



NewsCasting

Lima Workshop for the Diagnosis and Treatment of Childhood Lead Intoxication

The ILMC has been working with Government agencies and the private sector in Peru since January 2000 to identify and control excessive population lead exposure, including those resulting from fugitive emissions associated with the storage, handling and shipment of mine ore concentrates. As the medical community in Peru did not have specific experience or expertise in the diagnosis and treatment of lead intoxication in children the Peruvian Health Directorate, [DIGESA](#), asked the ILMC for assistance to organize and conduct a Physician's Workshop to outline and explain to the Peruvian medical community the most up to date and appropriate clinical treatment modalities and intervention strategies.



DIGESA Technical Assessor, Carmen Gastanaga Ruiz and Phyllis Autotte (University of Maryland, School of Nursing) welcome the delegates to the Workshop.

A workshop on the diagnosis and treatment of lead intoxication in children, organized by the ILMC and DIGESA with logistical support from ILMC's affiliate, the [Doe Run Company, Peru](#), was convened in Lima from June 21st to 22nd this year. More than thirty physicians from eight municipalities participated in an intensive two day interactive training session. The workshop



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delegates were welcomed by DIGESA Executive Director, Ana Maria Gonzalez, ILMC Executive Director, Craig Boreiko, and DIGESA Technical Assessor, Carmen Gastanaga Ruiz. Following introductory remarks, Dr. Adriana Torres (Torreon, Mexico) and Phyllis Autotte (University of Maryland, School of Nursing) provided a comprehensive overview of recommended measures to be followed for the treatment of lead intoxication in children. Dr. Torres detailed her personal experiences in Torreon, Mexico and presented case studies that illustrated the clinical symptoms of lead intoxication. Recommendations for the selection and use of chelating agents for lead intoxication were then provided.

Phyllis Autotte reviewed intervention strategies for the elimination of lead exposure sources. She explained to the delegates that chelation therapy should be considered as just one component of the total effort necessary for the effective treatment of a lead intoxicated child. She emphasized that chelation needed to be combined with case management strategies to

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Broadening Horizons

Australian ILMC Member Company, [BHP Billiton](#) operates a silver, lead and zinc mine at [Cannington](#) in North West Queensland. Its annual nameplate capacity of 1.5 million mt. of ore was achieved only 2 years after commissioning in 1997 and the mine currently produces about 2 million mt. of ore a year, making it the largest single mine producer of both silver and lead in the world.

Cannington's vision statement is "Creating Success through People with Passion". In its quest to achieve this vision, Cannington has been developing working relationships that promote enthusiasm, understanding of the business and a recognition that in different ways everyone can and does make positive contribution to the success of the business. These principles are reinforced by these shared values:

1. Care and respect for the environment.
2. The promotion of effective workplace and community communications.
3. Continuously striving for ever improving quality.



David Haigh (President NQCC), Laura Dobbs (Cannington Environmentalist) and Jim Tyler (Environmental Superintendent) inspect the Cannington nursery, where over 20,000 native trees and shrubs have been propagated since it was established in 1997.

BHP Billiton was a foundation signatory to the [Minerals Council of Australia's](#) (MCA) groundbreaking "[Code for Environmental Management](#)" in December 1996. This was a significant step by the industry and for the first time made public its accountability for environmental performance and committed resources "To achieve continual improvement in the environmental performance and accountability of the Australian minerals industry through implementation of the Code."

Those companies that adopted the Code agreed to take steps to ensure that there is:

- Integration of environmental, social and economic considerations into decision-making and management, consistent with the objectives of sustainable development.
- Openness, transparency and improved accountability through public environmental reporting and engagement with the community.
- Compliance with all statutory environmental requirements.
- Continuous improvement in the standards of environmental performance and, through leadership, the pursuit of environmental excellence throughout the Australian minerals industry.

The main principles covered by the Code include:

1. Accepting environmental responsibility for all actions.
2. Strengthening relationships with the community.
3. Integrating environmental management at work.
4. Minimizing the environmental impacts of the company's mining activities.
5. Encouraging responsible production and use of products.
6. Continually improving environmental performance.
7. Communicating environmental performance.

As part of the Code implementation, signatories are required to produce annual public environmental reports within two years of initial registration to the Code. After the initial report, the signatories are required to produce annual reports. Accordingly, the environmental performance of the Cannington operation has been included in the BHP Billiton annual environmental report since its first publication in 1998.

In 1999, the World Wildlife Fund conducted a scorecard assessment of environment reports prepared by 11 Australian mining companies who had signed the Australian Minerals Industry Code of Environmental Management. A significant shortcoming, in all but four of the reports, was external verification and it also concluded that all the companies performed poorly in the areas of community participation.

In early 1999, Cannington recognized the need to undertake an appraisal of its environmental performance and long-term environmental sustainability. As Cannington was committed to community involvement and world best practice in all areas the company approached the [North Queensland Conservation Council](#) to undertake an independent appraisal of the mining operations.

Community Reporting on Environmental Performance

For 25 years, the Townsville based regional conservation group North Queensland Conservation Council (NQCC) has represented the community in actively protecting and promoting the natural environment of North Queensland. Its mission is to protect and rehabilitate the natural environment; to encourage greater responsibility, respect and change in human attitudes and behavior towards the environment, through advocacy and education, and to assist and coordinate local communities to do the same.



Mark Adams, Cannington Asset Leader, signs the Deed of Agreement with David Haigh, watched by Carol Booth (NQCC), Mick Roche (Cannington) and Greg Wilcox (NQCC).

Initially NQCC began by investigating what information was available about Cannington's mining operations and environmental record. Cannington allowed access to its documentation on environmental, social and workplace practices. It also arranged for the NQCC's management committee and an environmental scientist to visit the mine.

NQCC also drafted a mining policy, based largely upon the work of other non-government organizations that worked substantially on mining issues, to provide a framework for its approach to mining operations.

It was critical to NQCC that it had access to technical expertise that was independent of Cannington. NQCC engaged the services of Natural Resource Assessments (NRA), environmental consultants based in Cairns. In consultation with environmental experts from James Cook University, the NQCC management committee developed Terms Of Reference for the project.

Cannington funded the project, according to agreed terms, including printing and distribution of the final Report. It was agreed at the outset that no individual in NQCC would receive any remuneration from Cannington.

The agreed project was implemented in four stages:

1. A review of all documents.
2. An inspection of the mining and off-site operations.
3. The preparation and submission of the final Report.
4. A peer review of the NQCC Report by a professor in environmental studies from Macquarie University.

Initially the [Deed of Agreement](#) provided for the final Report to be handed over to [Cannington](#) by the end of December 1999. In the event, the Deed was signed in November 1999 and the [Report](#) was handed over in June 2000, more than a year after the project was first proposed.



NQCC President, David Haigh (center left), presents Mark Adams with the final report watched by (from the left) Jeremy Tager (NQCC Coordinator), Greg Wilcox, Carol Booth and Mick Roche.

Since then the Cannington Management has already started to implement NQCC's recommendations. As a first step, NQCC members and Cannington staff worked together in a one-day workshop, and set out an agreed action plan based upon the main recommendations. The action plan provides both timelines and a framework for implementing improvements in environmental performance and effective consultation with indigenous populations. This project was a tremendous challenge for Cannington, but the outcome has broadened the operation's horizons in terms of environmental and social accountability.

Lima Workshop

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Dr. Adriana Torres (Torreon, Mexico) provided a comprehensive overview of current treatment methodologies for lead intoxication.

identify exposure pathways and remove the sources of lead exposure. Management of lead intoxication thus requires a team approach in which physicians, public health officials, and social workers combined their expertise to implement integrated strategies that both alleviated clinical symptoms and eliminated sources of lead exposure so as to preclude the recurrence of adverse health effects.

Interaction discussion sessions and break-out groups were then held to identify intervention strategies appropriate for Peru. Cultural and lifestyle factors that could impact upon exposure were reviewed, with a particular focus upon hygiene, food types and food preparation practices characteristic of the region.

As a consequence of the Workshop, a number of beneficial changes are occurring. Chelating agents now preferred for the treatment of pediatric lead intoxication are not approved for use in Peru. Formal proceedings have been initiated to obtain approval for the purchase and importation of appropriate pharmaceuticals.

The need to integrate clinical and exposure intervention strategies for lead intoxication is also being factored into the larger context of the "Mesa Redonda" program for dealing with the lead contamination problem in Callao. Industry, government agencies and the municipality are working cooperatively together, with the assistance of the ILMC, in the implementation of a comprehensive program of source reduction, monitoring, education, exposure reduction, and case management.

Iso - Kinetic Sampling

Recent proposed changes to Russian State environmental monitoring standards are likely to lead to the introduction of iso-kinetic stack sampling requirements for lead plants, a technique entirely new to most companies.

As part of ILMC's ongoing commitment to assist Russian battery manufacturer, Baltelectro, to improve its environmental performance one of the Company's Environmental Monitoring Engineers, Ms Maraya Nosovitskaya, spent three days in June this year at [Mount Isa Mines'](#) U.K. subsidiary [Britannia Refined Metals](#), training in the application of iso-kinetic stack sampling.



Maraya Nosovitskaya (Baltelectro) prepares the sampling tube under the direction of BRM's Frank Boyes.

Under the direction of Senior Environmental Officer Frank Boyes, Maraya learned how to prepare the sampling probe and filter, position the probe in the stack correctly and measure the emission levels from the stack in accordance with the international standard ISO 9096.

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