The 54th annual Conference of Chief Inspectors of Mines (CCIM) was held in Papua New Guinea from 13-19 September 2012. The conference was hosted by the Mineral Resources Authority of Papua New Guinea, chaired by Mr Peter Waggitt (Northern Territory) with representation from Western Australia, Queensland, Victoria, the Commonwealth of Australia and New Zealand. While the CCIM was in PNG, the country celebrated its 37th year of independence and members were invited to attend some of the celebrations.

**Pre-conference**

Prior to the formal proceedings, members of CCIM attended an official function in Port Moresby hosted by the Honourable Byron Chan, Minister for Mining. Members also visited two mines in Papua New Guinea. This provided relevant information on:

- impacts of the extremely wet climate, steep terrain, unique social aspects and remoteness on mining activities,
- PNG culture and customs,
- mine and plant safety management,
- achieving a workforce consisting almost wholly of locals and nationals,
- providing community support, and
- environmental management.

### Newcrest’s Lihir gold mine

Mr Karl Spaleck, General Manager, gave a thorough tour of all aspects of Newcrest’s Lihir gold mine. Widespread geothermal activity, including occasional outbursts, is a striking feature at the mine presenting a unique set of challenges. Lihir mine has 2181 direct employees plus 3500 contractors. The mine provides health and utility services to the Island plus extensive education and training programs. Employees are 90% PNG Nationals, including one third Lihirians. Island singing has become part to the ‘Zero 3 Tasol’ safety program which aims for zero harm. Employees are encouraged to associate safety with the three most important things in their lives. Tasol is pidgin for that’s all. Nestled beside the sea in the exposed half of the Luise caldera, the open pit mine extends well below sea level. The tightly constrained site meant the recent $1.2 billion ‘million ounce per year upgrade’ (MOPU) program required various relocations of plant and infrastructure. A public road traverses the site and circles the 15Km wide Island. The mine has 35 million ounces (Moz) of reserves in 400 million tonnes (Mt) grading 2.4 g/t Au from a resource of 830 Mt @ 2.1 g/t Au for 56Moz.

### MCC Ramu NiCo Limited’s Kurumbukari nickel laterite mine and Basamuk nickel-cobalt refinery

CCIM then visited the Kurumbukari nickel laterite mine which has a resource of 143Mt @ 1.0% Ni & 0.1% Co. Elmer Ferguson, General Manager gave an overview of mining at Kurumbukari. Ore is ground at the mine and the ore slurry is batch transferred by a 134 Km pipeline to the refinery at Basamuk after the abrasive chromite is separated by cyclones and shaker tables. At Basamuk, Mr Phillip Allcorn, acting General Manager and ex Murrin Murrin, gave a detailed tour of the newly constructed Basamuk nickel-cobalt refinery and port. Two of the three High Pressure Acid Leach (HPAL3) autoclave streams are now on-line. Nickel recovery is reported to be over 90%. Tailings are discharged at 150m depth into a deep sea canyon. Total project cost has been $1.4 billion. During load commissioning, a significant quantity of nickel-cobalt hydroxide has been produced and bagged ready to be shipped for refining.

The CCIM members appreciated the time given by operational staff at both mines to outline safety, current challenges, community and environmental initiatives and programs. Visits of this nature provide the CCIM with a collective opportunity each year to interact with site personnel and to
exchange experiences across jurisdictions. These have become a valued and informative part of the Conference process.

**Conference**

**Fatalities and major incidents (in camera)**
The CCIM reviewed in camera circumstances involving fatalities and high potential or major/significant incidents over the last twelve months. Analysis was presented of the contributing causes and circumstances with the view of sharing the relevant lessons between jurisdictions.

**Presentations from Industry**
Presentations were received from company representatives on the following projects; Porgera gold mine, Solwara 1 undersea mining, Wafi-Golpu copper gold development project, Hidden Valley gold mine, Ok Tedi copper gold mine and Yandra development project.

**National Mine Safety Framework (NMSF)**
The National Mine Safety Framework (NMSF) Secretariat provided a paper on the current progress of the implementation of the NMSF strategies. Members noted that the NMSF Steering Group continued to be primarily focussed on Strategy 1 - Development of Nationally Consistent Legislation, with the "core" model Work Health and Safety (WHS) Mines Regulations now close to completion and significant progress made on the "non-core" following the appointment of the "non-core" Independent Chair in January 2012. Members also noted that the development of the National Mine Safety Database was also progressing well, with the NMSF Data Working Group undertaking user acceptance testing of the completed system. PNG expressed interest in using the Database for storing their incident information.

**Issues discussed included:**
Diesel particulates, underground ventilation standards and the status of ‘Ventilation Officers’, managing dangerous goods on mine sites, supervision guidance material, training for Mines Inspectors, management of legacy mine sites, illegal miners, fibrous actinolite, plumes of nitrogen oxides post-blasting, fires, emergency preparedness, use of remote vehicles in underground mine rescue and recovery procedures.

**Governance issues**
CCIM has now concluded its second year as an independent body. CCIM is uniquely placed for providing advice on the implementation and maintenance of the NMSF and harmonisation as applied to mining OHS legislation. CCIM members have successfully continued ongoing dialogue, contact and sharing of solutions. The CCIM, as the peak body for mining regulators, has proved to be an effective forum to exchange information, share experience and lessons learned and develop consistency in the spirit of harmonisation.

**Website**
The Chief Inspectors noted that a revision of the CCIM website is to be undertaken shortly. This will reflect jurisdictional and membership updates.

**CCIM 2013**
The 55th Conference of Chief Inspectors of Mines is currently scheduled to be held in the Western Australia during September 2013.

Peter Waggitt
Chair, CCIM 2012
September 2012
CCIM attendees, September 2012
Left to right: Mohan Singh (PNG), Andrew Chaplyn (WA), Simon Ridge (WA), John Mitas (Vic),
Peter Waggitt (NT), Robert O'Sullivan (Qld), Dave Bellett (NZ), Keith Porritt (Cwlth).

Zero 3 Tasol at Lihir gold mine
Left to right: Peter Waggitt (NT), Karl Spaleck (Newcrest), Andrew Chaplyn (WA), Mohan Singh (PNG), Simon
Ridge (WA), John Mitas (Vic), Dave Bellett (NZ), Robert O'Sullivan (Qld).