The Centre for Social Responsibility in Mining

ANNUAL REPORT
2004
The Centre for Social Responsibility in Mining (CSRM) was established in 2001 by the University of Queensland, in response to growing interest and debate in the wider community about the role of the mining and minerals processing industries in contemporary society.

The Centre’s major objective is to help build the capacity of the industry to develop and manage community relationships more effectively, by conducting high quality research that is of value both to mining companies and the communities in which they operate.

The CSRM is a member of the Sustainable Minerals Institute (SMI), which embraces all of the centres and divisions within the University of Queensland that are active in research associated with the mining and minerals industry.

Our Vision

To be an internationally recognised centre of quality research expertise and effective knowledge transfer on social responsibility and sustainability issues to ensure their understanding and application by the minerals industry.

Centre Highlights 2004

- Attracted funding for six new projects, including a major ACARP-funded research project on the Impacts of Coal Mining in the Upper Hunter Valley
- Commenced work on an ARC Linkage project. This two-year project is investigating Community Engagement in the Australian Minerals Industry
- Completed a project on Indigenous Employment at Century Mine and obtained funding for a follow-up project on retention strategies for Indigenous employees
- Increased the number of PhD students associated with the Centre from three to seven
- Published the SOTA workbook
- Published eight conference papers
- Developed a strong research involvement with the CSRP
Chairman’s Report

As Chair of the CSRM Advisory Board, I am pleased to report that 2004 proved to be another busy and productive year for the Centre. Building a new centre from the ground is no easy task, but good progress has been made in the first three years. The Centre has developed a solid research program and is steadily building its profile within the minerals industry. Importantly, its research output is starting to inform practice in the industry and the Centre is developing a reputation for high quality research with a strong practical focus.

Now that a solid foundation has been established, the challenge for the CSRM is to broaden its funding base and further strengthen its research focus. In this context, the CSRM’s membership of the Sustainable Minerals Institute (SMI) brings significant advantages. There are exciting opportunities for collaboration between the CSRM and the other SMI centres to develop a genuinely multi-disciplinary approach to addressing sustainability issues within the minerals industry. Through its involvement with the Cooperative Centre for Sustainable Resource Processing (CSRP) the CSRM is also well placed to extend social science research into what has traditionally been seen as a purely technical area.

The Board is supportive of the CSRM’s efforts to develop these new directions and will provide assistance wherever possible. I would like to take this opportunity to thank my fellow Board members for their constructive input during the year and, in particular, acknowledge the contribution of two departing members, Mick Roche and Peter Argust. I would also like to record the Board’s appreciation to the staff and Director of the CSRM for their ongoing effort and commitment.

Director’s Report

This last year has seen a significant expansion in the research activity of the CSRM, reflecting our success in 2003 in securing funding support for new projects from the Australian Research Council (ARC), the Australian Coal Association Research Program (ACARP) and the Cooperative Research Centre for Sustainable Resource Processing (CSRP). We have also experienced a steady increase in the amount of work being directly funded by industry and, to a lesser extent, government. While the Centre is not yet at a point where it could be considered to be self-sufficient, we are making good progress towards that goal.

Most importantly, the research that we are undertaking is addressing issues of core concern to the minerals industry and those communities that are associated with the industry. Our work program includes projects aimed at: enhancing community engagement practices and processes in the industry; assisting operations to better understand and manage their impacts on local communities; improving the utilisation of resources within the sector; and building the capacity of operations to contribute to the long term sustainability of the communities and regions in which they operate. We have also been working with individual companies on issues such as sustainability risk and opportunity assessment, and the valuation of ‘beyond compliance’ behaviour.

In parallel with the development of our research program, we are continuing to expand the post-graduate program, with seven PhD students now associated with the Centre. One of the many benefits of having PhD students involved in the Centre is that they are able to undertake long term, basic research and offer a critical perspective, thereby providing a valuable counterbalance to the more applied work that we do with industry. All of our PhD students are making good progress and we are eagerly awaiting the first graduations.

Looking to 2005 and beyond, the prognosis for the CSRM – and its ‘parent’, the Sustainable Minerals Institute (SMI) – continues to be very encouraging. The minerals industry is currently experiencing enormous growth, fuelled by unprecedented demand from China. Along with managing the
changes associated with this rapid growth, the industry has demonstrated a growing awareness of the importance of sustainability issues. This is apparent both at the broader industry level and at the level of individual companies, where there is an increasing focus on developing systems, processes and competencies to monitor the social, environmental and economic impacts of mining.

A particularly significant development was the release, late in 2004, of Enduring Value – The Australian Minerals Industry Framework for Sustainable Development. All member companies of the Minerals Council of Australia (MCA) are required to commit to this framework and to implement progressively the International Council on Mining and Metals (ICMM) sustainable development principles. Translating these broad principles into improved practices on the ground will be a major challenge for the industry. Centres such as the CSRM can make a valuable contribution in this regard by identifying and documenting good practice and the conditions under which it can be achieved, developing useful tools and metrics for application in the industry, and building the knowledge base about what works and what doesn’t in industry approaches to sustainable development. We look forward to exploring with the industry how the resources of the CSRM – and of the SMI more broadly – can best be aligned to support the change process now currently underway within the industry.

In closing, I would like to acknowledge the staff of the Centre and the SMI for their continuing commitment and their valuable contribution to the development of the CSRM. I would also like to thank Professor Don McKee, Director of the SMI, and the members of the CSRM’s Advisory Board, for their support and advice throughout the year.

Our Advisory Board

The CSRM’s Advisory Board provides strategic advice, monitors the overall operations and long-term direction of the Centre, helps identify research and funding opportunities and provides feedback on the Centre’s performance. The Board met on two occasions in 2004. During the year Mick Roche and Peter Argust resigned from the board and Frances Hayter, Alexis Fernandez and Trevor Robinson joined as members.

<table>
<thead>
<tr>
<th>External Members</th>
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</thead>
<tbody>
<tr>
<td>Mr Ian Williams (Chair)</td>
<td>formerly General Manager Mining, Pasminco</td>
</tr>
<tr>
<td>Ms Hilary Chapman</td>
<td>Corporate Environmental Manager, Thiess</td>
</tr>
<tr>
<td>Mr Geoff Dickie</td>
<td>Executive Director Native Title Services, Queensland Department of Natural Resources, Mines and Energy</td>
</tr>
<tr>
<td>Mr Peter Argust*</td>
<td>Manager Sustainable Development, Comalco</td>
</tr>
<tr>
<td>Ms Alexis Fernandez**</td>
<td>General Manager Communications and Sustainable Development, Comalco</td>
</tr>
<tr>
<td>Ms Frances Hayter**</td>
<td>Environment and Indigenous Affairs Policy Adviser, Queensland Resources Council</td>
</tr>
<tr>
<td>Mr Mick Roche*</td>
<td>Stewardship, Cannington Mine, BHP Billiton Minerals</td>
</tr>
<tr>
<td>Mr Trevor Robinson**</td>
<td>Executive Officer, Queensland Indigenous Working Group (QIWG)</td>
</tr>
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<tr>
<th>University of Queensland Members</th>
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<tbody>
<tr>
<td>Professor Geoff Lawrence</td>
<td>Chair, School of Social Sciences</td>
</tr>
<tr>
<td>Professor Don McKee</td>
<td>Director, Sustainable Minerals Institute</td>
</tr>
<tr>
<td>Professor Michael Keniger</td>
<td>Executive Dean, Faculty of Engineering, Physical Sciences and Architecture</td>
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* Resigned during the year
** Appointed during the year
Financial Report

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<th>Income</th>
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* Cooperative Resource Centre for Sustainable Resource Processing
** Teaching and Research Fund

Income

Expenditure
Research Team

David Brereton
Director
- BA (Hons) University of Melbourne, Australia
- Ph D Stanford University, USA

David Brereton is a political scientist whose career focus has been on using social science research to improve policy and practice in the public and private sectors. Prior to taking up his current position, David was Director of Research at the Queensland Criminal Justice Commission for eight years. He has taught Legal Studies at La Trobe University and Politics at Monash, Melbourne and Stanford Universities, as well as serving as a Principal Consultant to the Law Reform Commission of Victoria.

Robin Evans
Senior Research Fellow
- BSc(Eng) Imperial College London, UK
- MEngSc University of Queensland, Australia
- MTM (Master of Technology Management), University of Queensland, Australia

Robin Evans is a mining engineer with broad experience in the minerals industry from the varying perspectives of site operations, research provider and product supplier. His research interests include technology transfer and sustainability issues in the mining industry.

Ruth Beach
Research Officer
- BA University of Sydney, Australia
- M Mgmt University of Queensland, Australia

Ruth Beach is a social scientist with substantial experience in organisational and evaluation research. Her research at the CSRM has focused on workforce issues associated with the mining industry and community engagement processes.

Tanuja Barker
Research Officer
- B Sc, University of Auckland, New Zealand
- M Sc (Resource Management), University of Queensland, Australia

Tanuja’s main area of research experience is in the social and cultural aspects of resource management. She holds a Masters from UQ in Environmental Management and Planning. Since joining the CSRM, much of her work has focused on issues relating to Indigenous communities and mining.

Glen Corder
Senior Research Project Manager
- BE (Hons), University of Queensland, Australia
- MEngSc University of Queensland, Australia
- Ph D, Cambridge University, UK

Glen Corder is a chemical engineer who has had over 15 years experience in the chemical and mineral processing industries. Glen joined CSRM specifically to head up the Gladstone regional synergies project.

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Research Officer
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- M Mgmt University of Queensland, Australia

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## OUR PEOPLE

### PhD Students

<table>
<thead>
<tr>
<th>Researcher</th>
<th>School of enrolment</th>
<th>School / Discipline</th>
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<tbody>
<tr>
<td><strong>Robin Evans</strong></td>
<td>School of Engineering.</td>
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<tr>
<td><strong>Research Topic</strong></td>
<td>The incorporation of sustainability criteria into decision-making practices within the Australian Minerals Industry</td>
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</tr>
<tr>
<td><strong>Supervisor(s)</strong></td>
<td>Professor Chris Moran (Centre for Water in the Minerals Industry) and Professor David Brereton (CSRM).</td>
<td></td>
</tr>
<tr>
<td><strong>Mathew Hancock</strong></td>
<td>School of Engineering.</td>
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<tr>
<td><strong>Research Topic</strong></td>
<td>Rights, risks and politics in the management of public health issues in the Papua New Guinea mining industry</td>
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<tr>
<td><strong>Supervisor(s)</strong></td>
<td>Professor David Brereton (CSRM), Professor Jim Joy and Ms Carmel Boefinger (MISHC).</td>
<td></td>
</tr>
<tr>
<td><strong>Deanna Kemp</strong></td>
<td>School of Social Work and Applied Human Sciences</td>
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<tr>
<td><strong>Research Topic</strong></td>
<td>Site-based community relations in the Australian and New Zealand minerals industries.</td>
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<tr>
<td><strong>Supervisor(s)</strong></td>
<td>Associate Professor Margaret Shapiro and Dr Jenni Warburton (School of Social Work and Applied Human Sciences), Professor David Brereton (CSRM).</td>
<td></td>
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<tr>
<td><strong>Bryan Mardle</strong></td>
<td>School of Political Science</td>
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<tr>
<td><strong>Research Topic</strong></td>
<td>How public policy frameworks and public research institution linkages contribute to successful transfer of research innovations to mining industry organisations.</td>
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<tr>
<td><strong>Supervisor(s)</strong></td>
<td>Professor Paul Boreham (School of Political Science) and Professor David Brereton (CSRM).</td>
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<tr>
<td><strong>Richard Parsons</strong></td>
<td>UQ Business School</td>
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<tr>
<td><strong>Research Topic</strong></td>
<td>Site-Level Community Engagement Processes in the Australian Minerals Industry: A Comparative Analysis</td>
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<tr>
<td><strong>Supervisor(s)</strong></td>
<td>Dr Bernard McKenna (UQ Business School), Professor David Brereton (CSRM).</td>
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<tr>
<td><strong>Petrina Schiavi</strong></td>
<td>School of Social Sciences</td>
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<td><strong>Research Topic</strong></td>
<td>Regulating the Social and Environmental Performance of the Australian Mining Industry: A Socio-legal Analysis of Emerging Forms of Governance.</td>
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<tr>
<td><strong>Supervisor(s)</strong></td>
<td>Professor David Brereton (CSRM), Professor Geoff Lawrence (School of Social Sciences)</td>
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<tr>
<td><strong>Rhys Worrall</strong></td>
<td>School of Geographical Sciences and Planning</td>
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<tr>
<td><strong>Research Topic</strong></td>
<td>A Sustainability Criteria and Indicators Framework for Legacy Mines Sites.</td>
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<tr>
<td><strong>Supervisor(s)</strong></td>
<td>Dr David Neil (School of Geographical Sciences, Architecture and Planning), Associate Professor David Mulligan (Centre for Mined Land Rehabilitation), Professor David Brereton (CSRM).</td>
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</table>
The CSRM places a strong emphasis on cross-disciplinary research. As well as our collaborations with the other centres in the SMI, we have established strong links with other disciplines within the University of Queensland. Research partnerships have been developed with academics from the School of Social Sciences, the School of Geographical Sciences, Architecture and Planning and the Business School. In 2004, these links were extended to include researchers based at Curtin, Sydney, Southern Cross and Charles Darwin Universities.

Industry Links

The CSRM is committed to engaging with the minerals industry on corporate social responsibility issues, particularly at the site level. During 2004, CSRM personnel made more than 40 sites visits in relation to current and proposed research projects, visiting such diverse locations as Gladstone, Orange, Kwinana, the Hunter Valley, North West Queensland and the East Kimberleys. In addition, our staff participated in several industry workshops.

The following organisations provided cash and in-kind support for our projects:

<table>
<thead>
<tr>
<th>Anglo Coal</th>
<th>Ensham Coal</th>
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<tbody>
<tr>
<td>Argyle Diamonds</td>
<td>Gladstone Area Industrial Network (GAIN)</td>
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<tr>
<td>BHP Billiton</td>
<td>Newcrest Mining</td>
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<tr>
<td>BHP Billiton Mitsubishi Alliance (BMA)</td>
<td>Newmont Australia</td>
</tr>
<tr>
<td>BHP Billiton Stainless Steel Materials</td>
<td>Queensland Department of Employment and Training</td>
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<tr>
<td>Comalco</td>
<td>Zinilex/Pasminco</td>
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</table>
CSRM research projects focus on three broad areas: mining and communities, workforce issues, and management and governance processes. We have a combination of continuing, completed and new projects in each of these areas.

Mining and Communities

The Mining and Communities research program seeks to promote positive socio-economic outcomes for communities affected by mining operations. Our projects include:

Utilisation of Mining Project Infrastructure to support Sustainable Indigenous Tourism Activities in Northern Australia

**Status**  
New project, commenced January 2004

**Description**  
tourism ventures in remote areas of Northern Australia.

**Funding**  
Cooperative Research Centre for Sustainable Tourism; Rio Tinto Pty Ltd

**Research Team**  
Reser (Charles Darwin University), Dr Jeremy Buultjens (Southern Cross University), Tanuja Barker (CSRM), Linda Thomson (AERC), Tim O’Rourke (AERC).

**Industry Partner(s)**  
In-kind support has been provided by Argyle Diamond mine, Zinifex Century mine and Comalco Weipa.

**Achievements**  
Field visits have been conducted and a first draft of the report has been produced.

**Outcomes**  
Ongoing project

**Duration**  
January 2004 – July / August 2005

**Challenges**  
To identify opportunities for an action research project that would support development of a viable Indigenous tourism venture.

Site-Level Community Engagement Processes in the Australian Minerals Industry: A Comparative Analysis

**Status**  
New project, commenced March 2004

**Description**  
This three-year study compares the community engagement practices of eight Australian mining and minerals operations in urban, regional and remote settings in Queensland, New South Wales and Western Australia. The project explores how community engagement is currently being practiced “on the ground”, and will document key challenges, lessons learned and good practice in community engagement.

**Funding**  
Australian Research Council (ARC) Linkage Grant

**Industry Partner(s)**  
BHP Billiton, Rio Tinto Ltd, Newmont Australia, Queensland Nickel Industries (QNI), Newcrest Mining.

**Outputs**  
The key output will be a report to industry due in early 2006. Findings will be presented at conferences and regional workshops during 2005/06 and all participating operations will receive a confidential site report.

**Achievements**  
Four participating sites were visited during 2004 and feedback to site has been completed for two of them. An eighth case study has been added, through a new industry sponsor, Newcrest Mining.

**Research Team**  
Paulsen (UQ Business School), Dr Lynda Herbert–Cheshire (School of Social Sciences, UQ), Ruth Beach (CSRM), Richard Parsons (PhD student)

**Duration**  

**Challenges**  
collected. The larger challenge is to ensure that the research outcomes are of practical value to industry.
Monitoring the Impact of Coal Mining on Local Communities

Status
New project, commenced January 2004

Description
This project aims to assist Australian coal mining operations improve how they monitor, manage and report on the impact of their activities on local communities. The project has involved developing a community impact monitoring and management strategy for Drayton Mine in the Upper Hunter Valley region of New South Wales. Using this case study, guidance materials, including a sourcebook of community impact indicators, are being prepared for wider use in the mining industry.

Funding
Australian Coal Association Research Program (ACARP)

Industry Partner
Anglo Coal

Research Team
Professor David Brereton (CSRM), Ms Jenny Moffatt (CSRM)

Outputs
Outputs from the project include:

- A report to ACARP
- Practical resources for industry including a sourcebook of community impact measures
- Presentation of a paper to the 2004 Minerals Council of Australia Sustainable Development Conference

Achievements
We successfully ran a multi-stakeholder workshop that encouraged dialogue between Drayton Mine and its stakeholders. The mine subsequently changed some practices in response to stakeholder concerns.

ACARP has provided additional funding to conduct a study of multi-mine impacts in the Upper Hunter Valley

Duration

Challenges
To ensure that the resources being developed are seen as useful by industry.

To encourage sites to take a more proactive approach to dealing with community issues.
Workforce Issues

This sub-program focuses on the social aspects of workforce management practices in the mining industry, including; commuting arrangements, rosters and hours of work, work-home balance, workers as stakeholders in the company and the community, and the role of contractors in the workforce.

Indigenous Employment at Century Mine

Status: Completed
Description: The initial stage of this project involved the analysis of trends in Indigenous employment at Century Mine located in the far north west of Queensland.
Funding: Queensland Department of State Development; in-kind support from Century Mine.
Research Team: Ms Tanuja Barker (CSRM), Professor David Brereton (CSRM).
Outputs: A report was provided to Century Mine and briefings given to senior Queensland Government officials and the Gulf Communities Agreement (GCA) Employment and Training Committee.
Achievements: Retention of Indigenous employees has been identified as a key issue for Century Mine, and funding obtained to undertake further research on this issue (see below). As a result of work undertaken for the study, Century has initiated a significant upgrade of its systems for collecting and managing information about Indigenous employees. Other mining companies have also indicated considerable interest in the research.
Challenges: To expand the focus of our research effort to support Aboriginal employment strategies at other mines in Northern Australia.
Duration: January 2003 to December 2004

Patrick Wheeler (Century Mine Community Liaison Officer, left) with Tanuja Barker and David Brereton from CSRM
Evaluation of the Delivery of Pre-employment Training to Aboriginal People in the Gulf region

**Status**
Completed

**Description**
Preparation of a framework for evaluating the overall effectiveness of prevocational programs provided at Century mine.

**Funding**
Queensland Department of Employment and Training; in-kind support from Century Mine.

**Research Team**
Professor David Breton (CSRM), Ms Tanuja Barker (CSRM)

**Outputs**
A report has been provided to Century Mine and the Queensland Department of Employment and Training.

**Achievements**
The recommended framework has been endorsed by Century Mine and the Department of Employment and Training.

**Challenges**
To ensure that there is proper follow through on CSRM recommendations.

**Duration**
August – December 2004

Identifying factors that contribute to voluntary turnover amongst Aboriginal employees at Century mine

**Status**
New project, commenced September 2004

**Description**
Previous research undertaken by the CSRM has indicated that the high turnover rates for local Aboriginal employees at Century mine are undeniably
will lead to improved retention rates for Aboriginal employees at Century.

The project involves designing and conducting a survey of local Aboriginal people who used to work at Century. The survey will provide valuable information on why local Aboriginal employees leave Century and where they go, once they leave the mine.

**Funding**
Queensland Department of Employment and Training; in-kind support from Century Mine

**Research Team**
The project is a collaborative initiative between CSRM and Century’s Gulf Communities Agreement (GCA) Support Department.
Team members have included: Ms Tanuja Barker (CSRM), Mrs Barbara Bailey, Mrs Laurel Douglas, Mrs Gina Sewter, Mr Patrick Wheeler, Ms Coreen Reading, Mr Peter Cameron, Mr Lloyd Jones and Mr Bull Yanner (Zinifex Century GCA Support staff).

**Achievements**
Most surveys have been completed and contact details obtained for most former employees.

**Outputs**
Planned outputs include:
- A report on the findings
- Conference presentations
- Confidential feedback to Century Mine

**Challenges**
The main challenge for this study will be to identify practical ways in which retention rates can be improved.

**Duration**
September 2004 – May 2005
RESEARCH PROGRAMS

Management and Governance

The management and governance research sub-program focuses on developing frameworks, tools and processes that will assist companies to implement social responsibility and sustainability principles, especially at site level.

Site Level Sustainability Opportunity and Threat Analysis (SOTA)

**Status**: Completed

**Description**: A piece of SOTA is a site-based workshop in which participants identify key sustainability issues for the site and formulate strategies for managing these issues.

**Funding**: Australian Coal Association Research Program, internal SMI funding.


**Research Partner(s)**: Minerals Industry Safety and Health Centre (MISHC).

**Research Team**: Robin Evans (CSRM), Professor Jim Joy (MISHC), Professor David Brereton (CSRM)

**Achievements**
- A broadly-focused SOTA review was carried out with Ensham Resources.
- The SOTA methodology was used with BHP Billiton Mitsubishi Alliance (BMA) to analyse water issues at BMA's Central Queensland operations.
- An underground mine at that operation.

**Outputs**
- SOTA workbook published
- An article on risk management and sustainable development was published in the AUSIMM Bulletin

**Future Challenges**: Identify opportunities to extend the methodology to other areas of the industry and to further refine the technique.

Developing Local Synergies in the Gladstone Industrial Area

**Status**: New project, commenced April 2004

**Description**: To assist these operations to achieve greater efficiencies in energy, water and materials consumption, plus reductions in waste and emission generation.

**Funding**: CRC for Sustainable Resource Processing, Gladstone Area Industrial Network (GAIN).

**Research Partner(s)**: Centre for Research Excellence in Cleaner Production, Curtin University.

**Research Team**: Dr Glen Corder (CSRM)

**Achievements**: Identifi late 2004 to develop a prioritised list of opportunities for more detailed investigation.

**Outputs**: A draft report has been prepared that documents existing synergies in the Gladstone region and identifies opportunities for developing additional synergies.

**Challenges**: The main understanding of the contributing factors for successful industrial synergies.

**Duration**: April 2004 – September 2006.
### Sustainability and Eco-Efficiency Opportunity Assessments at Operating Plants

**Status**  
New project, commenced June 2004

**Description**  
This project is investigating different approaches to conducting eco-efficiency assessments at mineral processing operations. The aim is to identify improvement opportunities and develop an improved assessment tool.

**Funding**  
CRC for Sustainable Resource Processing

**Research Partner(s)**  
Centre of Excellence in Cleaner Production, Curtin University; Hatch Associates.

**Research Team**  
Robin Evans (CSRM), Professor Rene van Berkel (Curtin), Venky Narayanaswamy (Curtin)

**Achievements**  
- An internal CRC Project Discussion Paper and Plan has been completed
- Agreement has been obtained from one CSRP industry sponsor for an on-site assessment

**Outputs**  
None to date

**Future Challenges**  
It has been difficult to obtain industry agreement to conduct site assessments. The scale and focus of the project will be reviewed during 2005.

**Duration**  
June 2004 – December 2005

### Decision Support Framework and Metrics

**Status**  
New project, commenced June 2004

**Description**  
This project is investigating different approaches to conducting eco-efficiency assessments at mineral processing operations.

**Funding**  
CRC for Sustainable Resource Processing

**Research Partner(s)**  
Sydney University (Project Manager), Curtin University.

**Research Team**  
Professor Jim Petrie (Sydney), Brett Cohen (Sydney), Professor Rene van Berkel (Curtin), Robin Evans (CSRM).

**Achievements**  
The CSRM’s role in the project was to review and analyse a cross-section of site-level sustainability indicators from Australian operations. This task has been completed.

**Outputs**  
Internal CSRP Report

**Future Challenges**  
This project is being co-ordinated through Sydney University, which is responsible for shaping future directions.

**Duration**  
June 2004 – December 2005
Contract Research and Consulting

During 2004 the CSRM undertook a variety of consulting assignments. One activity involved reviewing community engagement processes relating to a mining development in South-East Asia. Another project involved the review of how a large mining operation is implementing its obligations under a new Native Title Agreement. The Centre has also begun an evaluation of a mining company’s community support program.
An important aspect of the CSRM’s role is to encourage and promote education and training activities. The Centre conducts or contributes to a number of training programs directed at industry professionals and undergraduate students.

**Community Aspects of Mineral Resource Development (MINE 7052)**

This course aims to equip students with knowledge, skills and attitudes that will help them to understand, engage with, and contribute to the development of communities that are impacted on by mining and related activities. It is offered as part of the postgraduate course program in Mineral Resources (Environment) offered through the Centre for Mined Land Rehabilitation and has been designed to be delivered online.

**Sustainable Development of Resources (ENGG1070)**

In 2004, the CSRM made a substantial contribution to ENGG1070, a first year elective course in the School of Engineering. This course provides students with a broad introduction to the concept of sustainable development and its application to the resources sector.
EDUCATION ACTIVITIES

Mine Planning
The Centre also contributed to a fourth year course on Mine Planning, coordinated by the Minerals Industry Safety and Health Centre.

Policy contributions
Where the opportunity arises the CSRM seeks to participate in, and contribute to, industry change processes. In 2004 the centre contributed actively in a number of policy areas.

Mining Certification Evaluation Project (MCEP)
Early in the year the CSRM provided a detailed written commentary on the draft principles and certification criteria prepared by the Mining Certification Evaluation Project (MCEP).

Operational framework for Sustainable Development
Centre staff attended stakeholder workshops on the MCA’s “Operational Framework for Sustainable Development”. Subsequently, the Centre provided a written submission on the consultation draft.

EPA Workshop
In July, Professor David Brereton participated in a Queensland EPA workshop on the development of mine closure criteria.

ICMM Global Reporting Initiative
In August the centre made a submission to the ICMM on the draft Mining and Metals Sector Supplement to the Global Reporting Initiative’s 2002 Sustainability Reporting Guidelines.

MCA Sustainable Development Extension Group Roundtable
In September, Robin Evans represented the CSRM at an MCA Sustainable Development Extension Group Roundtable on “Developing the skills to maximize our contribution to the community”. David Brereton attended a follow up workshop in December.

Summer Scholarship Students
Amanda Chan and Anne Beresford, who were awarded Summer Scholarship programs with CSRM during January of 2003, finalised their report on Sustainable Development Practices among Small-to-medium Resource Companies.

Melissa Lovell, a final year student in political science, was awarded a Summer Scholarship with CSRM and will take up that position for six weeks during January and February 2005.

Centre visitors
Hua Jianwei was a visiting scholar from Jiangsu Province in China. He has considerable experience in mineral exploration and development planning and is interested in building a career as a specialist in the area of environmental management. During the six months he was with the CSRM, Jianwei conducted a research project into the regulation of quarries. He has since completed two academic papers, comparing rehabilitation efforts in Jiangsu, China with those in Australia and other western countries.

In July Marina Welker, a PhD student in Anthropology at the University of Michigan, visited the Centre and gave a seminar on her research at Newmont’s Batu Hijau mine in Indonesia.

In August, Sean Desserault, an Assistant Professor in Mining at the University of Arizona, gave a presentation on ‘The Impact of Sustainability on Political Risk’. Also in August, Josh Annear, Senior Business Analyst with Argyle Diamonds gave a presentation on ‘Argyle and Sustainability’.
**Book Chapter**


**Reports & Research Papers**


**Conference Publications and Proceedings**


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