



ERNEST HENRY

Ernest Henry Mining Sustainability Report 2005



SCOPE OF THIS REPORT

This report details the health, safety, environment and community performance of Xstrata's Ernest Henry mine at Cloncurry from 1 January 2005 to 31 December 2005.

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For a comprehensive review of Xstrata's HSEC performance at its north Queensland operations please also refer to the following reports:

- Xstrata Copper North Queensland Division Sustainability Report 2005;
- Xstrata Copper Mount Isa Mines Sustainability Report 2005; and
- Xstrata Townsville/Bowen Sustainability Report 2005.





Chief Operating Officer's Message

The business strategy of Xstrata Copper's north Queensland Division is to maximise value for Xstrata's shareholders by successfully managing a sustainable, integrated copper business that produces 300,000 tonnes of copper cathode a year.

We are passionate about improving our safety and environmental performance and increasing the level of social involvement in our local communities. We know this is possible only by using business practices that are socially, environmentally and economically sustainable and transparent. We also know that to be successful in our objectives we must work in partnership with our employees, local communities and other stakeholders.

In this sustainability report we have provided details on our performance against our 2005 targets, which are progressing towards our strategic objectives. We have expanded our sustainability reporting to include three site reports: Mount Isa, Ernest Henry and Townsville, in addition to an overall north Queensland report.

In 2005 we achieved a record copper in concentrate production of 306,492 tonnes at our north Queensland operations.

Our sustainability highlights for 2005 include:

- A 30% improvement in our safety performance, with no fatalities.
- The undertaking of the Xstrata plc health, safety, environment and community (HSEC) internal audit review which achieved encouraging results, supporting the development direction of our safety and health management system and ensuring our systems and performance meet the expectations of a resources company operating in a world market.
- Mount Isa Mines received the Metalliferous Employer of the Year Award at the annual Mining Industry Skills Centre Training Awards for its application of the Xstrata north Queensland Operations Training Management System. This system also won the coveted 2005 Queensland Mining Industry Excellence in Training Award.

- A total waste management system was established which enabled Mount Isa Mines to manage wastes generated on site to industry best practice standard. All waste streams are tracked, enabling better separation and recovery of scrap metal.
- The fluo solids roaster (FSR) at Mount Isa was decommissioned in 1997 after almost 30 years of service. To ensure a progressive approach to site rehabilitation, the demolition of the old FSR commenced in 2005, and is scheduled for completion in early 2006. About 3,500 tonnes of steel will be recovered for recycling.
- In line with Xstrata's commitment to corporate social involvement, we launched the Xstrata Community Partnership Program in north Queensland in December 2004. The program is contributing more than \$4 million to vital community initiatives. We have achieved many successes with Xstrata's partners across north Queensland in the first year of the program.
- In 2005 the decision was taken to create a step change in the already high quality of our apprenticeship training by building a custom designed Xstrata Skills Centre. Xstrata's north Queensland operation runs the largest apprenticeship program in north-west Queensland with 60 new apprentices recruited in 2005 and projected total apprentice numbers to exceed 300 from 2007.

In 2006 we will continue execution of our best practice approach to performance in safety, environment and community partnerships as we work towards recognition as an industry leader in these areas. Among a number of improvements, we will further reduce our injury rates, improve capture of emissions and increase our corporate social involvement commitment.

Our sustainability reports are designed to share our progress with you and we would welcome any feedback about the reports. Please email your comments to nqsustainability@xstratacopper.com.au or write to me at Xstrata Copper, PMB 6, Mount Isa, QLD, 4825.

Barry Grant
Chief Operating Officer
Xstrata Copper North Queensland



General Manager's Message

As part of the global Xstrata Group, Ernest Henry Mining (EHM) values its membership and involvement in the Cloncurry community.

This sustainability report is one avenue for the management of Ernest Henry Mining and Xstrata to distribute information to the community about our operations, with particular reference to our commitment to the health and safety of our employees. Our commitment to the environment and our involvement in the local and wider community is detailed for all to appreciate in a transparent and straightforward format. This community commitment has been ongoing at Ernest Henry since pre-planning and commencement of mining in 1997.

Our sustainability highlights of 2005 include:

- significant improvements in our health and safety performance during the second half of the year; these improvements in safety and the housekeeping of operations will continue to be driven by the whole Ernest Henry Mining team;
- our environmental management programs continue to deliver in line with our expectations; Ernest Henry Mining has continued to rehabilitate the site as we go, as well as meeting all our site monitoring requirements;
- the commencement of the Xstrata Community Partnership Program in north Queensland, which has benefited the community in which we operate; this funding is in addition to our ongoing support of key community events; and
- a record year of production, both from the mine and the concentrator; the cycle of ore mined, ore milled and subsequent copper and gold produced has been the largest to date in the life of the Ernest Henry Mining operations.

Overall, 2005 confirmed Ernest Henry Mining's position as an integral part of Xstrata's north Queensland copper operations. We are fortunate to be in a position to promote the Minerals Council of Australia's Enduring Value program and sustainable practices, particularly relating to the environment and community engagement practices that we have had in place since our inception. As the youngest participant in the north Queensland operations, we have delivered a holistic approach to operations from day one of planning.

It is with great pleasure I present the 2005 Ernest Henry Mining Sustainability Report. As the general manager, I am proud of Ernest Henry Mining operations and of delivering the 2005 HSEC results. All team members from Ernest Henry should be rightfully proud and can celebrate their contribution to our HSEC performance, a result of our 'can do' attitude. Our people really are the difference!

This sustainability report is designed to share our progress with you and we would welcome any feedback about this report. Please email your comments to nbking@xstratacopper.com.au or write to me at Ernest Henry Mining, PO Box 527, Cloncurry, QLD, 4824.

Cam Schubert
General Manager
Ernest Henry Mining



Our approach to sustainable development

For Xstrata, sustainability is about caring for the environment in all stages of mining and metal production; efficient and responsible use of resources, including energy, water and land; keeping our employees safe and healthy; improving services and facilities in communities where our employees and their families live; helping these communities to build the capacity to sustain themselves as vibrant, self-reliant centres; and providing our shareholders with a highly profitable return on their investment in our business over the long term.

XSTRATA COPPER'S DEFINITION OF PURPOSE

We will maximise value for shareholders by successfully growing and managing an industry-leading portfolio of copper assets that deliver superior returns.

We will achieve this in a safe, environmentally and socially responsible way, in open partnerships between our people and with communities, governments and other stakeholders.

Strategic objectives

- Injury-free, safe work environments.
- Continual improvements in environmental performance.
- Reputation for social responsibility.
- Leadership in the copper industry.
- Realisation of the full potential of our people.
- Achievement of the full capacity of our physical assets.
- Cost competitiveness through the cycles.
- Value creation through dynamic growth and continuous improvement.
- Effective implementation of common key systems and strategies.

Values

Our decisions and actions will demonstrate the following values:

- Honesty
- Dependability
- Respect
- Confidence
- Ingenuity
- Courage
- Passion

Our global perspective

Xstrata plc maintains a meaningful position in six major international commodity markets – copper, coking coal, thermal coal, ferrochrome, zinc and lead – under four commodity businesses: Xstrata Copper, Xstrata Zinc, Xstrata Coal and Xstrata Alloys. The Group's operations and development projects span five continents and nine countries: Australia, South Africa, Spain, Germany, Argentina, Peru, Columbia, United Kingdom and Canada.

Enduring Value – A Framework for Sustainable Development

Xstrata Copper is a signatory to *Enduring Value – the Australian Mineral Industry Framework for Sustainable Development*. This framework was developed and launched by the Minerals Council of Australia (MCA) in October 2004 to give practical effect to the International Council on Mining and Metals' (ICMM) sustainable development principles.

The key role of *Enduring Value* is to translate the principles of sustainable development into practices that ensure industry operates in a way that meets community expectations and maximises the long-term benefits to society by effectively managing Australia's natural resources.

As a signatory to *Enduring Value*, Xstrata Copper has obligations to include progressive implementation of the ICMM Principles and Elements, public reporting of site level performance at least annually and assessment of the systems used to manage key operational risks (using either internal or external assessment as appropriate).



Contributing to our economy

Ernest Henry is a mining and metals processing operation that forms a major part of Xstrata's operations in north Queensland. With more than 500 employees, and 190 of these residing in Cloncurry, the mine is a significant contributor to the local economy.

Businesses benefit from our spending of close to \$50 million in the region. Add to this the salary component of Cloncurry-based staff and you have an economic benefit in excess of \$60 million annually being generated.

Xstrata contributes to the economy through:

- employment of 4,500 people, including more than 500 at Ernest Henry mine;
- an annual wages bill in excess of \$300 million, most of which is spent in north Queensland;
- apprenticeship and youth training opportunities of \$4.4 million;
- \$245 million spent on purchasing regional goods and services; \$390 million spent purchasing goods and services within Queensland;
- \$3.7 million paid in annual rates to local councils;
- annual contributions of more than \$1.4 million, directed to community partnerships, donations, sponsorships and community programs;
- \$145 million in rail, power and water charges; and
- \$63.5 million paid to Governments in taxes and charges.

OUR PRODUCTION

The Ernest Henry copper-gold deposit, located 38 km north-east of Cloncurry near Fort Constantine Station, is the third largest copper ore body in Australia after Olympic Dam and Mount Isa. The magnetite, copper and gold minerals are thought to have been introduced to these rocks about 1500 million years ago.

The final pit will have a perimeter of 1.5 km and width of 1.3 km, with an overall depth of about 570 metres. The pit is being mined in 16 metre high benches which have an average wall slope of 70 degrees.

In 2005, 69,014,000 tonnes of material was mined, producing 11.4 million tonnes of ore and 129,000 tonnes of copper in concentrate. The value added concentrate is produced on-site. The concentrator is a single line plant using contemporary equipment, designed to treat nine million tonnes of primary ore a year, which equates to treating nominally 1,200 tonnes per hour. Tailings are pumped to an engineered tailings storage facility for long-term containment. The concentrate is either transported by road to Mount Isa and it is smelted and refined at Mount Isa Mines' copper refinery in Townsville or exported through the Port of Townsville. In addition to copper, over 167,000 oz of gold was produced in 2005.

Our namesake, Ernest Henry, was an English-born explorer and Cloncurry's founding father. He discovered copper in the region in 1859 and established the Great Australian Mine, which operated continuously until the 1920s. Ernest Henry mine's professional staff exhibit similar dedication and resourcefulness when working at the site.

Capital expenditure at the mine has been significant, with Xstrata investing more than \$70 million in the past two years on equipment and improvements to maintain Ernest Henry mine as a world class operation.

■ Production facts

Copper Stream	
2005 production	69,014,000 tonnes of ore mined 11.4 million tonnes milled on site 129,000 tonnes of copper in concentrate
Gold Stream	
2005 production	167,000 oz of gold produced



Caring for our people

The health and safety of our employees is critical to the business success of Xstrata Copper. We believe that all work-related incidents, illnesses and injuries are preventable.

HEALTH AND SAFETY

Overcoming challenges

Our key challenges during the year were difficulty in sourcing highly skilled labour, and ensuring that health, safety and training requirements were completed for an influx of new employees to operate our expanded haulage fleet.

One of our strategies for overcoming these risks was providing clear training requirements for each and every role within our business to ensure our people are provided with the skills they need to work safely and productively, with a focus on identifying potential hazards and managing risks at all times.

For this purpose we developed the Xstrata North Queensland Operations Training Management System. This system was implemented across all of Xstrata's north Queensland operations and was recognised at the 2005 Annual Mining Industry Skills Centre Training Awards.

Environmental conditions at Ernest Henry mine can be challenging, with pit temperatures exceeding 50 degrees during summer and falling below 10 degrees in winter. However, our modern, first class facilities are designed to address these climatic extremes.

Performing safely

Ernest Henry displayed sustained improvement in the site safety performance during the last six months of 2005.

We use three key performance measures to track performance against the target of zero harm. These are the lost time injury frequency rate (LTIFR), disabling injury frequency rate (DIFR) and the total recordable injury frequency rate (TRIFR) and these performance measures show the number of events per million hours worked.

Apart from a reduction in TRIFR, we achieved our targets for 2005. Our TRIFR increased from 11.1% in 2004 to 12.4% in 2005.

We identified the need to increase the clear, open and honest communication channels between our workforce and our management teams, particularly in relation to safety issues. To facilitate this outcome we re-invigorated the Positive Attitude Safety System (PASS) across the site. PASS is a communications tool developed to improve the flow of safety information through the workforce and to encourage safety improvement at the front line.

Employees, contractors and visitors participate in daily PASS meetings where the performance of the previous shift is rated. Both below-par performance and safety improvements are discussed in an open way that ensures that all concerned understand more about working safely. The performance of all participating groups is discussed with the most

HEALTH AND SAFETY PERFORMANCE

2005 Targets	Performance	2006 Targets
Ernest Henry Mining		
Zero fatalities	✓	Zero fatalities
TRIFR < 8.9	✗	TRIFR < 9.9
All staff to have access to PASS on a shift by shift basis	✓	Train a greater percent of site team as PASS champions
Review orientation process	✓	Upgrade orientation and induction process
Establish an Emergency Response Team (ERT) training facility	✓	Train key ERT personnel as instructors in a number of Emergency Response disciplines

✓ Achieved ✗ Not achieved → Action continues into 2006

senior person on site each day and, if required, feedback and assistance is provided to ensure issues are resolved in a timely manner. The system also allows staff to consider and plan for the tasks to be completed in the coming shift and to report any hazards identified during the day and document their controls.

The need for a sustainable and consistent occupational health and safety management system (OHSMS) was also identified. Our OHSMS has been updated and structured around the Xstrata plc HSEC Standards and HSEC Policy, Australian Standards AS:4801, AS:4804 and AS:4360, and the Queensland Mining and Quarrying Safety and Health Act (1999) and Regulations (2001) and is progressively being implemented across all of our business.

We have comprehensive occupational health and hygiene monitoring programs in place across our north Queensland operations and invest more than \$500,000 a year in managing this process. Environmental sampling (workplace and personal) and biological sampling are conducted for respirable dust and noise. Where sampling results identify an occupational hygiene risk above the relevant exposure standard, it is addressed immediately.

■ Prepared for emergency

Our newly established Ernest Henry Emergency Response Training Facility provides a designated area for emergency response team personnel to develop their skills in various emergency response techniques. This new training facility allows participants to practice vertical rope rescue techniques, road accident rescue procedures, fire fighting, control of hazardous chemicals and the use of self contained breathing apparatus.

Occupational health and wellbeing

Xstrata runs a number of education and awareness programs to encourage employees and their families to maintain healthy lifestyles, optimise long-term working life and income generating capacity and reduce short-term absences from work due to sickness. These programs address obesity, nutrition, sleep apnoea, shift work, fatigue management, alcohol abuse, smoking and mental health. We also engage external specialists such as medical practitioners, occupational health nurses and counsellors to assist our people.

During the year our health promotion campaigns linked in with state and federal health initiatives such as Quit, 10,000 Steps, Diabetes Awareness Week, Beyond Blue Depression Campaign and Lifestyle Prescription.

We commenced two new projects in 2005 with the aim of reducing the impact of musculoskeletal injuries in the work environment. One project was a review of over period of time (OPT) injuries, and the other was a job role criteria project that detailed the physical, environmental and cognitive requirements of each role.

■ Partners in health

In 2005 we continued engagement of the Gemini Medical and Services Group at the Cloncurry Medical Centre. The Ernest Henry Mining Health, Safety and Training Department works collaboratively with the Gemini occupational physician and medical support personnel to provide a timely and efficient occupational health and injury management service to Ernest Henry employees and contractors. The achievements of this partnership are integral to the ongoing improvement in safety and health at the mine. These services are also available to other industries and to the general Cloncurry community.

MANAGING OUR HUMAN RESOURCES

The key to the ongoing success and sustainability of our business is the alignment, commitment and capability of our employees. The Xstrata North Queensland Operations Human Resources (HR) Strategy, and accompanying initiatives, supports this requirement through the development of individual capabilities and organisational culture.

In a productivity and job creation initiative, the mine has solved idle time issues on its haul trucks by introducing a permanent part-time day shift. The shift has been enthusiastically embraced by local women looking for school hours work (see case study).



case study

WOMEN AT THE WHEEL

The introduction of a permanent part-time shift at Ernest Henry mine has overcome idle time issues on the mine's haul trucks and created job opportunities for women in Cloncurry.

Former Ernest Henry Mining Manager Andrew Miller was looking for a way to improve equipment utilisation at the mine in 2004 when his mining team joined with the human resources team to develop the concept of permanent part-time drivers.

The shift operates between 9am and 3pm and was introduced to cut the amount of time haul trucks were standing idle due to breaks and shift changes. The new day shift was marketed to local mothers who were likely to have children in school or day care and who were looking for work that blended in with their family responsibilities.

Eight of the nine part-timers driving haul trucks are women, most with children at home, and the mine provides a bus to transport the part-timers from the town each day.

Superintendent Employee Services, Administration and Community Relations, Andrew Upfill, said it was a win-win situation, producing positive outcomes and percentage increases in equipment utilisation.

"The permanent part-time shift has certainly been a success for us. It has kept our trucks working and material movements up. Instead of parking trucks during breaks, we keep them working," he said.

One of the main challenges faced in introducing permanent part-time drivers was getting the workforce to adapt to a day shift of drivers – something that was new for everyone concerned. Over time the workforce has seen the benefits of improved utilisation of equipment on a daily basis and the value of having relief drivers has become better

understood. The other main challenge was ensuring that the new trainees were safely integrated into the mine operation.

New recruits receive intensive training before they are allowed to drive alone.

A truck simulator, configured for either an 830E Komatsu truck or a 793 Caterpillar truck, is also used to ensure that drivers are trained to respond to situations such as a tyre fire or wet weather within the correct safety guidelines and without endangering people or equipment.

Mother of three, Colleen Power, became a part-time haul truck operator because she was looking for a change from sales and cleaning jobs and the family-friendly shifts made the truck driving job attractive.

Colleen hauls waste and ore in a 200-tonne truck that is about 14 metres long, almost seven metres high and can weigh more than 400 tonnes when fully loaded.

"It's scary to begin with, but once you get over that initial scare factor, it's like hopping in the car and driving down to the shops," Colleen said.

Although already qualified to operate Komatsu 830E, Caterpillar 785 and Caterpillar 793 trucks, Colleen hopes to acquire more skills and would consider other mining roles when her children were older.

"Right now the permanent part-time work is great for me and my family – the kids have mum morning and night and we are able to get ahead as a family from a job that pays well."

Women comprise 30% of Ernest Henry's workforce, with several women working as full-time mining technicians and 14 employed in administrative roles.



Caring for our environment

We believe that superior environmental performance results in increased efficiency, lower risk and higher overall performance of our operations and is critical in maintaining our licence to operate.

Xstrata is committed to the highest standards of environmental management and performance. We limit the environmental impacts of our operations through the efficient use of natural resources and the reduction of input materials and waste, and through contributing to the conservation of biodiversity. We believe that effective environmental

performance encourages greater efficiency and higher standards of performance at our operations and minimises risks to our business, contributing directly to our long term success.

OVERCOMING CHALLENGES

The key environmental challenges at Ernest Henry mine are:

- maximising the efficiency of fresh water use; and
- increasing the recycling of pit dewatering water.

Environmental compliance

The Queensland Government's Environmental Protection Agency (EPA) undertook a Level 1 3C compliance audit on Ernest Henry mine in September 2005 and no major non-compliances were identified. The EPA recommended investigation into additional sediment control around clay stockpiles and this action was completed, with sediment fences erected around clay stockpiles.

During 2005, we undertook a final void investigation into the final void hydrology of the Ernest Henry mine pit. This information was submitted to the EPA. Initial modelling suggests that the water quality of the pit water will be within stock water drinking guidelines and could potentially be a significant water resource after closure.



Members of the Mine Tech Services team share some geological mapping information with Cam Schubert General Manager.

« Tier 1 rehabilitation planting shows tremendous growth after rains in November 2005 (note the seeded trails).

ENVIRONMENTAL PERFORMANCE

2005 Targets		Performance	2006 Targets	
Ernest Henry Mining				
Complete detailed closure plan	→	Initial planning underway	Complete closure plan	
Begin tailings dam rehabilitation trial	✓	Preliminary modelling for capping designs undertaken	Complete tailings dam rehabilitation trial	
Environmental management system (EMS) to be compliant with ISO14001	✓			
Raw water consumption < 520l/tonne of ore treated	→	Required improvements were completed on tailings thickener	Raw water consumption < 520l/tonne	
Construct three additional monitoring bores	✓			
Review current waste rock dump designs	✓		Reuse > 85% of pit dewatering water	

✓ Achieved ✗ Not achieved → Action continues into 2006



Raelene Green checks one of the dust monitoring points. There has been no identified increase in dust deposition or elevation copper concentration rates outside the Ernest Henry mine's term lease areas.

Emissions to air

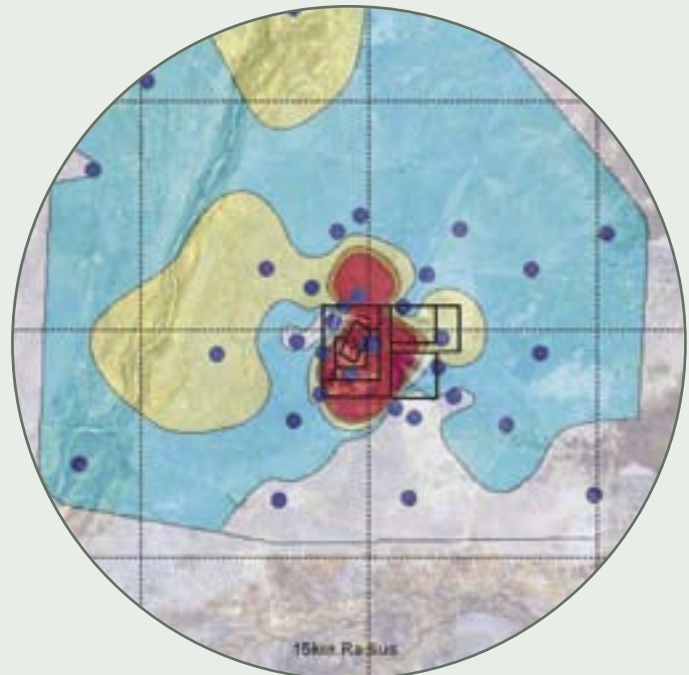
The monitoring, control and reduction of the impact of emissions from our mining and minerals processing operations on the community and environment of Cloncurry are major aspects of environmental management at Xstrata's north Queensland operations.

At Ernest Henry mine we continue to monitor dust deposition rates and copper concentration in an area up to 15 km from our mining leases. There has been no identified increase in dust deposition or elevation in copper concentration rates outside Ernest Henry mine's term lease areas.

Managing surface and groundwater

To enable mining we remove groundwater from the Ernest Henry pit via a series of dewatering bores and in-pit pumps. In 2005 we installed and commissioned two additional 600 metre deep bores to enable further development of the pit.

We monitor groundwater water levels and quality, taking measurements at 75 bores surrounding the mine. An additional three observation bores were constructed during 2005 to further assist with defining the current groundwater levels.



0-20 20-40 40-80 80-120 >120

Ernest Henry Mine dust contour monitoring – total dust fallout (mg/m²/day).

In 2005 we undertook groundwater quality surveys on neighbouring pastoral properties and shared these results with landowners. The surveys confirmed that there has been no significant change in groundwater quality since the commencement of mining.

In 2005 we upgraded the external spillway of the production evaporation dam to increase the dam's capacity. The upgraded spillway consists of a grout filled mattress which has the capacity to contain a one in 100 year rainfall event.

Caring for our environment



Members of the environment team lead by Mick Hawkins install sediment fencing to minimise sediment spreading from clay stockpile.



Appropriate construction methods are applied to ensure all tailings management compliance and regulatory matters are met. In 2005 the new northern cell of the tailings dam including spillway upgrade was completed.

Reducing water use

In 2005 we continued to dewater the pit from a series of dewatering bores and in-pit pumps. This water was reused both in the mine as a dust suppressant and in the concentrator as a raw water supply. The use of this water reduces the amount of water required from Lake Julius, our main water supply which is located 110 km west of the mine.

Additional improvements to our tailings thickeners in 2006 will increase water recycling within the concentrator and lead to reductions in water use. Our aim is to maintain the tailings densities being pumped to the tailings dam between 65% and 67%, which will be 4% to 6% higher than densities achieved in 2005.

Protecting biodiversity

In 2005 Ernest Henry Mining continued to undertake aquatic ecological health assessments at downstream locations from the mine. The assessments included the sampling and analysis of freshwater mussels, sediments and water quality in Gypsy Creek and at selected control sites in the Cloncurry region. Results indicated that the ecological health of the downstream locations had not deteriorated since the establishment of Ernest Henry mine.

We also undertook a terrestrial fauna survey during the year. This survey identified many species at the Ernest Henry mine rehabilitation trial site and at off-site reference areas. Species identified on the rehabilitation site included the stripe-faced dunnart, long-tailed planigale and Eyrean earless dragon.

Safe mine closure and rehabilitation

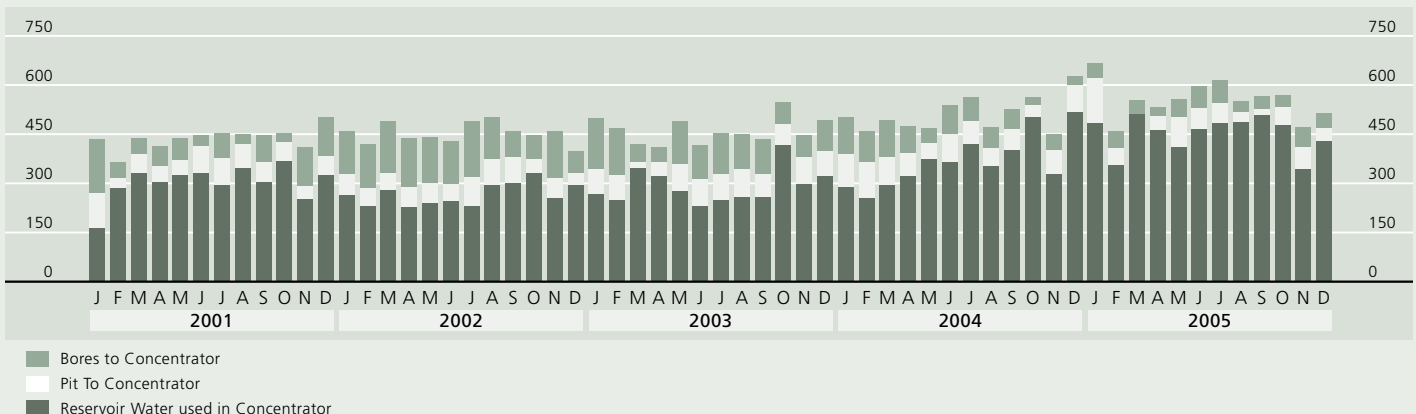
In 2005 we continued to actively rehabilitate available areas on waste rock dumps at Ernest Henry mine. Approximately 15 hectares was rehabilitated on tier one berms on both the north and southern waste rock dumps.

We undertook an investigation into the final void hydrology of the Ernest Henry mine pit. The study indicated that there was no risk of overtopping, as the equilibrium water level was located 50-60 metres below the lip of the pit.

In 2005 we consolidated investigations into capping designs for the tailings dams, which involved the analysis of the hydrological characteristics of cover materials. The approved 2005 designs will be constructed as trials on a small section of the tailings dam.

Water Usage

ML per month





Long-tailed Planigale, the smallest known marsupial in the world.



Pre-start check over all heavy equipment is part of daily operations: attention is paid to tyre condition.

Managing environmental risks

At Ernest Henry we continue to maintain our area specific environmental aspects registers. These aspects registers are used to monitor controls that are implemented to minimise environmental risks. They also identify where additional controls can be implemented to further reduce environmental risk at the mine.

■ Recycling waste

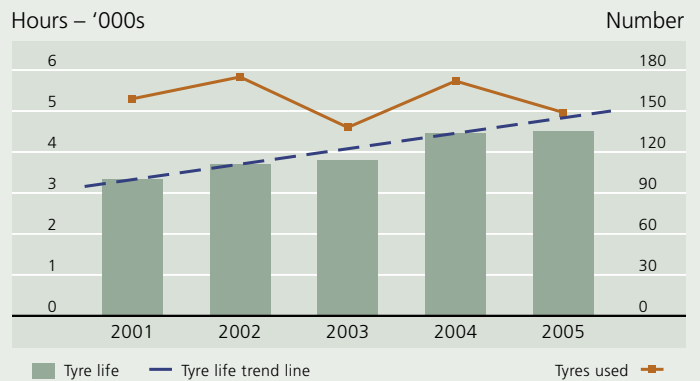
Local charities are benefiting from our aluminium can recycling program at Ernest Henry camp, run in partnership with the Lions Club of Cloncurry.

■ Extending tyre life

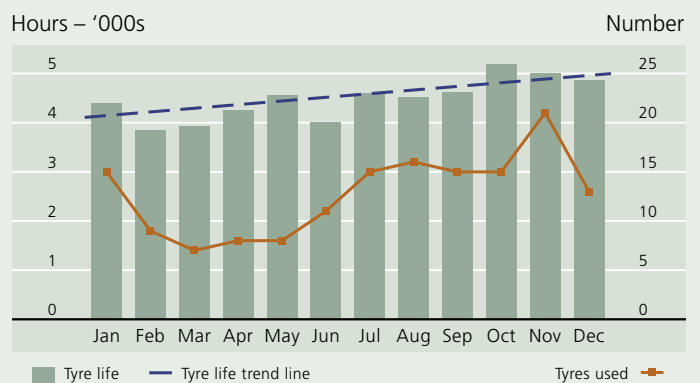
A concerted effort to increase the life of tyres on Ernest Henry's haul trucks has resulted in significant environmental and cost savings.

Since 2000 Ernest Henry tyre life has been improved by more than 150% to more than 5,000 hours per tyre. This important step, considering there is a worldwide shortage of tyres used in large scale mining, has been achieved through a number of initiatives. Tyre managers Klinge and Co have played a major role in improving tyre life by sharing their knowledge of tyre management systems with Xstrata. Our workforce now has a greater understanding of the scarcity of tyres and of the importance of tyres in keeping production rolling at the mine. In addition to education about tyre management, tyre life has been extended due to improvements to our road surfaces. We have focused on clearing rocks from roads and around shovels, and have been applying sheeting to maintain roads in top condition. Sheeting windrows to minimise side wall damage to tyres has also resulted in significant benefits.

Tyre Life graph – 5 years



Tyre Life graph – 2005





Caring for our community

Xstrata Copper believes that the wellbeing of our employees, their families and the communities in which we operate is crucial to maintaining our social licence to operate our business.

While recognising the need for ongoing development of the skills of current and potential future employees in north Queensland, we acknowledge that enterprise and job creation is just one part of the success equation. Our ongoing funding of educational, environmental, social, community, health, arts and cultural initiatives is also a key part of our social responsibility. The development of the Xstrata Community Partnership Program North Queensland is the cornerstone of our commitment to engaging with local communities and fostering opportunities to ensure their wellbeing.

XSTRATA COMMUNITY PARTNERSHIP PROGRAM

The Xstrata Community Partnership Program North Queensland, launched in north Queensland in December 2004, is contributing more than \$4 million to vital community initiatives in the communities in which we operate in north Queensland: Mount Isa, Cloncurry, Townsville and Bowen. In addition, it was announced in March 2006 that the program's funding would be increased to \$1.22 million for 2006.

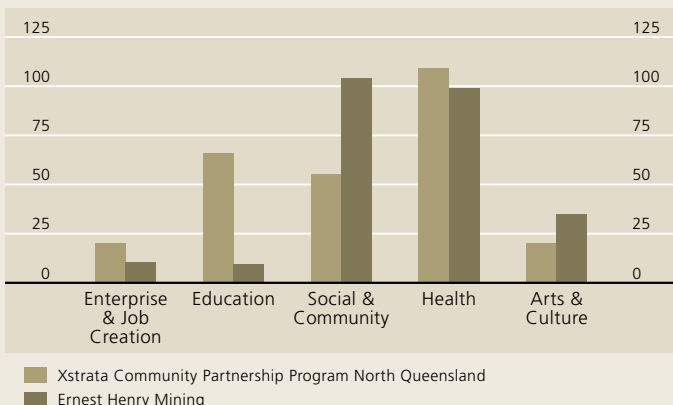
The program provides support within six key areas in response to the needs and issues of our community and in keeping with Xstrata's Corporate Social Involvement Policy and guidelines.

Our initiatives focus on the following areas and seek to actively promote partnerships with the communities; training, welfare and education organisations; and state and local governments, for the betterment of our community:

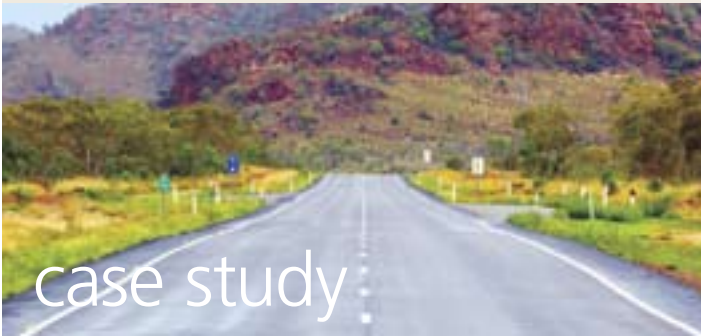
- enterprise and job creation;
- education;
- environment;
- social and community;
- health; and
- arts and culture.

Community Expenditure

\$'000s – 2005



« Gary Hall Principal of St Joseph's School plays up with Andrew Upfill EHM Community Relations Superintendent on the basketball court which is to be made sunsmart. Xstrata Community Partnership Program has allocated \$15,000 to assist with this project.



DEVELOPING TOURISM

Cloncurry's strong economy is primarily driven by the mining and pastoral industries and its sustainability will be improved by diversifying into tourism.

In partnership with the Cloncurry Shire Council, Cloncurry Historical Society, Queensland Sport and Recreation, the Outback Queensland Tourism Authority and the North Queensland Area Consultative Committee (NQACC), Xstrata is contributing \$150,000 over three years from 2005 to encourage tourism in the region.

In 2005 the Cloncurry Shire Council unanimously adopted the Cloncurry Development Plan, following input from the NQACC, community stakeholders, business people, local and state government

representatives and Xstrata representatives. The plan aims to attract more visitors to the area and to encourage them to stay longer. Currently, of the 452,244 tourists to the Outback each year, only 7% visit Cloncurry. Visitors came primarily from three groups – the self drive market, coach market and 'grey nomads' – and showed preference (in order of priority) for experiencing history and heritage, national parks, museums, gardens, countryside and scenery, and events.

As the Cloncurry market share is significantly less than Winton, Flinders Shire and Mount Isa, the report identified that the town needed to improve the level of experience through provision of better product within Cloncurry and to improve the level of awareness in the market through better promotion.

Feedback from community workshops identified a number of projects that would contribute to the tourism appeal of Cloncurry and the region. These were, in order of priority:

- developing a history trail through the town, with interpretive signage;
- improving the directional signage in Cloncurry;
- promoting the Aboriginal cultural heritage of Cloncurry; and
- upgrading the recreational area at Chinaman's Dam.

Another recommendation of the plan was the appointment of a tourism and events coordinator to manage advertising and promotion of the region. A secondary benefit of the Cloncurry Development Plan will be making the town more liveable by improving amenities for local residents.

SOCIAL RESPONSIBILITY PERFORMANCE

2005 Targets		Performance	2006 Targets	
Ernest Henry Mining				
Achieve Xstrata Community Partnership Program in north Queensland objectives		✓	Continue to expand the benefits of the Xstrata Community Partnership Program in north Queensland	
Consolidate donations coordination and policy over north Queensland		✓	Build on 2005 success with additional initiatives and ongoing transparency of donations	
A local publication in Cloncurry to build community capacity through communication		✓	Deliver one north Queensland publication for the north Queensland operations, reflecting unity of business and community relationships	
Participate in community events		✓	Continue to champion all Ernest Henry mine employees as advocates of community relations	
Work together and with others including other mines		✓	Improve our communities by listening, learning and facilitating with relevant community stakeholders where appropriate	

✓ Achieved ✗ Not achieved → Action continues into 2006

The Xstrata Community Partnership Program North Queensland will continue to build on its many successes in 2006. Following is an overview of the progress of the partnership programs in Cloncurry during 2005:

Enterprise and job creation

■ Supporting apprentices and trainees

We created four new apprenticeships in 2005, in the areas of electrical, diesel fitting and mechanical fitting.

We also made available structured work placement to five students from Cloncurry State School and Columbia Catholic College in Charters Towers.

Xstrata's commitment to the long-term future of Cloncurry has been backed by a \$150,000 grant over three years to encourage tourism in the region (see case study).



Caring for our community



Student Madison Smith with teacher Sally Kapernick learning on one of the networked computers as part of the Cloncurry computer cabling rollout at Cloncurry State School, one of Xstrata's Community Partners.



Constable John Kendall, Administration Support Leonie Elliott, Police Liaison Officer Herbie Fortune and Sergeant Brett Jenkins are part of important partnerships related to PCYC and other youth support initiatives.

Education

■ Supporting school students

Xstrata's scholarship program, which commenced at Mount Isa in 2005, has been expanded. As part of the Xstrata and Queensland Minerals Council Hub School Partnership, it will include **Cloncurry State School** in 2006.

■ High tech learning

The **Cloncurry State School** is now connected to the internet, giving school students access to the latest information technology. In 2005 Xstrata provided \$46,000 for cabling to connect classrooms, with a further \$40,000 of funding going to the school in 2006 and 2007 to continue upgrading the school's computers and systems.

■ Protecting our children

The Xstrata Community Partnership Program North Queensland is providing \$30,000 over three years to **Cloncurry Kindergarten** and **Curry Kids Childcare**. This funding, in partnership with BHP Billiton's Cannington Mine, allowed the installation of 'soft fall' material under play equipment at the Cloncurry Kindergarten in 2005.

Other monies have been spent on improving the comfort and amenity of the childcare centre by installing air-conditioning, painting the walls and adding bright new curtains.

■ Skin cancer protection

Skin cancer is the most common and most costly cancer in Queensland with more than 2000 cases of melanoma diagnosed in Queensland each year and more than 200 deaths annually due to melanoma. The State's very high levels of ambient ultraviolet radiation, a predominantly fair skinned population and an outdoor lifestyle all contribute to the risk. Thankfully, skin cancer is one of the easiest cancers to prevent.

Students at **Cloncurry State School** will gain extra sun protection following Xstrata funding of \$30,000 in 2006 towards playground infrastructure under shelter. Playground shelter will also be progressed at **St Joseph's Catholic School** thanks to a \$15,000 grant from the expanded 2006 partnership program.

Social and community

■ Assisting indigenous youth

A telephone survey conducted by Xstrata in 2005 identified the critical need for a Cloncurry-based indigenous youth worker. Funding from Xstrata in 2005 has fostered the development of a partnership between the **Cloncurry Police Citizens Youth Club** and the **Cloncurry Youth Centre Inc** and the resourcing of a youth worker.

The PCYC and Youth Centre share premises and staffing and the Xstrata funding, which will continue into 2006 and 2007, allows the youth centre to open at regular hours and be staffed by qualified youth workers. The youth workers are able to share their skills by working closely with other youth services in Cloncurry.

■ Beautifying Cloncurry

By donating \$10,000 to the **Cloncurry Shire Council** for beautification purposes, Xstrata started the ball rolling on the development of a beautification movement in Cloncurry. This project has spurred members of the community into getting involved in improving the aesthetics of the entire town. Xstrata has earmarked a further \$40,000 for targeted beautification improvements in Cloncurry in 2006.

■ Somewhere to skate

The youth of Cloncurry will soon have more recreational options after Xstrata donated \$20,000 to the **Lions Club** of Cloncurry in 2005. The Lions Club, in conjunction with local police, is liaising with the Cloncurry Shire Council and youth to find a suitable site to develop a skate park.

Health

■ More medicos

The Xstrata Community Partnership Program North Queensland is providing \$245,000 over three years (from 2005) to provide more doctors for Cloncurry. This initiative was prompted by a critical shortage of doctors in Cloncurry in late-2004.

The funding has enabled **Gemini Medical Services** to expand its medical practice to not only service EHM employees, but the whole community. The community now has access to an alternative general practice provider. This increase in the number of general practitioners in



The Bio Café & Cinema offers an alternative outlet for youth and the community to have activity away from alcohol.



case study

Cloncurry has also eased the pressure on the “on call” suite of doctors at the Cloncurry Hospital.

Starting in 2006, Xstrata will provide \$10,000 a year for three years to assist with **Cloncurry Hospital’s** transition to a Queensland Health Multi-Purpose Health Service (MPHS).

■ Quicker diagnosis

Patients suspected of having a heart attack or other major trauma can now receive a faster diagnosis due to the purchase of a \$14,000 blood analysing I-Stat machine by **Cloncurry Hospital**. The Xstrata Community Partnership Program North Queensland provided the funding for the machine, which supplies an instant reading of blood chemistry levels. Previously, emergency patients were evacuated to larger hospitals without receiving a specific diagnosis. This state-of-the-art piece of diagnostic equipment has improved the speed and accuracy of diagnosis, thus boosting community confidence in local medical services as well as potentially saving lives.

■ Emergency equipment

Xstrata provides \$15,000 a year to the **Royal Flying Doctor Service** (RFDS) for the purchase of new and vital equipment for the Mount Isa base. In 2005 the local base purchased an Oxylog 3000, which is a safe and portable ventilator suitable for use on anyone from a six-month-old baby to an elderly patient. The Oxylog 3000 is carried on the RFDS’s evacuation aircraft, ready for use in an emergency. The Mount Isa RFDS base covers a region of 500,000 square km, assisting more than 10,000 patients annually and flying in excess of 730,000 km a year.

Arts and culture

■ Movie stars shine

Support from the Xstrata Community Partnership Program North Queensland has allowed weekly screenings at the **Bio Outdoor Cinema**, which provides an alcohol-free recreation venue for families. In 2005, with assistance from Xstrata and the Australian Film Commission, the Bio Cinema staged the interesting and entertaining **Big Screen Film Festival**. In 2006 the festival will be held during Youth Week and will include a school and youth digital film making workshop, designed to enhance the technical and creative skills of budding film makers.

PARTNERS IN TRAINING

James Burke is a success story from Xstrata’s Memorandum of Understanding with the Koutha Aboriginal Development Corporation on employment and training for Aboriginal people.

James joined Ernest Henry as an apprentice electrical fitter in 1999, and completed his apprenticeship under the mentorship of experienced electricians Mick Sbrizziand and Jim McLennan whom he credits for teaching him everything he knows about the trade.

“I’m thankful for the opportunity which was afforded me by Koutha and the graduation from apprentice to employee was particularly useful,” said James.

“I’d recommend an apprenticeship as a good thing to do; now is a great time to do a trade as there are plenty of job opportunities and great rewards when you are qualified.”

After seven years with Ernest Henry, James has accepted a position at Boyne Smelters in Gladstone where he will broaden his experience. James said he enjoyed working at the mine and was looking forward to a sea change after spending his life in Cloncurry.

“It was good working with a diverse group of blokes at Ernest Henry, not just in the concentrator but across the whole mine,” he said.

■ Finding voice

In 2005 Xstrata and the QAC joined forces to bring an exciting musical theatre event to Mount Isa and Cloncurry. The play, *Voices*, with music by Mary Morris, was based on the movie *Paradise Road*, a World War II drama about a vocal orchestra started by a group of women imprisoned in labour camps by the Japanese. The *Voices* production brought in a team of professional performers to work with women and children in the region. The performances were well attended and participants gained the opportunity to develop their performance and professional production skills.

During 2006 and 2007 Xstrata will provide ongoing funding for Queensland Arts Council (QAC) projects in north Queensland communities, our commitment totalling \$225,000 over three years.

Caring for our community



Michael Hawkins (Perry Hastead and Marie Curley in the background) taking the local neighbours to the rehabilitation trial area during the annual neighbours day visit to the operation.

DONATIONS AND SPONSORSHIPS

In addition to the Xstrata Community Partnership Program North Queensland, Xstrata spent more than \$460,000 in 2005 on sponsorships, donations and other community support initiatives. In Cloncurry we supported the following events:

- major sponsor of the Cloncurry Merry Muster;
- major sponsor of the Cloncurry Stockman's Challenge;
- major sponsor of the Cloncurry and District Agricultural Show Association;
- major sponsor of the Cloncurry Arts Council Inc; and
- donations to welfare, health care, education, sporting, cultural, environmental, indigenous and arts initiatives.

COMMUNITY ENGAGEMENT AND COMMUNICATION

As an integral part of the local community, we like to keep abreast of relevant regional issues and to share clear, open and honest information on Xstrata's activities in north Queensland with employees, contractors, stakeholders, local organisations, community members, visitors and other interested parties.

Some of the methods used for disseminating this information in Cloncurry during 2005 included:

- community information sessions to share information on Xstrata's operations and allow questions from community members;
- holding regular meetings with key local stakeholders to discuss emerging issues, facilitate cooperation between the company and the community and resolve any issues;
- an annual presentation and providing ongoing information to local landowners on critical issues such as environmental and social issues that have potential to impact on pastoral properties that adjoin the mine. Information was provided on matters such as dust particulate fallout, water drawdown from deep water bores and the open pit operation;
- keeping in regular contact with partners in the Xstrata Community Partnership Program North Queensland to discuss progress of programs and offer advice and assistance when sought;
- regular surface tours of Ernest Henry mine, run in conjunction with the Mary Kathleen Memorial Park and Museum;
- representation on local committees and membership of community development organisations;
- production of the local newsletter, *Zingari Express*, and *Curry Capers*, which is delivered to all employees and to members of the local community.

We believe that keeping clear and open dialogue with and creating employment and training opportunities for indigenous residents is an important part of our role in the communities in which we operate. Ernest Henry has established several partnerships with local indigenous groups (see case study) that are creating win-win outcomes.

Fostering indigenous partnerships

Ernest Henry mine is working closely with indigenous communities and has been a pioneer in developing commercial partnerships with Aboriginal groups (see case study). Representatives from Ernest Henry and Mount Isa Mines attended Joint Partnerships Forums facilitated by the Department of Industry and Tourism in 2005. The aim of these forums is to share the opportunities that partnerships with indigenous organisations can deliver.

In 2005 Ernest Henry commenced engagement with the Mitakoodi-Juhnjar Aboriginal Corporation, assisting with information gathering regarding their business plan being completed by James Von Senden. The business plan will include both tourism development and involvement in the Cultural Heritage Centre in Cloncurry. The Mitakoodi-Juhnjar Aboriginal Corporation is an Aboriginal Cultural Heritage Body, appointed under the Aboriginal Heritage Act. This status enables the corporation to give parties planning mineral exploration or other activities a central contact point, representing indigenous people with a cultural interest in the land involved.

Xstrata has formed a formal partnership with Elaine McKeon of McKeon Alliance and this initiative helps keep us informed of issues affecting Native Title and opportunities to assist in adhering to the triple bottom line of economic, environmental and social improvements for partnerships with the indigenous community.

Listening to feedback

In 2005 we commissioned a community perception survey to understand the issues facing the local community and to provide feedback on Xstrata's community support programs. The survey has enabled Xstrata to develop an action plan to address issues of concern and relevance to the community.

Thirty-five percent of Cloncurry respondents said that a lack of activities for youth was the major social issue facing the town. Xstrata Community Partnership Program funding has enabled the employment of a youth worker at the Cloncurry Youth Centre Inc and has prompted the formation of an inter-agency youth committee. The committee has 14 members including representatives from the police, local justice group, Aboriginal housing cooperative, Cloncurry Shire Council, schools and youth services. Terms of reference have been agreed and Xstrata Copper is providing secretariat for an initial phase of three months to promote sustainable outcomes. Partnership funding is also getting the ball rolling on developing a skate park in the town, which will provide another recreational option for residents.

A follow-up survey will be conducted in 2007 to allow Xstrata to determine where its efforts have been successful and identify areas where extra action may be needed.

■ Handling complaints and enquiries

Ernest Henry Mining received one complaint in 2005 relating to blast overpressure at Cotswold Station. This was investigated and found to have been caused by a cloud inversion that reflected the pressure of a blast and caused it to travel to a station house 14 km away.

Glossary

AQC – Air Quality Control centre

The centre monitors sulphur dioxide emissions and weather conditions and directs the operations of the Mount Isa Mines smelters and the Southern Cross Fertilisers Acid Plant to control sulphur dioxide concentrations within licence limits.

Biodiversity

An abbreviation of “biological diversity” that means the variability among living organisms from all sources, including land based and aquatic ecosystems of which they are a part. These include diversity within species, and of ecosystems.

Closure Plan

A formal document detailing a costed conceptual outline of how the operation will be closed, taking into account the options available to deal with prevailing social and environmental issues.

DI – Disabling Injury

Calculated as lost time injuries plus restricted work injuries (LTI + RWI).

DIFR – Disabling Injury Frequency Rate

Disabling injury frequency rate = $DI \times 1,000,000/\text{hours worked}$.

EMS

Environmental Management Systems.

EPA

Environmental Protection Agency.

EPP air goal

Maximum levels for air quality indicators to be progressively achieved as part of achieving overall Environmental Protection Policy objectives.

Fatality

A death resulting from an occupational injury or disease/illness and identified within the reporting period.

Gj

Gigajoules (a thousand million joules).

Greenhouse gas

Any gas that absorbs infra-red radiation in the atmosphere, causing the warming of the earth's atmosphere.

HSEC

Health, safety, environment and community.

ISO

International Standardisation Organisation.

ISO14001

The International Standardisation Organisation's standard for environmental management systems.

LTI – Lost Time Injury

An occupational injury or disease that results in days away from work on any rostered shift subsequent to that on which the injury occurred. A fatality is also recorded as an LTI.

LTIFR – Lost Time Injury Frequency Rate

Lost time injury frequency Rate = $LTI \times 1,000,000/\text{hours worked}$.

ML

Megalitres (1 megalitre = 1,000,000 litres or 1,000 kilolitres).

µg/dl

Micrograms per decilitre.

µg/m²/day

Micrograms per square metre per day.

NOHSEC

National Occupational Health and Safety Commission.

PASS

Positive Attitude Safety System.

PM₁₀

Particulate matter less than 10 microns in size.

Raw water

Untreated water extracted from groundwater, dams or rivers.

Recycled water

Recycled water is water:

- that has been used at least once in a process within the operation or at another operation; and
- that would otherwise be part of a waste stream; and
- if not re-used, would require the input of raw water.

Rehabilitation

In this report, rehabilitation is defined as disturbed areas that have been prepared for environmental rehabilitation and seeded.

RWI – Restricted Work Injury

An occupational injury or disease that results in a person being physically or mentally unable to perform all or any part of his/her normal assignment during any rostered shift subsequent to that on which the event occurred.

Social Involvement Plan

A plan produced by each Xstrata commodity business to set out engagement with local communities detailing the range of initiatives to be undertaken and the resources, financial and otherwise, dedicated to this area of the business.

Tailings and tailings dams

The fine fraction of waste rock remaining after the mining and on-site processing of mineral resources. This consists of finely ground particles and traces of process reagents and chemical residues. Tailings are piped into engineered impoundments known as tailings dams, which are developed, operated, monitored and maintained to prevent seepage and water contamination both during and after mining operations.

TRI – Total Recordable Injuries

A measure that includes:

- lost time injuries (including fatalities)
- restricted work injuries (RWI); and
- medical treatment injuries (MTI).

TRIFR – Total Recordable Injury Frequency Rate

Total recordable injury frequency rate = $(LTI + RWI + MTI) \times 1,000,000/\text{hours worked}$.



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