

PRESS RELEASE

## Independent study into health of Mount Isa waterways released

Mount Isa, 27 September 2012

An independent University of Queensland study into the potential sources and pathways of lead and other heavy metals into Mount Isa's waterways has shown that Leichhardt River water quality poses a low risk to human health.

The study confirms that Mount Isa's drinking water supply meets *Australian Drinking Water Guidelines* and recreational activities, such as swimming and boating in the Leichhardt River and Lake Moondarra pose a low risk to public health from heavy metals.

The *Lead Pathways Study* is the most comprehensive study of its kind in Australia, investigating the presence of naturally and industrially sourced heavy metals in the community, and assessing the potential human and ecological health risks.

The Centre for Mined Land Rehabilitation (CMLR), which forms a part of the Sustainable Minerals Institute at The University of Queensland, completed the *Lead Pathways Study Water Report* in collaboration with the University's National Research Centre for Environmental Toxicology (Entox).

CSIRO's Land and Water Environmental Biogeochemistry Research Program Chief Research Scientist, Dr Graeme Batley, peer reviewed the report to verify its scientific validity and outcomes based on facts evident in the data.

The study's head, Associate Professor Barry Noller (CMLR) said the comprehensive technical study investigated the potential sources and pathways of lead and other heavy metals and metalloids in water from a number of tributaries leading into the Leichhardt River Catchment.

"We found the risk to human health from heavy metals in the Leichhardt River, including Lake Moondarra, is low," Associate Professor Noller said.

"Eating the flesh of fish caught in Lake Moondarra also presents a low risk to human health from metals and metalloids.

"However, people should avoid eating fish livers as they may have higher concentrations of heavy metals and other toxicants, which is an important consideration when eating fish in general, whether from Mount Isa or otherwise.

"The study also confirmed Leichhardt River water meets national livestock watering guidelines for heavy metals.

"The Water Report makes a number of recommendations for improved environmental performance at Xstrata's Mount Isa Mines operation, including further investigations and improvements to existing water monitoring programs."

Xstrata Copper North Queensland Chief Operating Officer Steve de Kruijff said studies like this are helping Xstrata identify additional opportunities to improve their environmental performance.

"The health and wellbeing of our people and community is paramount and we are already progressing all of the Water Report's five recommendations," Mr de Kruijff said.

"Importantly, what this study shows is that our community can continue to enjoy sport and recreational activities at Lake Moondarra in the same way they always have.

"Mount Isa is a great place to work and live. We continue to be a proud community partner and take our social licence to operate very seriously.

"Our new *Environmental Authority* was granted in December 2011 and a Transitional Environmental Program (TEP) for Water was approved in May 2012.

"We have developed our action plan for the Water Report to align with our comprehensive Action Plan of environmental improvements in water management as part of our TEP.

"We have committed approximately \$360 million over the next five years to continue improving our environmental performance, with approximately \$60 million allocated specifically for water management initiatives.

"This will include improvements to our site-based capture of contaminated waters and sediment, further minimising the risk of releasing contaminated water from site," Mr de Kruijff said.

The Water Report follows the 2009 release of the Land Report, which showed the risk to human health from historical mine sediment was low.

"As part of the Leichhardt River Remediation Project, we have invested in excess of \$2.7 million to date relocating around 160,000 tonnes of soil containing historical mine sediment material from the Leichhardt River, onto our mine site," Mr de Kruijff said.

"Between 2008 and 2011 we conducted an annual post-wet season sampling program, which confirmed the success of our remediation project.

"Since acquiring Mount Isa Mines in 2003 we have invested more than \$290 million in over 250 initiatives to continually improve our environmental performance."

End

---

*Neither the content of the company's website nor the content of any other website accessible from hyperlinks on the company's website is incorporated into, or forms part of, this announcement*

### Xstrata Copper contacts:

**Josh Euler**

Telephone +61 7 3295 7543  
Mobile +61 435 659 987  
Email [jeuler@xstrata.com.au](mailto:jeuler@xstrata.com.au)

**Agata Graham**

Telephone +61 7 3295 7687  
Mobile +61 478 304 345  
Email [agraham@xstratacopper.com](mailto:agraham@xstratacopper.com)

[www.mountisamines.com.au](http://www.mountisamines.com.au)

---

### **About the *Lead Pathways Study***

In 2006, Xstrata Mount Isa Mines commissioned the most comprehensive study of its kind in Australia to investigate the natural and industrial pathways of lead and other heavy metals into a community, and assess the potential human and ecological health risk.

The report was peer reviewed by CSIRO's *Land and Water Environmental Biogeochemistry Research Program* Chief Research Scientist, Dr Graeme Batley, a leading Australian scientist in the area of analytical and environmental chemistry of trace contaminants in natural water systems.

The purpose of the *Lead Pathways Study Water Report* was twofold:

1. Investigate the potential sources and pathways of lead and other heavy metals and metalloids in water from a number of tributaries leading into the Leichhardt River Catchment.
2. Assess the risk to human, pastoral and ecological health from lead and other heavy metals and metalloids in water

The Water Report comprised a water quality, sediment quality and aquatic toxicity assessment in water and sediment in line with the National Water Quality Management Strategy (NWQMS).

The study considered multiple potential contaminant sources, including mining operations, urban activities and wastewater discharges, natural mineralisation and historical mine sediment.

The *Lead Pathways Study Water Report* summary and full technical reports are available at [www.mountisamines.com.au](http://www.mountisamines.com.au).

The final Air Report is expected to be released in early 2013, following peer review.

### **About the *Centre for Mined Land Rehabilitation (CMLR)***

Established in 1993, the Centre for Mined Land Rehabilitation (CMLR) within the Sustainable Minerals Institute (SMI) at The University of Queensland is a collaborative and multi-disciplinary group of research, teaching and support staff and postgraduate students dedicated to delivering excellence in environmental research and education to the Queensland, national, and international minerals industry and associated government sectors.

CMLR focuses on preventing, minimising and remediating mining impacts by providing education and professional development in the sustainability area; engaging industry, government and community; and delivering research solutions developed through science.

CMLR is one of seven research centres at SMI ([www.smi.uq.edu.au](http://www.smi.uq.edu.au)), which provides knowledge-based solutions to meet sustainability challenges in the global mining industry. The Institute was established in 2001 as a joint initiative of the Queensland Government, University and the minerals industry to provide an overarching framework for progressing minerals industry research and education.

### **Notes to editors**

#### **About Xstrata plc**

We are a major producer of a range of vital commodities used in everything from constructing buildings and delivering electricity, to developing jet engines and mobile phones. We are one of the top five global producers of copper, thermal and metallurgical coal, ferrochrome, zinc and nickel and we also produce silver, lead, platinum, gold, cobalt and vanadium.

Founded in 2002 and headquartered in Switzerland, we operate in over 20 countries and employ over 70,000 people at more than 100 operations and projects around the world. We work in a responsible and sustainable way, with an entrepreneurial spirit and dynamic approach. For more information, visit [www.xstrata.com](http://www.xstrata.com)

### **About Xstrata Copper**

We are the fourth largest global copper producer and one of the world's largest producers of smelter, refined and recycled copper, including from third party materials.

The copper we produce is essential to our modern society, being used extensively in electronic, consumer and building products, and with its use in green-technologies, anti-microbial applications and ability to be recycled, it is playing a vital role in our sustainable future.

Headquartered in Brisbane, Australia, we have operations and projects in eight countries and employ over 20,000 people. We play an essential role in the communities in which we live and work, by providing jobs, training, infrastructure, income for suppliers and support for social development. For more information, visit [www.xstratacopper.com](http://www.xstratacopper.com)

### **About Xstrata Zinc**

Headquartered in Madrid, Spain, we are one of the world's largest vertically integrated producers of zinc, with an annual production of about a million tonnes of mined zinc. We have operations in Australia, America, and Europe, including world-class mines and deposits in Northern and East Australia, Canada, Peru, and processing and refining facilities in Spain, Germany and the United Kingdom.

Zinc is a versatile material that plays a vital role in modern society. It is an essential nutrient in human health and very useful in crop yield improvement. Zinc in galvanising protects steel against corrosion for its use in automobiles, buildings and others. It is also used for the production of zinc die-casting alloys, brass and oxide, and in manufacturing batteries and other electrical and consumer goods. For more information, visit [www.xstratazinc.com](http://www.xstratazinc.com)