HSEC parameters discussed in this Annual Report.

Conclusions drawn from the data and corresponding statements made in this Annual HSEC Report were reviewed by ERM in the context of the robustness of data. Case studies were not included in this review.

Observations

In general, the data collection, collation and interpretation processes exhibited by BHP Billiton at its individual operating sites and its offices in Melbourne provide a sound basis for the credible reporting of performance.

BHP Billiton is undertaking its first globally integrated data collection process since the merger in June 2001, and many support systems contributing to this process are still in development. Although a large volume of data was collected, some data sets require a greater degree of consistency in reporting at the operational level before firm conclusions on company-wide performance can be drawn from them. BHP Billiton has recognised these limitations where they exist and applied sound judgement to the selection of data for inclusion in this Annual Report. Where inaccuracies have been identified, none have resulted in any material skewing of the results presented.

Some opportunities for improvement in future annual reporting are as follows:

- The definition of 'rehabilitation' in relation to land resources varies, by necessity, from site to site – but its application at the site-based reporting phase was not always evidenced;
- Although the use of hearing protection was consistently high across sites, there were varying degrees of completeness in the assessment of the number of personnel potentially exposed to excessive noise; and
- Whereas some sites showed evidence of integrated communication in compiling accurate HSEC data from various departments, others were less advanced in this respect.

Opinion

On the basis of the activities undertaken to verify the content of this report, we believe that the material presented in the Annual HSEC Report is a fair and reasonable representation of actual company performance on reported HSEC issues across the operations managed by BHP Billiton.

Raj Aseervatham
Principal, Mining

David Snashall
Principal

BHP Billiton HSEC Awards

The BHP Billiton HSEC Awards recognise those employees who openly embody the values expressed in our Charter and go beyond what is required in their day-to-day jobs to care for their fellow employees, the community and the environment.

Awards have been presented in four categories: Health, Safety, Environment and Community. Nominations were assessed by a separate judging panel for each category, comprising one representative from the Company and four experts from non-government, government and education sectors.

Having received more than 130 nominations from around the world, the judges selected a shortlist of finalists in each category. From these, the winners and recipients of highly commended and merit awards were chosen. In recognition of their initiative, each winning and highly commended nominee has been presented with a specially designed trophy and each merit award winner has received a certificate. The finalists each nominated a non-profit organisation to share in their award. These organisations have received a donation of US$5000 (winners), US$2500 (highly commended) or US$1000 (merit).

All the nominees are to be congratulated for the high standard of their contributions.

We wish to thank the judges who participated in the assessment of the nominations and acknowledge their contribution to the awards process.

Linda Kissane

HEALTH – WINNER

Linda Kissane (team representative)

Mozal Aluminium Smelter, Maputo Province, Mozambique

Linda and her colleagues in the Malaria Task Group developed a malaria prevention and control program and are managing its implementation throughout our Mozal operations and the local community. As Mozal is located in an endemic malaria area, this serious disease poses a threat to the ongoing viability of the smelter's operations.

Following a high incidence of malaria cases during construction, the Malaria Task Group was formed, bringing together representatives of the Mozal operations and expansion project teams, medical staff and the Mozal Community Development Trust.

Recognising that the problem was too big to tackle alone, the task group liaised with the governments of Mozambique, Swaziland and South Africa who were developing a regional malaria control program with the support of the World Health Organization and international malaria prevention scientists.

With support from the Company, the government initiative was extended to include a 10-kilometre zone around Mozal. The task group set about implementing a program that involves residual spraying of all site buildings and Company-owned residences, control of mosquito breeding sites, insecticide resistance management, and independent auditing of the program's effectiveness. Medical management has been enhanced to include a focus on early diagnosis, a dedicated malaria laboratory and wider availability of medicines and bednets. There is also a high level of employee and community involvement through education programs.

In the 18 months since the spraying program began, the number of malaria cases among the Mozal workforce has dropped by more than 50 per cent. Local communities involved in the program have seen a 40 per cent reduction in the number of children carrying the malaria parasite, and there has been a significant reduction in the number of cases diagnosed at local clinics. (See case study, page 31.)

Judge's comment: 'This program is an outstanding intervention benefiting employees, the business and the community. It is an excellent demonstration of how active employee involvement results in real, measurable outcomes.'

Martin Lombard, Group Executive Human Resources, World Vision Australia

HEALTH – HIGHLY COMMENDED

Steve Goosen (team representative)

Khutala Colliery, Mpumalanga, South Africa

Steve and his colleagues devised and developed an injury rehabilitation centre at the colliery. The centre, which operates under the management of Ingwe Medical Services, facilitates early response to workplace injuries and allows rehabilitation to occur on site. The centre houses a multi-disciplinary team of medical and other health professionals in a dedicated rehabilitation environment. Programs are focused on assisting injured workers to be fully capable of returning to their previous job or learning an appropriate alternative. To this end, facilities at the centre include simulated colliery equipment and machinery. The overall aim of the service is to improve the recovery process, enabling earlier return to work. Having the centre on site also helps foster a trusting relationship between injured workers, health professionals, supervisors and management.

Alan Pangbourne (team representative)

Tintaya Copper Mine, Arequipa, Peru

Alan and his team installed a system for controlling the sulfuric acid mist emitted during the electrowinning of copper, an industry-wide problem that represents a health threat to workers and can also cause corrosion of equipment and structures. The conventional control method is to dilute and transfer the mist from inside to outside the building. At Tintaya, this is not feasible because of the plant's proximity to a hospital. The project team's system captures the mist at its source through a suction process and cleans it prior to release, reducing emissions to levels that are less than half the allowable limit. This has enhanced safety in the work environment, reducing the need for the use of personal protective equipment such as respirators, while also minimising corrosion.

HEALTH – HIGHLY COMMENDED

José Maurício Macedo (team representative)

Alumar Smelter and Refinery, Maranhao, Brazil

José led a multi-disciplinary team in designing, implementing and coordinating an ergonomic program at Alumar. The program aims to reduce or eliminate risk factors in the workplace, and to avoid new ones. Features of the program include advanced ergonomic training for the project team, leadership groups, HSE professionals and engineering personnel. Employees exposed to ergonomic risks also receive basic training and the opportunity to attend compensatory exercise programs. The ergonomic factors of tasks at the plant have been analysed and a risk inventory compiled. A subsequent action plan has resulted in changes and improvements to a wide variety of work practices, processes, equipment and facilities. This has led to a significant reduction in the number of recorded injuries and lost work days at Alumar.

HEALTH – MERIT

Anthony Bell

Middelburg Mine, Mpumalanga, South Africa

Anthony was responsible for designing and compiling three databases that capture occupational health data, including hygiene exposures, absences due to illness, and medical surveillance activities and outcomes. The databases provide a formal repository for the information and significantly improve analysis and reporting capabilities. The database design has since been adopted at three other Ingwe sites.

Jimmy Moreham (team representative)

Ohanet Construction Facility, Ohanet, Algeria

Jimmy and his colleagues have been instrumental in developing and implementing a medical support system as a response to injury and illness in this remote area. The system includes medical emergency procedures, a coordination plan to ensure all sites can interact and support each other during an emergency, and organisation of the necessary equipment and materials to facilitate remote-area medical support.

HEALTH – MERIT

Marian Aumord (team representative)

Bayside Aluminium, Kwa-Zulu Natal, South Africa

Marian and her team managed the integration of the occupational health programs at Bayside, facilitating the cross-referencing of information in the occupational hygiene, occupational medicine and biological monitoring programs using SAP HSE. This allows employees' workplace risk exposures to be linked to their individual health records, enabling potential health problems to be more easily identified.

Noelle Emmett

Worsley Alumina, Collie, Western Australia

Noelle designed, initiated and delivers the Lifestyle programs for employees at Worsley and was also the driving force behind the construction of a fitness and rehabilitation centre. The Lifestyle programs promote education and awareness of lifestyle risk factors and include a wide range of initiatives aimed at assisting employees to maintain a high level of health and fitness.

Keith Brassell

SAFETY – WINNER

Keith Brassell (team representative)

Zululand Anthracite Colliery, Kwa-Zulu Natal, South Africa

Keith and his colleagues have developed a purpose-built mock mine at the colliery. The facility, erected above ground, comprises 110 metres of simulated underground mine workings. It is primarily used to train new employees in a controlled, safe environment, with the aim of reducing the risk of accidents.

Because of its location, the colliery must recruit 95 per cent of its workforce from the local rural community. The new workers usually have little knowledge or experience of industrial processes or working in an underground environment. In the mock mine, they can familiarise themselves with conditions, learn standards and procedures, and make mistakes that can be corrected without danger. Employees returning from leave also attend refresher training in the facility.

The mock mine contains an operating conveyor belt system, an extraction fan, an escape route, various geological features including slips and faults, and different types of roof and wall supports. Uses for the mine include strata control courses, hazard awareness and identification, escape procedure training, safety equipment usage, ventilation reading, gas testing procedures, flameproofing, conveyor operation and fault identification, and support installation. It can also be used for mine rescue training.

As well as providing an innovative training facility, the mock mine has significantly cut costs associated with employees attending mandatory strata control courses and other training programs. Without the facility, employees would need to travel to Koornfontein Mines, 500 kilometres from the colliery. The savings in transport and accommodation have already far outweighed the cost of building the mock mine.

Through open days and organised school visits, the facility is also proving useful in educating the community about the colliery's operations and the coal industry in general.

Judge's comment: 'The mock mine is an outstanding example of going beyond theory and applying good training practice. It demonstrates a practical, effective approach to helping underground workers see and understand the nature of key underground hazards in a controlled situation.'

Professor Jim Joy, Director Minerals Industry Safety and Health Centre, University of Queensland, Australia

SAFETY – HIGHLY COMMENDED

John McDougall (team representative)

QNI Yabulu Refinery, Queensland, Australia

John and the Training System Project Team have developed an online system for continuously improving the performance of the processes and people at Yabulu refinery. Operator training had been identified as warranting increased emphasis to ensure the workforce can effectively and safely operate the refinery. Drawing on existing manuals and the knowledge of experienced process operators, the team has produced an online database of plant operations. They have catalogued all operator tasks, compiled a job safety analysis and work instructions for each task, profiled operator competencies, and produced data sheets on all plant equipment. All the necessary resources and training packages have also been developed, together with software programs to manage training records, assessments and reviews. The resulting system allows standardised, online training across the organisation.

Leon Dickson (team representative)

BHP Steel – Port Kembla Steelworks, New South Wales, Australia

Leon and the Isolation Verification Workshop team have designed a facility that allows electrical workers to experience best practice methods of verifying electrical isolations. The process of isolating equipment being worked on, and verifying the isolation, is essential if electrical work is to be performed safely. The workshop was developed in response to the increasing number of electric shock incidents due to inadequate verification. The team identified the most common risk factors by reviewing past incident reports and has based the workshop on re-creating 'life threatening' situations on equipment identical to that found in the plant. The workshop is practical in nature, allowing hands-on experience and assessment in safe, simulated conditions.

SAFETY – HIGHLY COMMENDED

Chris Gunther

Middelburg Mine, Mpumalanga, South Africa

Chris has developed a Learning Point Register, on which details of incidents and their learning points are recorded and related to the recommended controls. Data linked to each incident include actions to be undertaken, responsible personnel, due dates, risk assessments and existing standards. This enables the mine to more effectively review its safety controls, risk assessments and training needs and put in place improvements where required, thereby minimising the potential for re-occurrence of incidents. The electronic register brings all the information together in one central place and measures it against BHP Billiton standards and controls, facilitating adoption of best practices and continual improvement. The register can be adapted by other Company sites, enabling consistent standards to be achieved across the Group.

SAFETY – MERIT

Michael Loretz (team representative)

Bayside Aluminium, Kwa-Zulu Natal, South Africa

Michael and the project team produced a safety guide for contractors involved in a long-term, and potentially high-risk, maintenance program at the smelter. The 72-page booklet is pocket-sized for easy use and, as many of the contractors are semi-literate, includes numerous illustrations and cartoons. Produced in both English and Zulu, it contains detailed safety checkpoints for everyday maintenance activities.

Jorge Hidalgo (team representative)

Cerro Colorado, Iquique, Chile

Jorge and his team developed a warning system that alerts drivers of haulage trucks to wear their seatbelts and ensure they are fastened correctly. Installed in the cab, the system receives a signal when the truck is started and activates a buzzer until the seatbelt is securely fastened. A flashing strobe light outside the cab alerts colleagues that the driver's belt is not fastened or if a system failure has occurred.

SAFETY – MERIT

Jose Pinel (team representative)

Middelburg Mine, Mpumalanga, South Africa

In a pro-active response to the unacceptable injury rate at the mine, Jose and his team set about changing the focus and role of the Safety Department and developing a new safety strategy. A comprehensive program of innovations was initiated as part of the drive towards zero harm. Since the implementation of changes, there has been a 70 per cent improvement in the lost time injury frequency rate.

Steve Brown (team representative)

Douglas Colliery, Mpumalanga, South Africa

Steve and his colleagues developed the 'driver reviva' program to enhance the safety of haul truck operators working the open-cut section of the colliery. Incident analysis had shown operator fatigue was contributing to accidents towards the end of shifts. After consultation with the truck operators, a number of rest and refreshment areas have been set up on the haul roads, leading to a significant decline in accidents.

Willie Prinsloo

Koornfontein Mines, Mpumalanga, South Africa

Operators of non-flameproof vehicles at the mine must sound a warning before turning a 90-degree corner, but working the hooter while turning the wheel is difficult and risky. Willie's solution was to have the hooter connected to the indicator so it sounds with each flash, and allows the driver to keep both hands on the steering wheel while turning – a simple, low-cost, effective solution.

Abdullah Bellaama

BHP Billiton Petroleum, Hassi Messaoud, Algeria

Driving and maintaining vehicles in the remote locations and inhospitable terrain around Hassi Messaoud is a daunting undertaking. Responsible for the driver safety and vehicle maintenance program, Abdullah has introduced many initiatives that have enhanced the standard of vehicles, equipment, systems and procedures and contributed to the excellent driver safety record at our Algerian operations. (See case study, page 28.)

Manganese pellets and stockpile at Metalloys, South Africa

ENVIRONMENT – WINNER

Piet van Schalkwyk (team representative)

Metalloys, Meyerton, South Africa

Piet and his team developed a process to convert hazardous manganese sludges and dusts into pellets that can be made into manganese alloys. It took three years of work to achieve this recycling concept, which provides a unique alternative to the traditional industry method of storing sludges in lined dams that are expensive and environmentally unacceptable.

Disposing of the sludges in storage dams, which had been occurring at Metalloys for 50 years, had come under increasing scrutiny due to stricter legislation, unavailability of land for additional dams, and community concerns about the environmental impact.

With no precedents anywhere in the world, every step in the team's development of the recycling process was breaking new ground. The solution had to accommodate a variety of waste streams accumulated over time, while being flexible enough to cater for future changes in the composition of contaminants. It also had to be environmentally responsible and acceptable to the Company, the authorities and the community. A further challenge was to deliver a solution before the last available sludge dam filled up, and ensure it was affordable.

After abandoning several options suggested by external consultants and suppliers, the team set about developing their own process, utilising a mothballed plant on the site for pilot studies. Eventually, all the hurdles were overcome, and the new process was developed, with significant advantages. Not only is it acceptable to all the stakeholders, but it offers economic benefits. The pellets produced by the conversion process can be made into high-value manganese alloys. No further land will be required for storage dams, and the old dams can be reclaimed. This will lead to further savings by minimising clean-up costs at the time of site closure.

Judge's comment: 'This project demonstrated that, with some ingenuity, what were once thought of as intractable wastes, can be turned into useful product. This not only helped the environment, but also had a profitable outcome.'

Dr Harry Blutstein, Director Sustainable Development, EPA Victoria, Australia

ENVIRONMENT – HIGHLY COMMENDED

Matt Lord (team representative)

GEMCO, Northern Territory, Australia

Matt, with the support of the Rehabilitation & Mine Services team, has been driving initiatives to improve post-mining land rehabilitation at GEMCO's Groote Eylandt operations. After reviewing best practices within the mining and horticultural industries, Matt developed a rehabilitation program and supervised the preparation of a comprehensive set of manuals, procedures and work instructions. The program has introduced new processes and equipment for removing and returning topsoil; enhanced techniques for the collection, storage and planting of seed; and improved nursery practices. Ongoing consultation with the Anindilyakwa Land Council (representing the traditional owners) has resulted in training and employment for local Aboriginal people as a key component of the program. Around 50 hectares of land have been rehabilitated since the program began.

Juan Carlos Sanchez

Cerro Colorado, Iquique, Chile

Juan Carlos has led the development of an innovative process for recycling used oil for the production of explosives for the mine – a first for the mining industry in Chile. The oil, which is used for lubricating equipment and in hydraulic systems, is collected after use and stored in a purpose-built storage plant. The waste oil is then recycled as a fuel component in the production of the explosives. Juan Carlos directed the four-year analysis and testing program and supervised design and construction of the on-site storage plant. The program has proved that waste oil can be recycled in a safe and effective manner for the production of the explosives. It has enabled the Company to recycle 250 000 litres of waste oil annually.

ENVIRONMENT – HIGHLY COMMENDED

Johan Du Preez (team representative)

Chemfos Mine, Western Cape Province, South Africa

Johan and his team have coordinated the rehabilitation of the phosphate mine through the closure phase. There have been several key outcomes from the project. The site has been revegetated with a diverse variety of local indigenous plants and this has been achieved in an arid area with sandy and nutrient-poor soils. An eco-tourism, research and educational facility, the West Coast Fossil Park, has been established as a viable commercial enterprise. The old mining village has been transformed into Green Village, a thriving, self-governing community with public housing, a church, school, health clinic, recreation facilities and essential infrastructure. The project has won four national awards from the South African Landscapers Institute and has been widely recognised as an example of excellence in sustainable development in the mining industry. (See case study, page 33.)

ENVIRONMENT – MERIT

Peter Brown (team representative)

TEMCO, Tasmania, Australia

Peter and his team have been responsible for identifying the presence of dioxins at the sinter plant and developing a program to reduce their emission. While a health risk assessment showed levels were within acceptable limits, pioneering work was undertaken by the team to develop and implement a reduction strategy. Their program has resulted in emissions being reduced by 96 per cent.

Martin Lenters (team representative)

Witputs Project, Windhoek, Namibia

The Witputs Project is a minerals exploration project in the pristine Namib Desert in south-western Namibia. The exploration program and subsequent rehabilitation work conducted by Martin and the team has been widely recognised for outstanding environmental stewardship. The exploration program was undertaken with virtually no harm to the fragile and sensitive desert environment. (See case study, page 36.)

ENVIRONMENT – MERIT

Steve Sinclair (team representative)

Griffin Venture *FPSO, offshore from Onslow, Western Australia*

Steve and his team are responsible for the maintenance painting program on the *Griffin Venture*. They developed a strategy for utilising ultra-high-pressure water jetting for surface preparation, rather than the more conventional abrasive blasting technique. This has resulted in significant environmental benefits, as well as better health and safety outcomes for the FPSO workers and considerable cost savings.

Ian Tredinnick (team representative)

QNI Yabulu Refinery, Queensland, Australia

Yabulu Refinery, through extensive planning across the whole business, has developed an innovative water recycling facility at the site, which is located on southern Halifax Bay near the Great Barrier Reef Marine Park. The facility, which recycles water from one of the tailings ponds, has reduced raw water use by up to 45 per cent and enabled the routine discharge of water from the tailings ponds to the ocean to be discontinued. (See case study, page 35.)

Rocklin Reed (team representative)

Hillside Aluminium Smelter, Kwa-Zulu Natal, South Africa

Rocklin and his team formulated a comprehensive water management plan for the smelter. The plan has gained approval from the authorities, enabling the smelter to pro-actively manage the environmental impact of the site's waste water discharge and to effectively address total water resource issues. The team has been involved in all key aspects of the development and implementation of the plan.

Carlos Adriano de Jesus (team representative)

Alumar Smelter and Refinery, Maranhao, Brazil

Carlos Adriano played a key role in the team that developed a process that enables spent pot lining from the smelter to be safely utilised by cement manufacturers in their kilns. The recycling program is an innovative solution to the costly and environmentally sensitive problem of storing the hazardous waste. It also benefits the cement plants by decreasing the operational temperature of their kilns and reducing fuel consumption.

The Community Awards have been judged in two categories. Category A covers projects that are unrelated to the Company's business programs. Category B covers projects that are Company-sponsored, and where the employee has exceeded expectations by spending hours above and beyond the normal work commitment.

Daniel Butler

COMMUNITY (A) – WINNER

Daniel Butler

BHP Billiton Corporate, Victoria, Australia

Daniel devotes a considerable amount of his spare time to working voluntarily with Edmund Rice Camps, a not-for-profit organisation conducted under the auspices of the Christian Brothers. Established in Victoria in 1981, the camps provide disadvantaged and marginalised young people with a holiday they could otherwise not afford. The aim is to provide them with a positive, fun-filled experience.

The week-long camps are conducted each school holidays for groups aged from 8 to 11 and 12 to 15. Family and weekend adventure-based camps are also regularly conducted. A feature of the camps is that they are conducted with a leader-to-participant ratio of 1:1, ensuring that a high level of attention and support is provided. The leaders are all volunteers. Around 80 per cent are students, and the remainder represents a cross-section of ages and working backgrounds. Workshops are provided to equip leaders with the necessary training, with emphasis on best practice operating standards, safety and self-respect.

Daniel has been involved with the organisation since 1990 and has attended more than 30 camps, undertaking a variety of roles from leader to camp coach. Apart from his work on the actual camps, he has served as a member of the Board of Management from March 1998 to March 2002, the last two years in the role of Deputy Chair, as well as a member of various subcommittees within the organisation.

The organisation relies heavily on donations and in-kind support. Considerable assistance is gained from schools, which provide access to their campsites, supply buses, help recruit leaders and conduct fundraising activities. Local businesses also generously support the organisation.

Edmund Rice Camps now operates in all states of Australia, as well as in New Zealand, England, Ireland, South Africa, Tanzania and Kenya.

Judge's comment: 'Daniel's personal long-term commitment to disadvantaged youth encapsulates many values espoused in the BHP Billiton Charter. Most of Daniel's colleagues would be unaware of the extent of his voluntary involvement in this community activity.'

Graham Evans, Vice President Government and Community Relations, BHP Billiton

The Grade 7 Economics and Management Science class, Ilembe Primary School, with teacher Mr Mazibuko

The Grade 6 Natural Science class, Sinaye Primary

COMMUNITY (B) – WINNER

Bongani Mqaise (team representative)

Hillside and Bayside aluminium smelters, Kwa-Zulu Natal, South Africa

Bongani and his colleagues initiated the Partnerships-in-Education (PEN) Schools Project as part of a multi-pronged approach to address educational needs in the Zululand area. The project is a partnership between BHP Billiton Aluminium, the Zululand Chamber of Business Foundation (ZCBF) and the Kwa-Zulu Natal Department of Education.

As the smelters were receiving requests for financial assistance from hundreds of schools, it was decided to develop a strategy that could assist educational development in a meaningful way. The Corporate Social Investment (CSI) steering committee undertook extensive consultation with industry leaders, CSI practitioners, educationalists, consultants, non-government organisations and universities to tailor a strategy appropriate to the region.

Rather than making small donations to a large number of schools, several high schools and their feeder primary schools in disadvantaged communities were selected for 'whole school development' assistance over a 12-year period. The objective is to raise their teaching and governance methods to the standard of the best urban schools in the region and create a chain of excellence in the children's education. Key aims are to significantly improve pass rates, create a core of skilled teachers, and develop synergistic partnerships with organisations involved in educational development.

Part of the project's distinctiveness is that it involves all the stakeholders, including the Department of Education, industry, parents, teachers, learners and the community, in planning and implementing strategies. Another key feature is that, through the involvement of the ZCBF, the schools have access to a wide variety of teaching aids, career and lifeskills guidance, and counselling and development programs.

The project, now in its fifth year, assists 11 high schools and 28 primary schools, to the benefit of 32 000 students and 800 teachers annually. (See case study, page 39.)

Judge's comment: 'This entry was viewed as being highly relevant to the needs of the country. The program is galvanised by the commitment of all the key stakeholders within this particular community. The long-term nature of the program was further commendable.'

Paul Jennings, Network Director, Opportunity International, Australia

COMMUNITY – HIGHLY COMMENDED

Anne Marie Dawe (team representative)

Ekati Diamond Mine™, Northwest Territories, Canada

Anne Marie has been the driving force behind the initiation, development and implementation of an innovative Workplace Learning Program, which is aimed at increasing the level of literacy for Aboriginal employees. The program reflects the Company's commitment to building a sustainable Aboriginal workforce. Anne Marie developed the program in collaboration with the government, community leaders, educators and the mine's team leaders. It is based on literacy assessments, individual and group instruction, and computer-based training. Employees participating in the program say their confidence has increased and they feel more comfortable speaking out, asking questions and participating in their team activities. They can now help their children with homework and actively participate in community events. They have also shown increased motivation to learn and plan their careers.

Mike Jose (team representative)

Pilbara Iron Ore Operations, Western Australia, Australia

Mike plays a leading role in the team that has developed a cross-cultural awareness training program for the Pilbara operations workforce and the local communities. The program is designed to promote a greater understanding of Aboriginal history and culture and the social, economic and health issues faced by indigenous communities. It is aimed at creating a culturally sensitive and supportive workplace environment that will foster increased Aboriginal employment within the Company and encourage positive relationships between the workforce and Aboriginal communities. The program has been developed through a collaborative effort by the Aboriginal Affairs team, Curtin University Centre for Aboriginal Studies, and Aboriginal community representatives. To date, more than 800 members of the workforce have attended the one-day course.
(See case study, page 40.)

Madelon Piana (team representative)

Samarco Mineracao, Minas Gerais, Brazil

The subdistrict of Bento Rodrigues near the Samarco mine has had a history of poverty, high unemployment, low schooling levels, health issues, and environmental problems, such as a lack of clean water and a high incidence of brush clearing fires. In response, the Corporate Communications and Environment teams developed the Community Environmental Education Program of Bento Rodrigues. To foster sustainability of the program, the local people were mobilised to form a Community Association. A range of initiatives have since been implemented, including courses on literacy, health and the environment. A water treatment station has been constructed, and brush clearing fires have reduced significantly as a result of environmental education. School facilities and teaching standards have been improved, reducing drop-out rates; and the establishment of a local food processing business has boosted employment. (See case study, page 39.)

COMMUNITY – MERIT

Tim Sewell

Ekati Diamond Mine™, Northwest Territories, Canada

Tim organises the Wingfest, an annual fundraising event to support children with special needs. A fun-filled community activity celebrating chicken wings (a favourite Canadian food), the Wingfest, which has a budget of C$500, has raised C$150 000 over the last four years. Donations have benefited organisations caring for children with learning disabilities, social difficulties, serious illnesses and other special needs.

Abidin Djali (team representative)

Petangis Mine, Pasir Regency, Indonesia

Abidin and his team have constructed water storage and distribution facilities for local communities around the mine site, providing them with fresh, clean water so they can survive the lengthy dry season. A key aspect of the project is the training of local people to enable them to preserve the water catchment area and maintain the storage facility as a sustainable community resource.

Zulfiqar Ali Khan

Zamzama Gas Field, Islamabad, Pakistan

Zulfiqar initiated the establishment of a primary school for girls from the villages around the gas plant – the first in the region. Working with local non-government organisations and community representatives, Zulfiqar organised the use of a building and arranged a teacher training course. The school now provides classes up to Grade 4 for around 50 students and is achieving excellent pass rates. (See case study, page 39.)

Roberto Arriagada Godoy (team representative)

Minera Escondida, Antofagasta, Chile

Roberto and his colleagues have extended their 'Say No to Drugs' program, which is aimed at keeping young people in the community off drugs by involving them in sports events and drug education programs. Among its many initiatives, the program now also supports a local drug rehabilitation centre, helping the internees to once again become active and useful members of the community.

Sthe Dyan (team representative)

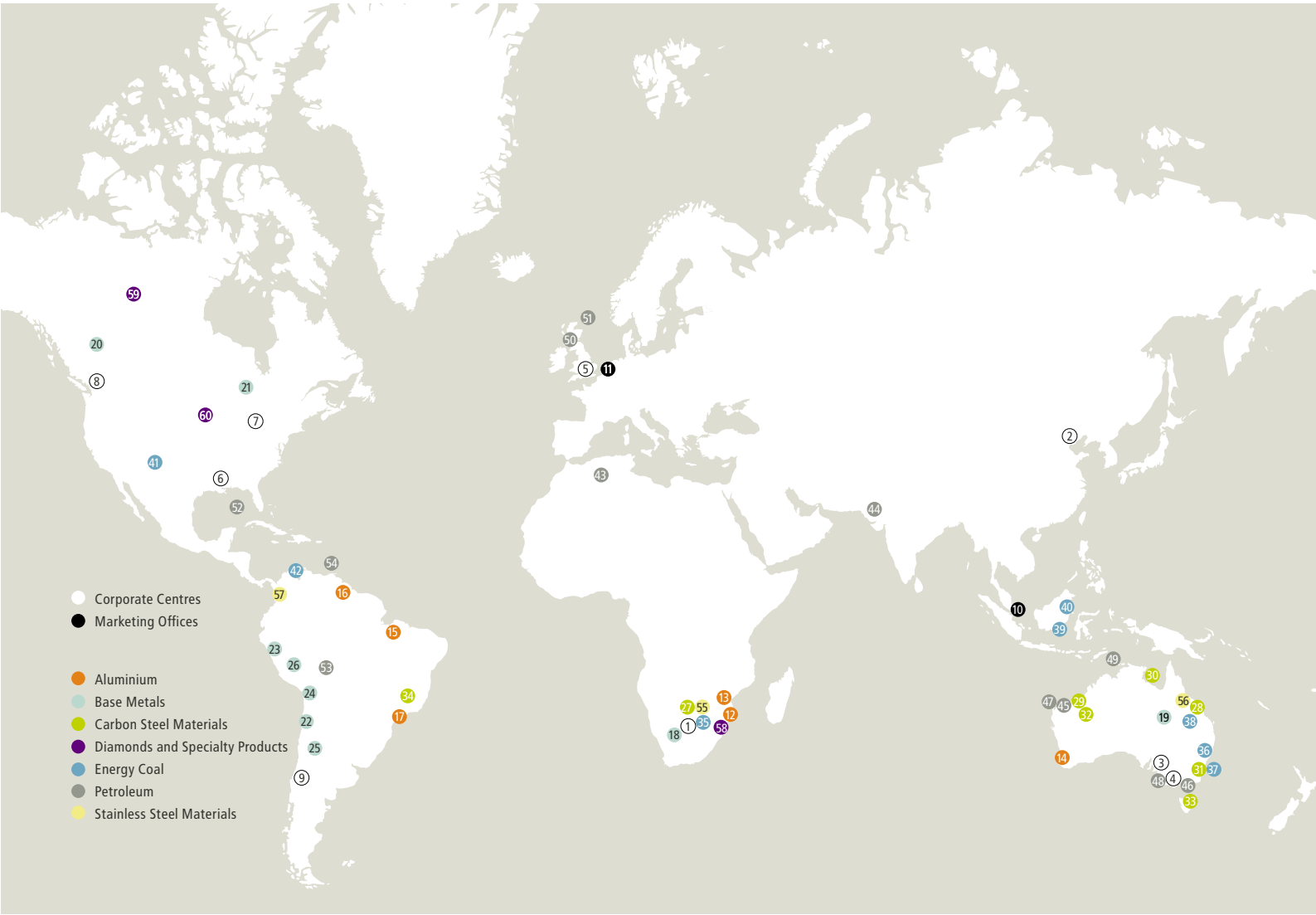
Middelburg Ferrochrome/Technochrome, Mpumulanga, South Africa

Sthe and his team have played an ongoing role in developing the Little Elephant art and craft market, which comprises thatched stalls, workshops, an amphitheatre, and displays of ethnic huts. The aim is to alleviate poverty and unemployment in the region, preserve South African arts and crafts, and attract tourists to Mpumulanga. Over 100 artists and craftspeople are presently selling their work through the market.

	Customer Sector Group	Aluminium	Base Metals					
	Commodity	Aluminium	Copper	Gold	Zinc	Silver	Lead	Manganese
	Energy	High-tension power lines, wires and cables	Wire and cables, electrical wiring in buildings, electrical generators and motors		Zinc carbon batteries		Lead-acid storage batteries (car batteries), remote area power storage	Dry cell batteries
	Construction	Door and window frames, wall cladding, roofing, awnings	Electrical wiring, plumbing pipes and tanks, roofing, light fixtures, treated timbers	Gold leaf for decoration	Roofing, fences, doors, handles, paints, plumbing, nuts and bolts	Solder, super conductors	Roofing, plumbing, soundproofing, stained glass windows	
	Industry	Propellers, body sheet (for ships, aeroplanes, vehicles), gearboxes, motor parts, wires, cables, packaging	Wires and cables, electrical wiring in buildings and vehicles, robotics, airconditioning and refrigeration units, scientific instruments	Electronics for computers, defence and industrial equipment, aerospace technology, tinted-glass windows	Galvanising and corrosion protection, car bodies, carburettors, tyres	Photographic paper and film, medicines	Lead foil, radiation shields, toxic waste storage containers, dyes, solder	Steel alloys
	Household appliances	Components for TV sets, radios, refrigerators and airconditioners	Electrical appliances, telephone cables, microwave equipment, radio and TV sets	Electronic technology	Door handles and other household components, brass fittings		Electronic and electrical appliances such as radios and TV sets (soldered connections)	
	Personal use	Beverage cans, bottle tops, foil wrap, foil semi-rigid containers, kettles and saucepans, cutlery, tennis racquets, softball bats, indoor and outdoor furniture	Ornaments, telephones, cooking utensils, home heating systems, decorative applications, coins	Jewellery, watches, currency, dentistry, decoration for dinnerware and ornaments	Medications, zinc cream, TV sets, computer parts, toys	Jewellery, watches, dinnerware and ornaments, mirrors, cutlery, currency, medallions (e.g. Sydney Olympics medals)	Computers, leadlight windows, glass in TV and computer screens for radiation protection	Glass, ceramics, dry cell batteries

arbon Steel Materials		Diamonds and Specialty Products		Energy Coal	Petroleum	Stainless Steel Materials		
Iron Ore	**Coking Coal**	**Diamonds**	**Titanium**	**Thermal Coal**	**Oil and Natural Gas**	**Chrome**	**Nickel**	**Cobalt**
				Electricity generation, heating	Fuel, heating		Electricity generation turbines, batteries	Rechargeable lithium batteries for mobile telephones and laptop computers, jet engine turbines
Steelmaking, buildings, bridges, tools, cranes		Diamond grit and powder impregnated rock drilling bits, masonry drilling, machine tool tips and cutting discs	Pigment for paints, fabric, plastics, paper		Carpets, paints, plastics	Treated timbers, street furniture, building cladding	Street furniture, building cladding	Tyre adhesives, magnets, carbide cutting tools
Steelmaking, transport equipment, motor vehicles, farm machinery	Steelmaking	Polishing compounds in fine optical surfaces, jewel bearings, wire drawing dies	Titanium metal for aerospace and military equipment, engines, abrasives, ceramics, robotics	Electricity generation, heating, cement	Electricity generation, transport, furnace fuel	Pigments for paints, food and beverage equipment, vehicles	Computer hard disks, surgical implements and implants, jet engines, food and beverage equipment, pharmaceutical equipment, vehicles, metal hardening	Paints, enamels, glazes
Refrigerators, washing machines, ovens		Knife 'sharpeners'	Paper products, computers and TV screens		Plastic components, packaging	Electrical appliances	Colour TV tubes, kitchen sinks, white goods	Videotape coatings, heating elements on electric stoves
Food cans, cars, tools, cutlery, jewellery, watches		Jewellery	Cosmetics and sunscreens, fabric, clothing, jewellery, heart pacemakers, hip replacements, food colouring		Electricity, fuel for vehicles, fuel for cooking and heating, clothing fabric, plastic toys, pens	Bathroom and kitchen fittings	Kitchen utensils, coins, mobile telephones, bathroom and kitchen fittings and fixtures	

BHP Billiton Locations



Corporate Centres

Map Ref	Continent	Location
1	Africa	Johannesburg
2	Asia	Beijing
3	Australia	Adelaide
4	Australia	Melbourne (Global Headquarters)
5	Europe	London
6	North America	Houston
7	North America	Toronto
8	North America	Vancouver
9	South America	Santiago

Marketing Offices

Map Ref	Continent	Location
10	Asia	Singapore
11	Europe	The Hague

Aluminium

Map Ref	Continent	Site/Asset	Description	% Ownership
12	Africa	Hillside/Bayside, South Africa	Two aluminium smelters	100%
13	Africa	Mozal, Mozambique	Aluminium smelter	47%
14	Australia	Worsley, Australia	Integrated alumina refinery/bauxite mine	86%
15	South America	Alumar, Brazil	Alumina refinery and aluminium smelter	36–46%
16	South America	Paranam, Suriname	Billiton Maatschappij Suriname (BMS) alumina refinery & Lelydorp bauxite mine	45–76%
17	South America	Valesul Aluminio SA, Brazil	Aluminium smelter	46%

Base Metals

Map Ref	Continent	Site/Asset	Description	% Ownership
18	Africa	Pering, South Africa	Zinc-lead mine located in the North West Province	100%
19	Australia	Cannington, Australia	Silver, lead and zinc mine in north-west Queensland	100%
20	North America	Highland Valley Copper, Canada	Highland Valley Copper mine in British Colombia	33.6%
21	North America	Selbaie, Canada	Open pit operation producing zinc and copper concentrate and by-products including gold and silver	100%
22	South America	Escondida, Chile	One of the largest copper mines in the world	57.5%
23	South America	Antamina, Peru	Large copper-zinc mine	33.75%
24	South America	Cerro Colorado, Chile	Copper mine in Northern Chile, producing cathode copper through a SXEW leach operation	100%
25	South America	Alumbrera, Argentina	Copper concentrate producer, with gold by-products	25%
26	South America	Tintaya, Peru	Produces copper concentrate and copper cathode within the 'Skarn Belt' of south-eastern Peru	100%

Carbon Steel Materials

Map Ref	Continent	Site/Asset	Description	% Ownership
27	Africa	Samancor, Manganese, South Africa	Integrated producer of chrome and manganese ores and ferroalloys (Also part of Stainless Steel Materials Customer Sector Group)	60%
28	Australia	Queensland Coal, Australia	World's largest supplier of high-quality metallurgical coal for steel production	50–80%
29	Australia	Boodarie Iron, Australia	Hot briquetted iron plant	100%
30	Australia	GEMCO Australia	Groote Eylandt Mining Co Pty Limited (GEMCO) producer of manganese ore (part of Samancor)	60%
31	Australia	Illawarra Coal, Australia	Five underground coal mines	100%
32	Australia	WA Iron Ore, Australia	The Pilbara iron ore mines rank among the world's best long-life iron ore assets	85–100%
33	Australia	TEMCO, Australia	Tasmanian Electro Metallurgical Company Pty Limited (TEMCO), producer of manganese alloys (part of Samancor)	60%
34	South America	Samarco, Brazil	An efficient low-cost producer of iron ore pellets	50%

Energy Coal

Map Ref	Continent	Site/Asset	Description	% Ownership
35	Africa	Ingwe, South Africa	Largest coal producer in South Africa	100%
36	Australia	Hunter Valley Coal, Australia	New 12mtpa mine (Mount Arthur North) being developed adjacent to Bayswater mine	100%
37	Australia	Illawarra Coal, Australia	Marketing agent for energy coal output	–
38	Australia	BMA, Australia	Marketing agent for energy coal output	–
39	Asia	PT Arutmin, Indonesia	Marketing agent for 75% of coal output	–
40	Asia	PT Kendilo, Indonesia	Petangis mine	100%
41	North America	New Mexico Coal, USA	Mine-mouth operations incl. new underground mine development	100%
42	South America	Cerrejon Coal (Carbones del Cerrejon, Cerrejon Zona Norte mines), Colombia	Largest producer in Colombia	33%

Petroleum

Map Ref	Continent	Site/Asset	Description	% Ownership
43	Africa	Algeria	ROD and Ohanet developments	35.1–45%
44	Asia	Zamzama, Pakistan	Gas production	38.5%
45	Australia	North West Shelf	One of Australia's largest resource projects, producing liquids, LNG and domestic gas	8.33–16.67%
46	Australia	Bass Strait	The Bass Strait operations produce oil, condensate, LPG, natural gas and ethane	50%
47	Australia	Griffin	Operator of oil & gas project offshore WA	45%
48	Australia	Minerva	Gas field under development in the Otway Basin	90%
49	Australia	Laminaria/ Corallina	Oil production in the Timor Sea	25–32.6%
50	Europe	Liverpool Bay	Operator of oil and gas development in the Irish Sea	46.1%
51	Europe	Bruce/Keith	Oil and gas production in the UK North Sea	16–31.83%
52	North America	Gulf of Mexico	Interests in four producing assets in the Gulf of Mexico; development activities and exploration interests	4.95–50%
53	South America	Bolivia	Oil and gas production	50%
54	South America	Trinidad	Exploration activities	30–50%
–	Various	Exploration	Exploration interests in Africa (Angola, Gabon, South Africa), Brunei, Brazil, Australia, USA, Trinidad and the UK	–

Stainless Steel Materials

Map Ref	Continent	Site/Asset	Description	% Ownership
55	Africa	Samancor, Chrome, South Africa	Integrated producer of chrome and manganese ores and ferroalloys (Also part of Carbon Steel Materials Customer Sector Group)	60%
56	Australia	QNI Yabulu, Australia	The Yabulu refinery is one of the world's major laterite nickel-cobalt processing plants	100%
57	South America	Cerro Matoso, Colombia	Integrated ferro-nickel mining and smelting complex in north Colombia	99.8%

Diamonds and Specialty Products

Map Ref	Continent	Site/Asset	Description	% Ownership
58	Africa	Richards Bay Minerals, South Africa	World's largest producer of titanium slag	50%
59	North America	Ekati™, Canada	Diamond mine in the Northwest Territories of Canada	80%
60	North America	Integris Metals	Metals distribution	50%

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The following websites provide additional information relevant to this Report.

Business in the Community (UK)	www.bitc.org.uk
Dow Jones Sustainability Indexes	www.sustainability-index.com
Global Mining Initiative	www.globalmining.com
Global Reporting Initiative	www.globalreporting.org
International Aluminium Institute	www.world-aluminium.org
International Chromium Development Association	www.chromium-asoc.com
International Council for Mining and Metals	www.icmm.com
ISO 14001 – Environmental Management System	www.iso.org
Minerals Council of Australia	www.minerals.org.au
Mining, Minerals and Sustainable Development	www.iied.org/mmsd
Nickel Development Institute	www.nidi.org
OHSAS 18001 – Occupational Health and Safety Management System	www.bsi-global.com
United Nations Global Compact	http://65.214.34.30/un/gc/unweb.nsf
United Nations Declaration of Human Rights	www.un.org/Overview/rights.html
World Business Council for Sustainable Development	www.wbcsd.ch
World Health Organisation	www.who.int

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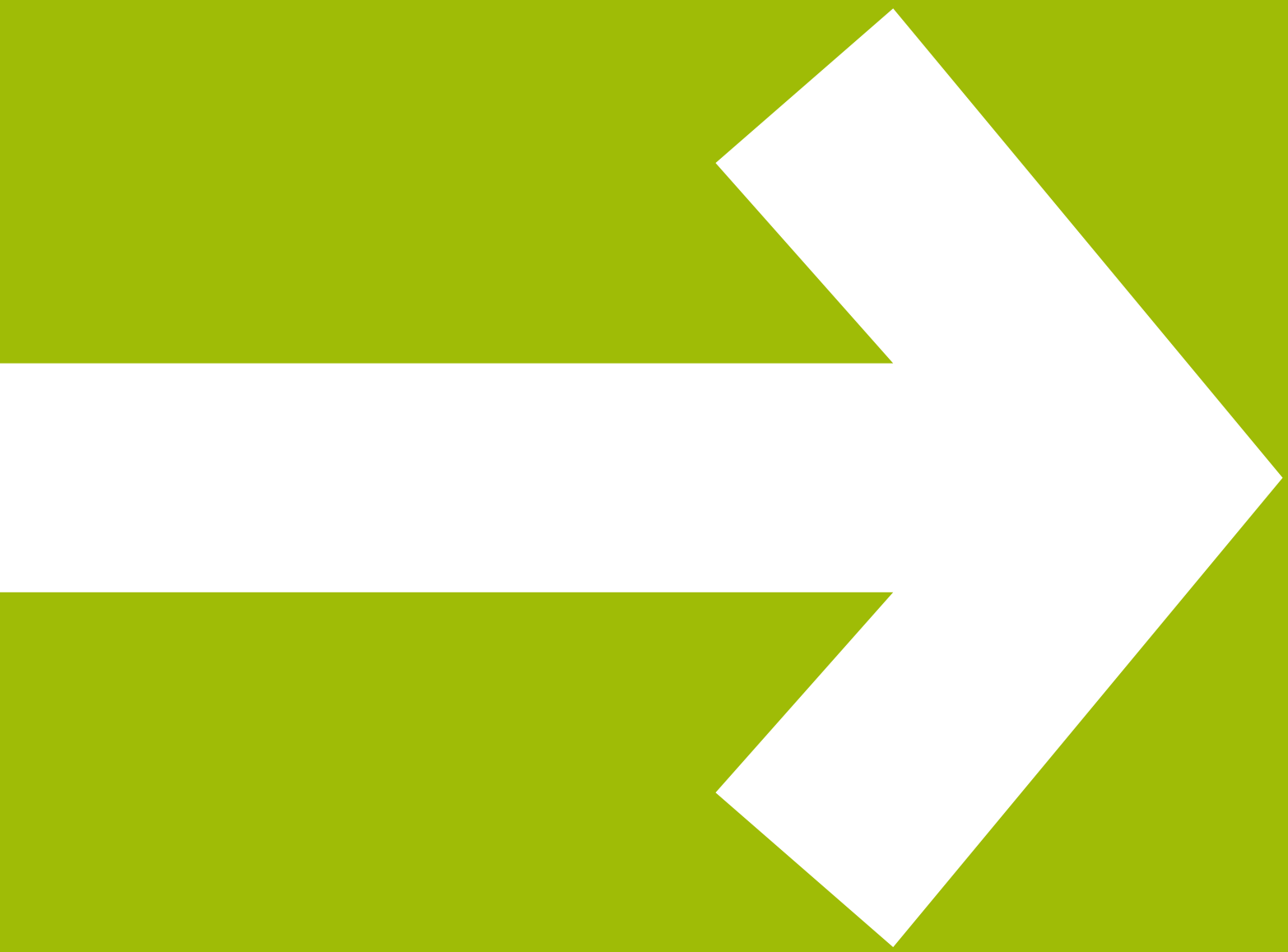

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