



INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE

Auditor Credentials Form

Facility Audited: Boddington Gold Mine

Date: 30 August – 1 September 2011

Auditor and Technical Specialist Credentials

Lead Auditor: Tom Carmichael
 Auditor Certification Number: 14544 (Registered as an Auditor since 1996 and as a Lead Auditor since 1998)
 Certifying Organisation: RABQSA International
 Telephone Number: +61 2 4728 4600
 Address: Suite 102, 148 Henry Street, Penrith BC NSW 2751
 Web Site Address: www.rabqsa.com

The following list is representative, not exhaustive, of the audits I have undertaken. The scope of the environmental management audits generally included review of chemical storage and handling practices on the sites.

| Year | Type of Facility, Type of Audit | Country & State/Province |
|------|---|--------------------------|
| 2011 | Cowal Gold Mine, Lead Auditor and Technical Expert, ICMC Recertification Audit | Australia, NSW |
| 2011 | Boddington Gold Mine, Lead Auditor and Technical Expert, ICMC Certification Audit | Australia, WA |
| 2011 | Tanami Gold, Technical Expert, ICMC Pre-Recertification Audit | Australia, WA |
| 2011 | KCGM, Technical Expert, ICMC Recertification Audit | Australia, WA |
| 2011 | Chemical manufacturing facility, environmental and dangerous goods management | Australia, NSW |
| 2010 | Waste management company, including landfills and waste transfer stations, environmental management | Australia, NSW |
| 2010 | Major gold mine, environmental management | Indonesia |
| 2009 | Major copper mine, environmental management | Zambia |
| 2008 | Chlorine manufacturing plant No. 1, environmental management | Australia, NSW |
| 2008 | Chlorine manufacturing plant No. 2, environmental management | Australia, NSW |
| 2008 | 6 coal testing laboratories, environmental management | Australia, NSW and QLD |
| 2008 | Explosives manufacturing plant, environmental management | Australia, QLD |
| 2008 | Cyanide manufacturing plant, environmental management | Australia, QLD |
| 2008 | Minerals sands mining and processing facility, environmental management | Australia, NSW |
| 2008 | Chemical manufacturing plant, environmental management | Australia, NSW |
| 2008 | Herbicide production facility, environmental management | Australia, NSW |
| 2008 | Industrial printing plant, environmental management | Australia, NSW |



**ICMI AUDITOR CREDENTIALS - TOM CARMICHAEL,
BODDINGTON GOLD MINE CERTIFICATION AUDIT**

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|------|--|--------------------------|
| 2008 | Timber products manufacturer, environmental management | Indonesia |
| 2008 | Oil storage facility, environmental management | Australia, NSW |
| 2008 | Electrical products manufacturer, environmental management | Australia, NSW |
| 2008 | Metal products manufacturer, environmental management | Australia, NSW |
| 2008 | Chemical products manufacturer, environmental management | Malaysia |
| 2007 | Semi-conductor manufacturers, environmental management | Philippines |
| 2007 | Industrial printing plant, environmental management | Australia, NSW |
| 2007 | Chemical manufacturing plant, environmental management | Australia, NSW |
| 2006 | Gas processing facility, environmental management | Australia, NSW |
| 2006 | Pharmaceutical manufacturer, environmental management | Australia, NSW |
| 2006 | Freight Handling Facility, environmental management | Australia, NSW |
| 2006 | Building products manufacturer, environmental management | Australia, NSW |
| 2006 | Building products manufacturer (2), environmental management | Australia, NSW |
| 2006 | Machinery assembler, environmental management | Australia, NSW |
| 2005 | Petroleum products manufacturer, environmental management | Australia, NSW |
| 2006 | Electronics manufacturer, environmental management | Philippines |
| 2006 | Electronics manufacturer (2), environmental management | Philippines |
| 2006 | Vehicle dealership, environmental management | Australia, NSW |
| 2005 | Timber products manufacturer, environmental management | Australia, Tasmania |
| 2005 | Timber products manufacturer, environmental management | Australia, NSW |
| 2005 | Whitegoods manufacturer, environmental management | Australia, NSW |
| 2005 | Timber products manufacturer, environmental management | Australia, NSW |
| 2005 | Building products manufacturer, environmental management | Australia, NSW |
| 2005 | Building products manufacturer, environmental management | Australia, NSW |
| 2005 | Building products manufacturer, environmental management | Australia, NSW |
| 2005 | Aeronautical servicing facility, environmental management | Australia, QLD |
| 2005 | Cold Storage Facility, environmental management | Australia, NSW |
| 2005 | Warehousing, environmental management | Australia, NSW |
| 2005 | 5 Vehicle dealerships, environmental management | Australia, QLD, NSW, VIC |
| 2005 | Chemical manufacturer, environmental management | Australia, NSW |
| 2004 | Building products manufacturer, environmental management | Australia, NSW |
| 2004 | Electricity generator, environmental management | Australia, NSW |
| 2004 | Petroleum products manufacturer, environmental management | Australia, NSW |



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| 2004 | 2 Plastic products manufacturers, environmental management | Australia, NSW |
| 2004 | Warehousing, environmental management | Australia, NSW |
| 2003 | Food products manufacturer, environmental management | Australia, NSW |
| 2003 | Chemical products manufacturer, environmental management | Australia, NSW |
| 2003 | Paper products manufacturer, environmental management | Australia, NSW |
| 2003 | Paper products manufacturer, environmental management | Australia, NSW |
| 2003 | Building products manufacturer, environmental management | Australia, NSW |
| 2003 | Petroleum products manufacturer, environmental management | Australia, NSW |
| 2003 | Chemical products manufacturer, environmental management | Australia, NSW |
| 2003 | Plastics products manufacturer, environmental management | Australia, NSW |
| 2003 | 3 Building products manufacturing sites, environmental management | Australia, NSW |
| 2002 | Cooling tower manufacturing facility, environmental management | Australia, NSW |
| 2002 | Chemical storage facility, environmental management | Australia, NSW |
| 2002 | Transportation company, environmental management | Australia, NSW |
| 2002 | Building products manufacturer, environmental management | Australia, NSW |
| 2002 | Timber products manufacturer, environmental management | Australia, NSW |
| 2002 | Cleaning products manufacturer, environmental management | Japan |
| 2002 | Food products manufacturer, environmental management | Australia, NSW |
| 2002 | Chemical products manufacturer, environmental management | Australia, NSW |
| 2001 | Transport company, environmental management | Australia, NSW |
| 2001 | Electrical / mechanical components manufacturer, environmental management | Australia, NSW |
| 2001 | Electronics service centre, environmental management | Australia, NSW |
| 2001 | Gas heater manufacturer, environmental management | Australia, NSW |
| 2001 | Car products wholesaler, environmental management | Australia, NSW |
| 2001 | Plastic products manufacturer, environmental management | Australia, NSW |
| 2001 | Household appliances manufacturer, environmental management | Australia, NSW |
| 2001 | Metal processing facility, environmental management | Australia, NSW |
| 2000 | 2 Food products manufacturing sites, environmental management | Australia, NSW |
| 2000 | Household appliance manufacturer, environmental management | Australia, NSW |
| 2000 | Metal products manufacturer, environmental management | Australia, NSW |
| 2000 | Resin products manufacturer, environmental management | Australia, NSW |
| 2000 | Metal cable manufacturer, environmental management | Australia, NSW |
| 2000 | Electrical equipment manufacturer, environmental management | Australia, NSW |



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| 2000 | Paper carton manufacturer, environmental management | Australia, NSW |
| 2000 | Metal products manufacturer, environmental management | Australia, NSW |
| 2000 | International Airport, environmental management | Australia, NSW |
| 2000 | Aircraft products manufacturer, environmental management | Australia, QLD |
| 2000 | Stone products manufacturer, environmental management | Australia, NSW |
| 1999 | Metal products manufacturer, environmental management | Australia, NSW |
| 1999 | Storage and workshop facility, environmental management | Australia, NSW |
| 1999 | Metal products manufacturer, environmental management | Australia, NSW |
| 1999 | Paper products manufacturer, environmental management | Australia, NSW |
| 1999 | Plastic products manufacturer, environmental management | Australia, NSW |
| 1999 | Metal products manufacturer, environmental management | Australia, NSW |
| 1999 | Ship painting operation, environmental management | Malaysia |
| 1999 | Ship painting operation, environmental management | Indonesia |
| 1999 | Forestry products manufacturer, environmental management | Australia, NSW |
| 1998 | Metal products manufacturer, environmental management | Australia, NSW |
| 1998 | Chemical products manufacturer, environmental management | Australia, NSW |
| 1998 | 2 Timber products manufacturing facilities, environmental management | Australia, NSW |
| 1998 | Shopping centre, environmental management | Australia, NSW |
| 1998 | Landfill, environmental management | Australia, NSW |
| 1998 | Major manufacturing facility, environmental management | Australia, NSW |
| 1998 | Concrete products manufacturer, environmental management | Australia NSW |
| 1998 | Major hospital site, environmental management | Australia, NSW |
| 1998 | 5 Major chemical manufacturing facilities, environmental management | Australia, NSW |
| 1998 | Commercial laundry, environmental management | Australia, NSW |
| 1998 | Scientific research facility, environmental management | Australia, NSW |
| 1998 | Brick manufacturer, environmental management | Australia, NSW |
| 1998 | Building products manufacturer, environmental management | Australia, NSW |
| 1997 | Electronics manufacturer, environmental management | Indonesia |
| 1997 | Electronics manufacturer, environmental management | Philippines |
| 1997 | NSW Fire Brigades, environmental management | Australia, NSW |
| 1997 | Metal manufacturing facility, environmental management | Australia, NSW |
| 1996 | 9 Sewage treatment plants, environmental management | Australia, NSW |



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| Year | Type of Facility, Type of Audit | Country & State/Province |
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| 1996 | Roads works depots and chemical storage facilities, environmental management | Australia, NSW |
| 1995 | Major Airport (parts), environmental management | Australia, NSW |
| 1996 | 2 Major construction sites, environmental management | Australia, NSW |
| 1996 | 3 Railway rolling stock maintenance facilities, environmental management | Australia, NSW |
| 1995 | Sheep tannery, environmental management | Australia, NSW |

Cyanide and Operational Related Experience

Each auditor must have at least 3 years; at least one auditor must have at least 7 years experience

I have been undertaking environmental audits for over 15 years and have been registered with RABQSA as a Lead Environmental Auditor since 1998.

| Operation | Yrs | Relevant Position Titles | Types of Operations |
|--|-----|---|--|
| Golder Associates | 1.5 | Principal Environmental Scientist | Environmental audits of various mining, chemical and industrial manufacturing operations including ICMC Audits. |
| Export Finance & Insurance Corporation | 2 | Associate-Director, Technical and Environmental Risk Assessment | Auditing of operating mines including a gold mine using cyanide to extract gold from ore. |
| URS Australia Pty Ltd | 10 | Principal Environmental Scientist | Environmental audits and liability assessments with respect to legislative compliance, dangerous goods storage and handling, EHS, development and implementation of environmental management systems, assessment of potential liabilities associated with acquisitions and divestments, and potential site contamination for over 250 sites throughout Australia, New Zealand, Fiji, Singapore, Malaysia, Indonesia, Philippines, Japan. Facilities assessed include manufacturing operations – chemicals (organic and inorganic), explosives, cyanide, water treatment chemicals, detergents, petrochemicals, oil refining, metal products, electrical cables, white goods, electrical/electronics, timber products, paper products, concrete products and brickworks; sewage treatment plants; mines/quarries; railway infrastructure; road maintenance works depots; airports; major construction sites; wool scouring facility; forestry operations; hospitality operation; commercial laundry premises; a major hospital site; and agricultural research facilities. |
| Montgomery Watson Australia Pty Ltd | | Environmental Manager | Environmental auditing of a range of industrial facilities including metal products manufacturers and semi-conductor manufactures. |
| CMPS&F Pty | 5 | Senior Environmental | Environmental auditing of a range of industrial facilities |



**ICMI AUDITOR CREDENTIALS - TOM CARMICHAEL,
BODDINGTON GOLD MINE CERTIFICATION AUDIT**

| | | | |
|----------------------------|---|-----------|---|
| Ltd | | Scientist | including sewage treatment plants and a fell monger. |
| Western Mining Corporation | 3 | Geologist | Worked on operating open cut gold mines using cyanide-in-pulp processes to extract gold from ore. |

Tom is a Principal Environmental Scientist with over 20 years experience in the mining industry, environmental consulting and the finance industry.

Tom has provided consulting environmental planning, impact assessment and risk management services to various mining projects including:

- Environmental risk management reviews of gold mining operations in New South Wales and Papua New Guinea, copper mine in Zambia and three coal mines in Queensland.
- Environmental audits of cyanide and ammonium nitrate production facilities in Queensland.
- Statutory audit of compliance with consent conditions on behalf of NSW Department of Planning for a mineral sands operation in NSW.
- Preparation of erosion and sediment control plans for the construction of the Cowal Gold Mine process plant, tailings dams and water supply pipelines.
- Environmental impact assessment of Hornsby Quarry in NSW.
- Environmental impact assessment of quarries at Port Macquarie and Lauriton.
- Environmental Management Plans for quarries at Lauriton and Valla in northern NSW.
- Environmental due diligence assessment of a copper smelting and refining operation.

Statement of No Conflict

I certify that I have not audited any component of this facility for which I was responsible for design or development; nor have I within the past year been an employee of the facility, its parent company, or associated affiliates. Excluding audits, I have not derived more than 30% of my income within the past 5 years from the facility, its parent, or associated affiliates. I have not participated in more than two consecutive Cyanide Code audits of this facility. I have participated in at least 3 health, safety, and/or environmental audits in the past 7 years and am familiar with standard audit procedures as well as with the protocols developed by the International Cyanide Management Institute for implementation of the Code.

Signed,

Name
Tom Carmichael

Signature

Date
8 February 2012

Use additional pages if necessary

*The lead auditor's signature must be certified by notarisation or equivalent.

Witnessed by: 8/2/12

Graham K. Scholey
Justice of the Peace
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