INTERNATIONAL CYANIDE MANAGEMENT CODE VERIFICATION AUDIT

COWAL GOLD MINE

prepared for

BARRICK GOLD OF AUSTRALIA LIMITED

SUMMARY AUDIT REPORT

30 March 2007

KMH Environmental Pty Ltd
PO Box 307
Belrose, NSW 2085, Australia
Location and Description of Process

The Cowal Gold Mine is located in Central New South Wales, Australia, approximately 32 kilometres north of West Wyalong and approximately 350 kilometres west of Sydney.

The Cowal Gold Mine is an open cut mine located adjacent to Lake Cowal. The process facilities are designed to treat ore with conventional carbon-in-leach and sulphide flotation technologies. The process does not involve heap leaching and only liquid cyanide solution is held on-site. The broad characteristics and exclusions of the process were evident in documentation, site observations and interviews.

The mine began production in the first quarter of 2006 and the plant was in full operation at the time of the audit. Gold production is expected to average approximately 230,000 ounces per annum over the first three years.
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Auditors Finding

This operation is

☐ in full compliance
☐ in substantial compliance *(see below)
☐ not in compliance

with the International Cyanide Management Code.

* The Corrective Action Plan to bring an operation in substantial compliance into full compliance must be enclosed with this Summary Audit Report. The plan must be fully implemented within on year of the date of this audit.

Audit Company: KMH Environmental Pty Ltd
Audit Team Leader: Ken Holmes
E-mail: ken@kmh.com.au

Names and Signatures of Other Auditors:

<table>
<thead>
<tr>
<th>Name of Auditor</th>
<th>Signature of Auditor</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tony Williams</td>
<td></td>
<td>30 March 2007</td>
</tr>
<tr>
<td>Geoff Mance</td>
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Cowal Gold Mine

Name of Mine | Signature of Lead Auditor | Date
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I attest that I meet the criteria for knowledge, experience and conflict of interest for Code Verification Audit Team Leader, established by the International Cyanide Management Institute and that all members of the audit team meet the applicable criteria established by the International Cyanide Management Institute for Code Verification Auditors.

I attest that this Summary Audit Report accurately describes the findings of the verification audit. I further attest that the verification audit was conducted in a professional manner in accordance with the International Cyanide Management Code Verification Protocol for Gold Mine Operations and using standard and accepted practices for health, safety and environmental audits.

Cowal Gold Mine

30 March 2007

Name of Facility
Signature of Lead Auditor
Date

Declared At: Penrose New South Wales
This 4th day of July 2007
Before me

BRUCE CLARKE J.P.
(Signature of person before whom the declaration has been made)
(Title of the person before whom the declaration has been made)

(Signature of Declarant – Ken Holmes)

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1. PRODUCTION: Encourage responsible cyanide manufacturing by purchasing from manufacturers who operate in a safe and environmentally protective manner.
   
   **Standard of Practice 1.1:** Purchase cyanide from manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide, and to prevent releases of cyanide to the environment.
   
   - [x] in full compliance with
   - [ ] in substantial compliance with
   - [ ] not in compliance with
   
   **Basis for Audit Finding:** Cowal Gold Mine sources its cyanide exclusively from Orica Australia Pty Ltd. Barrick Gold of Australia has prepared contractual documents for the supply of Cyanide that require Orica and any other facilities from which Orica may source cyanide on Barrick’s behalf to be certified as fully compliant under the International Cyanide Management Code (ICMC) by 30 May 2007. The Orica facility has been certified as being in full compliance with the Code and therefore the Cowal Gold Mine is in full compliance with Standard of Practice 1.1.2.

2. TRANSPORTATION: Protect communities and the environment during cyanide transport.
   
   **Standard of Practice 2.1:** Establish clear lines of responsibility for safety, security, release prevention, training and emergency response in written agreements with producers, distributors and transporters.
   
   - [x] in full compliance with
   - [ ] in substantial compliance with
   - [ ] not in compliance with
   
   **Basis for Audit Finding:** The evidence provided to the auditors addresses all of the requirements of the ICMC Standard of Practice 2.1 and if fully implemented, monitored and enforced would ensure the operation would be in full compliance with Standard of Practice 2.1.

   **Standard of Practice 2.2:** Require that cyanide transporters implement appropriate emergency response plans and capabilities and employ adequate measures for cyanide management.

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x in full compliance with

The operation is □ in substantial compliance with Standard of Practice 2.2
□ not in compliance with

Basis for Audit Finding: The contractual documents and evidence of the audits of Orica’s transportation contractor provided to the auditors address all of the requirements of the SOP 2.2 Code and if fully implemented, monitored and enforced should ensure that the operation would be in full compliance with Standard of Practice 2.2.

3. HANDLING AND STORAGE: Protect workers and the environment during cyanide handling and storage.

Standard of Practice 3.1: Design and construct unloading, storage and mixing facilities consistent with sound, accepted engineering practices, quality control/quality assurance procedures, spill prevention and spill containment measures.

x in full compliance with

The operation is □ in substantial compliance with Standard of Practice 3.1
□ not in compliance with

Basis for Audit Finding: Cyanide solution is held in the day tank for operational use in the Process circuit. No dry or other cyanide is stored on-site. Facilities for unloading, storing and mixing have been designed and constructed appropriately and are located away from people and surface waters. The facilities lie within adequate secondary containments and procedures have been established to respond to and remediate potential accidental releases. The operation is therefore considered to conform fully with Standard of Practice 3.1.

Standard of Practice 3.2: Operate unloading, storage and mixing facilities using inspections, preventive maintenance and contingency plans to prevent or contain releases and control and respond to worker exposures.

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The operation is □ in substantial compliance with Standard of Practice 3.2
□ not in compliance with

Basis for Audit Finding: Dry cyanide arrives at the site in isotanks within which it is sparged and delivered as solution into the mixing tank and transferred to a day tank for operational use. No other containers (e.g. drums, boxes, bags) are received. The isotank is returned to the supplier by the transporter. All cyanide handling and storage facilities, pipelines and equipment are located in fully contained areas. Procedures are implemented to prevent and contain potential releases and to control and respond to worker exposures. All cyanide reagent tanks and pipelines are subjected to an appropriate regime of testing and inspections. Considerations under SOP’s 4.1 and 4.7 support the conclusion that handling and storage facilities are constructed, operated and maintained and there are sufficient records demonstrating reliable implementation of scheduled inspections and programmed preventive maintenance apply to these facilities. Consequently the operation is considered to fully conform to Standard of Practice 3.2.

4. OPERATIONS: Manage cyanide process solutions and waste streams to protect human health and the environment.

Standard of Practice 4.1: Implement management and operating systems designed to protect human health and the environment utilising contingency planning and inspection and preventive maintenance procedures.

The operation is □ in substantial compliance with Standard of Practice 4.1
□ not in compliance with

Basis for Audit Finding: The operation has developed comprehensive management and operating systems. These include operating procedures and contingency procedures as well as relevant inspection and preventive maintenance regimes. Furthermore records indicate that the procedures are being implemented. The inspection and preventive maintenance records sighted by the auditors were complete with respect to the scheduled frequency and it is considered therefore that the operation conforms fully to Standard Of Practice 4.1.

Standard of Practice 4.2 Introduce management and operating systems to minimise cyanide use, thereby limiting concentrations of cyanide in mill tailings.

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x in full compliance with

The operation is
☐ in substantial compliance with Standard of Practice 4.2
☐ not in compliance with

Basis for Audit Finding: The operation established a standard cyanide addition rate and conducts daily laboratory test work to evaluate this in near real-time. Operating practices within the processing plant provide information, on both an hourly and daily basis, for the modification of rates of cyanide addition. A process has been implemented by which cyanide addition is controlled with respect to appropriate rates. The operation is considered to conform fully to Standard of Practice 4.2.

Standard of Practice 4.3: Implement a comprehensive water management program to protect against unintentional releases.

x in full compliance with

The operation is
☐ in substantial compliance with Standard of Practice 4.3
☐ not in compliance with

Basis for Audit Finding: A comprehensive, probabilistic water balance model is maintained. It is reviewed regularly and modified if improvements to the integrity of the model can be made. Inspections are conducted of tailings storage facilities and storage ponds to protect against releases. A minimum freeboard of 500mm is maintained above the design storage requirements. The operation is considered in full conformity with SOP 4.3 of the Code.

Standard of Practice 4.4: Implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions.

x in full compliance with

The operation is
☐ in substantial compliance with Standard of Practice 4.4
☐ not in compliance with

Basis for Audit Finding: The operation maintains cyanide levels in open water bodies consistently below 50mg/L and as maintains effective fencing to exclude terrestrial wildlife. Wildlife mortality investigations demonstrate that these measures are effective at preventing

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cyanide related wildlife deaths. The operation has no heap leach facility and is considered to conform fully to this Standard Of Practice 4.4.

**Standard of Practice 4.5:** Implement measures to protect fish and wildlife from direct and indirect discharges of cyanide process solutions to surface water.

- [x] in full compliance with
- [ ] in substantial compliance with
- [ ] not in compliance with

**Basis for Audit Finding:** The operation has effective measures to prevent direct and indirect discharges of water from site, in order to meet its regulatory requirement of zero discharge. Furthermore groundwater sampling has not detected any elevation of cyanide levels down gradient of the site. The operation is considered to comply fully with this Standard of Practice 4.5.

**Standard of Practice 4.6:** Implement measures designed to manage seepage from cyanide facilities to protect the beneficial uses of groundwater.

- [x] in full compliance with
- [ ] in substantial compliance with
- [ ] not in compliance with

**Basis for Audit Finding:** Barrick commissioned professional geotechnical engineers to develop design, supervise construction and prepare operations and maintenance plans for the two tailing storage facilities associated with this operation. The operation has implemented a routine monitoring program that has demonstrated that no seepage has been detected. The process plant and cyanide handling areas are fully contained and a rigorous monitoring and maintenance program is in place. There are significant regulatory requirements relating to the protection and monitoring of ground and surface waters in and around the storage facilities. The Cowal operation was in full compliance with all of these requirements at the time of the audit. The operation is therefore considered to be in full compliance with Standard of Practice 4.6.

**Standard of Practice 4.7:** Provide spill prevention or containment measures for process tanks and pipelines.
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The operation is

☐ in substantial compliance with Standard of Practice 4.7
☐ not in compliance with

Basis for Audit Finding: Spill containment measures have been provided for most process tanks and pipelines at the operation. These have been demonstrated to be of acceptable construction and generally appropriate size. Where the secondary containment is insufficient, potential releases report along designated drainage routes to an emergency pond and established response and remediation procedures apply. The operation is therefore considered to conform fully with Standard of Practice 4.7.

Standard of Practice 4.8: Implement quality control/quality assurance procedures to confirm that cyanide facilities are constructed according to accepted engineering standards and specifications.

The operation is

☐ in substantial compliance with Standard of Practice 4.8
☐ not in compliance with

Basis for Audit Finding: The Cowal Gold Mine appointed an independent engineering group, GHD Pty Ltd to assess the condition of cyanide containing plant, structures and secondary containments (i.e. bunds), as well as design, engineering and operational controls, and make technical judgement whether the facilities reviewed are in a suitable condition for continued operation. The cyanide containing plant was reported to be fully compliant. The operation is therefore considered to conform fully with Standard of Practice 4.8.

Standard of Practice 4.9: Implement monitoring programs to evaluate the effects of cyanide use on wildlife surface and ground water quality.

The operation is

☐ in substantial compliance with Standard of Practice 4.9
☐ not in compliance with

Basis for Audit Finding: Fauna, groundwater and surface water procedures have been prepared. Monitoring and reporting has been undertaken to evaluate the effects of cyanide use on fauna,
surface and ground water quality for the Cowal Gold Mine. Surface water monitoring is programmed when surface is present and includes cyanide testing therefore the operation is considered to fully conform with Standard of Practice 4.9.

5. DECOMMISSIONING: Protect communities and the environment from cyanide through development and implementation of decommissioning plans for cyanide facilities.

Standard of Practice 5.1: Plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife and livestock.

- in full compliance with
- not in substantial compliance with
- not in compliance with

Basis for Audit Finding: Cowal Gold Mine has made a demonstrable commitment to the reclamation and rehabilitation of the site. These commitments are described in the Reclamation and Closure Plan and the Decontamination and Decommissioning Plan. The Code requires that a number of issues are addressed in such a plan all of which have been adequately addressed. These plans are reviewed annually in accordance with Cowal Gold Mine corporate and site policies. This review is designed to identify changes in closure scope and costs due to changes in site operations, economic or other factors.

A schedule for decommissioning of the plant has been developed that shows the order of the planned decommissioning activities starting from prior to the time that the operations cease through to clearing and decontamination of the process plant site and rehabilitation of the tailings management facilities. Therefore Cowal Gold Mine is deemed to be in full conformity with Standard of Practice 5.1.

Standard of Practice 5.2 Establish an assurance mechanism capable of fully funding cyanide related decommissioning activities.

- in full compliance with
- not in substantial compliance with
- not in compliance with

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Basis for Audit Finding: Cowal Gold Mine has commissioned a number of independent reviews (HLA Envirosiences) of costs to decommission and decontaminate the cyanide facilities. In accordance with the Cyanide Code, these reviews have been undertaken on the basis that the works would be outsourced to a 3rd party contractor for implementation. The cost estimate (+/- 30%) will be reviewed annually in accordance with Cowal Gold Mine policies. The Department of Mineral Resources has required (and been provided with) an AUSS$12 million bond, that on the basis of the cost estimates produced to date would fully fund the decommissioning and cleanup of the cyanide handling facilities at the mine. Cowal Gold Mine is deemed to be in full conformity with Standard of Practice 5.2.6.

6. WORKER SAFETY: Protect workers’ health and safety from exposure to cyanide.

Standard of Practice 6.1: Identify potential cyanide exposure scenarios and take measures as necessary to eliminate, reduce or control them.

x in full compliance with

☐ in substantial compliance with Standard of Practice 6.1

☐ not in compliance with

Basis for Audit Finding: Barrick has developed a process for identifying operational risks including those of cyanide exposure. The operation has implemented measures and controls to mitigate these risks. Barrick seeks worker input in the preparation and review of its operational procedures and have implemented an change management system. The change management system is designed to ensure that cyanide (and other) process related changes will be reviewed and that changes are reflected in updated procedures. Therefore the operation is considered to be in full compliance with Standard of Practice 6.1.

Standard of Practice 6.2: Operate and monitor cyanide facilities to protect worker health and safety and periodically evaluate the effectiveness of health and safety measures.

x in full compliance with

☐ in substantial compliance with Standard of Practice 6.2

☐ not in compliance with

Basis for Audit Finding: Cowal Gold Mine has identified the areas of the plant where there is the potential for cyanide exposures. They have developed safe work procedures for specific areas or activities, installed appropriate safety and monitoring equipment and provided cyanide related
training and reference materials. The operation is therefore considered to be in full compliance with Standard of Practice 6.2.

**Standard of Practice 6.3:** Develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.

- ☒ in full compliance with
- ☐ in substantial compliance with Standard of Practice 6.3
- ☐ not in compliance with

**Basis for Audit Finding:** The operation’s has implemented Safety Standards, and first aid and emergency response measures to deal with potential workers exposed to cyanide. The Cyanide Emergency Procedure has been prepared and implemented (CEP GEN-016). This procedure covers all of the elements required by this SOP. Therefore the operation is considered to be in full compliance with Standard of Practice 6.3.

### 7. EMERGENCY RESPONSE:

**Protect communities and the environment through the development of emergency response strategies and capabilities.**

**Standard of Practice 7.1:** Prepare detailed emergency response plans for potential cyanide releases.

- ☒ in full compliance with
- ☐ in substantial compliance with Standard of Practice 7.1
- ☐ not in compliance with

**Basis for Audit Finding:** The operation has developed a comprehensive emergency response and management framework comprising several documents that incorporate all the elements required to achieve conformity with this SOP. The Cyanide Emergency Procedure satisfies the requirements so of the SOP. Therefore the operation is considered to be in full compliance with Standard of Practice 7.1.

**Standard of Practice 7.2:** Involve site personnel and stakeholders in the planning process.

- ☒ in full compliance with

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The operation is □ in substantial compliance with Standard of Practice 7.2
□ not in compliance with

**Basis for Audit Finding:** The operation has developed its cyanide emergency response procedures with the participation of the workforce and stakeholders including outside responders. There are no communities potentially affected by cyanide related releases from the operation and it was demonstrated that stakeholders are consulted to maintain the emergency response procedures. Therefore the operation is considered in full conformity with Standard of Practice 7.2.

**Standard of Practice 7.3:** Designate appropriate personnel and commit necessary equipment and resources for emergency response.

x in full compliance with

The operation is □ in substantial compliance with Standard of Practice 7.3
□ not in compliance with

**Basis for Audit Finding:** The operation has committed the necessary resources for emergency response including equipment. This is documented in the ERP and implementation has been confirmed where relevant by interview and observation. Outside entities have been consulted by the operation to a level commensurate with their involvement. The operation is considered to be in full conformity with Standard of Practice 7.3.

**Standard of Practice 7.4:** Develop procedures for internal and external emergency notification and reporting.

x in full compliance with

The operation is □ in substantial compliance with Standard of Practice 7.4
□ not in compliance with

**Basis for Audit Finding:** Procedures and information for communicating with internal and external stakeholders are described in the Cyanide Emergency Procedure, the Emergency Response Plan and the Disaster Management and Response Plan. The operation is considered to conform fully with Standard of Practice 7.4.

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Standard of Practice 7.5: Incorporate into response plans and remediation measures monitoring elements that account for the additional hazards of using cyanide treatment chemicals.

- in full compliance with

The operation is
- in substantial compliance with Standard of Practice 7.5
- not in compliance with

Basis for Audit Finding: The cyanide related emergency response documentation incorporates remediation measures as required and monitoring requirements required by this SoP. The operation is considered to conform fully with Standard of Practice 7.5.

Standard of Practice 7.6: Periodically evaluate response procedures and capabilities and revise them as needed.

- in full compliance with

The operation is
- in substantial compliance with Standard of Practice 7.6
- not in compliance with

Basis for Audit Finding: The cyanide emergency response documentation makes provision for periodic review and such reviews were confirmed by the auditors. Exercises are scheduled, conducted and evaluated periodically and provisions are made for debriefing following actual emergencies. The operation is therefore considered to conform fully with Standard of Practice 7.6.

8. TRAINING: Train workers and emergency response personnel to manage cyanide in a safe and environmentally protective manner.

Standard of Practice 8.1: Train workers to understand the hazards associated with cyanide use.

- in full compliance with

The operation is
- in substantial compliance with Standard of Practice 8.1
- not in compliance with
Basis for Audit Finding: Cowal Gold Mine has a comprehensive training and induction program that includes detailed discussion on cyanide to ensure that workers understand the hazards associated with cyanide use. This program includes a requirement to complete refresher training. All records of the training are retained in hard copy or in the Risk Information Management System (RIMS). RIMS is used to track the training requirements and records for all site personnel according to their position (i.e. a training needs matrix) and to ensure that refresher training is carried out according to its recommended frequency. Cowal Gold Mine is deemed to be in full conformity with Standard of Practice 8.1.

Standard of Practice 8.2: Train appropriate personnel to operate the facility according to systems and procedures that protect human health, the community and the environment.

- [x] in full compliance with
- [ ] in substantial compliance with Standard of Practice 8.2
- [ ] not in compliance with

Basis for Audit Finding: Cowal Gold Mine has developed, implemented and trained site personnel to control the operation of its cyanide facilities in a safe and environmentally responsible manner. Personnel that are required to undertake tasks on site receive appropriate training (and refreshers) and are assessed to confirm their competency. The training is undertaken by Senior Managers with demonstrated training experience and competence in the technical aspects discussed in the training. Records of the training are retained. Therefore Cowal Gold Mine is deemed to be in full conformity with Standard of Practice 8.2.

Standard of Practice 8.3: Train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide.

- [x] in full compliance with
- [ ] in substantial compliance with Standard of Practice 8.3
- [ ] not in compliance with

Basis for Audit Finding: Cowal Gold Mine’s process personnel are trained to respond in the event of worker exposure and/or environmental releases of cyanide through the training and induction program, development and instruction in specific procedures and through emergency procedures.
response training and mock drills. In addition Processing personnel have been, or are in the process of being, trained in Senior First Aid. The Emergency Response Team (ERT) receives training in the Emergency Response Plan and Cyanide Emergency Procedures as well as general emergency response topics. ERT personnel have completed (and gained necessary accreditation) for the required comprehensive emergency response training in specific areas including Cyanide Spill Response, HAZMAT response and Breathing Apparatus (auditor sighted the competency matrix of the ERT). Cowal Gold Mine is deemed to be in full conformity with Standard of Practice 8.3


**Standard of Practice 9.1:** Provide stakeholders the opportunity to communicate issues of concern.

- [ ] in full compliance with

The operation is
- [ ] in substantial compliance with Standard of Practice 9.1
- [ ] not in compliance with

**Basis for Audit Finding:** The schedule of forums and the process of consultation and disclosure provide ongoing opportunities for stakeholders to present issues to Barrick. Therefore the operation is considered to be in full compliance with this Standard of Practice 9.1.

**Standard of Practice 9.2:** Initiate dialogue describing cyanide management procedures and responsively address identified concerns.

- [ ] in full compliance with

The operation is
- [ ] in substantial compliance with Standard of Practice 9.2
- [ ] not in compliance with

**Basis for Audit Finding:** The schedule of forums and the process of consultation and disclosure provide an ongoing mechanism through which stakeholders are engaged and information is presented regarding cyanide management. Therefore the operation is considered to be in full compliance with Standard of Practice 9.2.
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**Standard of Practice 9.3:** Make appropriate operational and environmental information regarding cyanide available to stakeholders.

- [x] in full compliance with
- [ ] in substantial compliance with
- [ ] not in compliance with

**Basis for Audit Finding:** The public consultation processes have been established and implemented. Cyanide management information has been prepared and delivered periodically in written and verbal forums. Incident reporting processes have been drafted or identified in the Cyanide Emergency Management Procedure and Cyanide Management Plan. There is a legal obligation requiring the reporting of all cyanide related incidents to the State Department of Environment and Climate Change. All reports made to this Department are made available to the public by the Department (and are posted on the Department's Web Site www.epa.nsw.gov.au). Therefore it is considered that the operation complies fully with Standard of Practice 9.3.