INTERNATIONAL CYANIDE MANAGEMENT CODE

RECERTIFICATION AUDIT

GOLD MINING OPERATION

BALD MOUNTAIN MINE

SUMMARY REPORT

Submitted to:

Barrick Gold Corporation
Barrick Bald Mountain Mine
P.O. Box 2706
Elko, Nevada 89803

and

International Cyanide Management Institute
888 16th Street N.W, Suite 303
Washington, D.C. 20006

Submitted by:

ERM-West, Inc.
102 West 500 South, Suite 650
Salt Lake City, Utah 84101

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1. INTRODUCTION, SUMMARY, AND ATTESTATION

This summary report has been prepared to meet the requirements and intentions of the International Cyanide Management Institute (ICMI) to demonstrate that the following named project has met the obligations in implementing the International Cyanide Management Code (Code).

Name of Project: Bald Mountain Mine

Project Owner / Operator: Barrick Gold Corporation

Name of Responsible Manager: Tracy Miller, General Manager

Address and Contact Information: Barrick Gold Corporation, Barrick Bald Mountain Mine P.O. Box 2706 Elko, Nevada 89803 Phone: 775-237-5811 Fax: 775-237-5818

Audit Company: Environmental Resources Management (ERM)

Audit Team:

Lead Auditor: Roland Guerrero Email: roland.guerrero@erm.com

Gold Mining Technical Expert Auditor: Brent C. Bailey, P.E., CEA Email: brent.bailey@erm.com

Date of Audit: This recertification audit was conducted November 5 through 7, 2013.

Auditors Findings:

☐ in full compliance with

☐ in substantial compliance with International Cyanide Management Code

☐ not in compliance with

This operation has not experienced compliance problems during the previous three-year audit cycle.

Attestation:

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.

Roland Guerrero  
Name of Auditor  
Signature of Lead Auditor  
February 11, 2014  
Date

Name and Signature of Other Auditors:

Brent C. Bailey  
Name of Auditor  
Signature Auditor  
February 5, 2014  
Date

2. LOCATION AND DESCRIPTION OF MINING AND MILLING OPERATION

The Bald Mountain Mine (BMM) is an open-pit, run-of-mine, heap leach gold mine located in northeastern Nevada, United States. BMM owns approximately 9,010 claims within the Bald Mountain Mining District and this area covers approximately 154,440 acres. The total land position is approximately 30 miles long north to south by 11 miles wide east to west.

BMM consists of open pit mines, waste rock dumps, process leach pads, associated process ponds, and process buildings. Power is provided via a 17 mile 69 KVA power line from the Alligator Ridge Mine substation. Water is supplied by wells located on the mine property. Facilities have been designed, constructed, and are operated, for zero discharge to the environment.

Prior to 2011 gold recovery was conducted at processing facilities at Process #2 and Mooney Basin (now identified as Mooney Basin North). Since the 2010 Recertification Audit the construction of new gold recovery facilities were completed south of Mooney Basin. These new facilities identified as Mooney Basin South were under construction during the 2010 Recertification Audit but were not commissioned for operation until July 2011. These facilities include a heap leach pad, pregnant solution tank (constructed adjacent to a process/barren solution pond), an events pond, and a CIC processing facility that includes an off load facility for cyanide. Except for the addition of the Mooney Basin South facilities no changes or modifications were made to the BMM facilities since the 2010 Recertification Audit. An operational change in February 2013 incorporated the discontinuation of stripping and refining at Process #2. Loaded carbon from the three carbon plants is now sent to Barrick’s Goldstrike operation at Carlin, NV for further gold recovery.

Mining is conducted at multiple pits located on the property and run-of-mine ore is hauled to heap leach pads at Process #2, Mooney Basin North, and Mooney Basin South. The Process #2 and Mooney Basin
North heap leach pads incorporate composite liners with solution collection systems. The liners consist of an 80-mil high-density polyethylene (HDPE) primary liner placed over a prepared 12-inch thick, imported low hydraulic conductivity soil layer. Under drain systems of perforated piping are placed over the 80-mil HDPE liners for solution collection and reduction of head on the liner systems. The heap leach pad solution collection channels consist of HDPE lined channels and leak detection, collection, and removal systems to contain any process solution leaks from the collection channels. The Mooney Basin South heap leach pad also incorporates a composite liner with a solution collection system. However, the liner consists of an 80-mil high density polyethylene (HDPE) primary liner placed over a prepared 12-inch thick, imported low hydraulic conductivity soil layer or over a Geosynthetic Clay Liner (GCL) with equivalent or lower maximum permeability placed on a prepared subbase. An under drain system of perforated piping is placed over the 80-mil HDPE liner for solution collection and reduction of head on the liner system.

Pregnant solutions from the leaching operations at Process #2 and Mooney Basin North pads report to the pregnant ponds from where it is pumped to the adsorption, desorption and recovery (ADR) plants at the respective facilities. The pregnant ponds are designed and constructed with 80-mil HDPE primary liners and 40-mil HDPE secondary liners placed over prepared native soil subgrade. A HDPE geonet is sandwiched between the primary and secondary liners to act as a leak detection system. The Mooney Basin South pregnant solution is collected within the under drain piping system that conveys it by gravity to a collection header pipe running in channel adjacent to the pad, which serves as secondary containment. Under normal operating conditions, the pregnant solution reports directly to the Process Building. Alternatively, in the case of a temporary shutdown of the plant for maintenance, the pregnant solution may be diverted to the Solution Pond and later pumped to the plant once it has restarted. The Solution Pond is designed and constructed with an 80-mil HDPE primary liner and a 60-mil HDPE secondary liner placed over a combination of prepared native soil and engineered compacted till. Sandwiched between the primary and secondary liners is an HDPE geonet for collection and transfer of fugitive process solution, via gravity, to the leak detection sump. The pregnant solutions are pumped to the carbon columns where it gravity flows, countercurrent to the activated carbon for precious metal recovery. Barren solutions report to the barren tanks where the pH is adjusted, if necessary, and sodium cyanide is added prior to pumping to the heaps. The loaded carbon from the last columns is removed and transported to the Goldstrike Mine for stripping and refining.

Processing facilities at Process #2, Mooney Basin North, and Mooney Basin South have been designed and constructed with appropriate secondary containments for pipelines and tanks, with additional storage for collection of storm water from extreme precipitation events and with controls for wildlife protection including fencing.

BMM receives liquid sodium cyanide, in specially engineered tanker trucks, from Cyanco whose depot is located in Winnemucca, Nevada. The transporter, TransWood delivers the sodium cyanide to the mine site. Both Cyanco and TransWood are signatories to the Code and have been certified as compliant with the Code by third-party auditors.

BMM has three separate unloading and cyanide storage facilities: (1) the Process #2 Building, (2) the Mooney Basin North Process Building, and (3) Mooney South Process Building. BMM stores and manages sodium cyanide in engineered tanks, pipelines, and lined ponds that have had appropriate quality control and quality assurance. BMM employees are trained in cyanide hazards including first aid, first response, emergency response, and specific operational task training. BMM facilities are fenced to
exclude wildlife and livestock from cyanide process areas. BMM conducts daily, weekly, and monthly inspections to assure that facilities are functioning as designed and to monitor process solutions. Preventive maintenance programs are in place to assure continuous operations. BMM has approved closure and reclamation plans along with financial assurance to complete the appropriate management of cyanide solutions and solids, and decontamination of cyanide pipelines and equipment. BMM has a comprehensive environmental monitoring program to evaluate the performance of the ore processing facilities and containments. The monitoring program includes daily monitoring of pond leak collection systems, quarterly sampling and analysis of groundwater and surface water, and quarterly sampling and analysis of tailings supernatant ponds. The operators conduct wildlife monitoring per shift during facility inspections.

BMM has an emergency response team that is trained to respond to on-site fires, chemical spills, and worker exposures to cyanide. BMM works with local community emergency services to ensure that adequate resources are available to address both off-site and on-site emergencies.

BMM has not experienced compliance problems during the previous three-year audit cycle. BMM is in Full Compliance with the Code.
3. SUMMARY AUDIT REPORT

PRINCIPLE 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.

☑ in full compliance with

☐ in substantial compliance with Standard of Practice 1.1

☐ not in compliance with

Basis for Audit Finding:

The operation is in full compliance with Standard of Practice 1.1. BMM has committed to only purchase cyanide from producers that are compliant with the Code. Cyanco, located in Winnemucca Nevada, has been the cyanide producer and supplier for BMM since January 1, 2009. The supply and service agreement with Cyanco states they shall comply with the Code requirements. Cyanco’s Winnemucca Production Plant is a Code certified operation. BMM has purchased cyanide solely from Cyanco during the 2013 Recertification Audit period – 2010 through 2013.
PRINCIPLE 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.

☐ in full compliance with

☐ in substantial compliance with Standard of Practice 2.1

☐ not in compliance with

Basis for Audit Finding:

The operation is in full compliance with Standard of Practice 2.1. The BMM cyanide supply contract with Cyanco requires Cyanco to comply with the "Principles and Standards of Practice" of the International Cyanide Management Code during the manufacture, transportation, storage, use, and disposal of Product (cyanide). Compliance with the Code requires the supplier and transporter to conform to specific compliance matters set out in the Code's Cyanide Production and Cyanide Transportation Verification Protocols. Cyanco uses TransWood as the only transporter of cyanide from their production operation to BMM. Both Cyanco and TransWood are signatories to the Code and are Code certified by ICMI.

The cyanide supply contract with Cyanco specifies that BMM takes ownership of the cyanide at the time the liquid cyanide is delivered into the cyanide storage tanks at the mine site. The contract specifies that BMM and Cyanco agree to comply with the ‘Principles and Standards of Practice' of the Code.

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

☐ in full compliance with

☐ in substantial compliance with Standard of Practice 2.2

☐ not in compliance with

Basis for Audit Finding:

The operation is in full compliance with Standard of Practice 2.2. The Barrick BMM cyanide supply contract with Cyanco delegates the transportation of cyanide to Cyanco. Further, the contract requires Cyanco to comply with the "Principles and Standards of Practice" of the International Cyanide Management Code during the manufacture, transportation, storage, use and disposal of Product (cyanide). Compliance with the Code requires that the supplier and transporter conform to specific compliance
matters set out in the Code's Cyanide Production and Cyanide Transportation Verification Protocols. The contracted transporters via their agreement with Cyanco have a subrogated requirement to Barrick (BMM) requiring them to transport cyanide to the mine in accordance with the ICMC.

TransWood has been the sole cyanide transporter since January 2009. BMM has retained signed chain of custody forms (Bills of Lading) for all cyanide shipments documenting each shipment from the Cyanco plant via trucks used by TransWood that confirm the cyanide was transported by TransWood, an ICMI certified transporter during the time frame considered for the 2013 Recertification Audit. Neither Cyanco or TransWood uses interim storage facilities.
PRINCIPLE 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.

☑ in full compliance with

☐ in substantial compliance with Standard of Practice 3.1

☐ not in compliance with

**Basis for Audit Finding**

The operation is in full compliance with Standard of Practice 3.1. BMM has three separate unloading and cyanide storage facilities, located at: (1) the Process #2 Building, (2) the Mooney Basin North Process Building, and (3) Mooney South Process Building. The tanker truck unloading areas are on concrete pads constructed of cast-in-place reinforced concrete. The Process #2 tanker truck unload pad is outside and drains into the cyanide storage tank concrete containment. The overflow of this containment drains to sumps in the plant. The Mooney Basin South off load is within the Process Building on a concrete floor and any spillage would be within the containment of the building with excess overflow directed to the adjacent solution pond. The Mooney Basin North tanker truck containment is within the process building and drains into the curbed containments of the building with excess overflow directed to the adjacent pregnant pond. The unload pads are adequate barriers to prevent seepage to the subsurface.

The design and construction of the cyanide offload and storage facilities has been performed in accordance with sound and accepted engineering practices as documented in design, construction drawings and evaluation reports as prepared and stamped by Nevada registered Professional Engineers.

All three cyanide offloading areas are within the fenced, secure areas of the mine. The offloading and storage areas are located away from public access and no perennial surface water bodies are within one mile of either facility. All personnel with access to the offloading and storage facilities, including contractors, receive site specific health and safety training that includes cyanide hazard awareness.

The BMM cyanide storage tanks have level indicators and high level alarms that prevent overfilling. There are no unsecured valves that would allow direct access to the liquid cyanide.

The Process #2 storage tank is located outside with adequate ventilation. The Mooney Basin North and Mooney Basin South cyanide storage tanks are located inside the process buildings. Both buildings have ventilation fans located near the top of the walls. In addition, the Mooney Basin North building is accessed by two large roll up doors for access by the cyanide delivery tanker and carbon trucks. The Mooney Basin South cyanide storage tanks are covered with a cone top and ventilation pipes from the peaks to exhaust cyanide gases from the tanks outside the building.

BMM has isolated the cyanide offload and storage tanks away from incompatible chemicals such as
hydrochloric acids and oxidizers. No smoking or eating is allowed the cyanide storage areas.

**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.

- [x] in full compliance with

- [ ] in substantial compliance with Standard of Practice 3.2

- [ ] not in compliance with

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 3.2. BMM has developed and implemented standard operating procedures to prevent exposure and releases for cyanide during offloading, storage, and use. The SOPs entitled “Receiving Cyanide Shipment” and “Reagent Receiving Checklist” cover the responsibilities for the transporter and the site personnel. Offloading does not occur until a BMM operator is present to observe compliance with the PPE requirements, truck parking and chocking, tank levels, test safety shower and eye wash, and unlock the unload piping. Both the transporter and the operator check to confirm that the storage tanks have sufficient capacity for the offload. The BMM operator wears a gas badge for HCN monitoring and has a site radio for emergency communication if required. Additionally, the BMM operator and transport driver have ready access to PPE, cyanide antidote and oxygen in the case of an emergency. BMM has copies of the Cyanco cyanide delivery procedure. The transporter offload procedures are designed to prevent the potential for release.
**PRINCIPLE 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 utilizing contingency planning and inspection and preventive maintenance procedures.

☑️ in full compliance with

☐ in substantial compliance with Standard of Practice 4.1

☐ not in compliance with

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 4.1. BMM has developed a series of SOPs and operation plans that cover the management and operation of the cyanide facilities (e.g. carbon columns, heap leach operations and ponds). The WPCPs (NEV50045 and NEV98100) also specify operating procedures and regulatory requirements for cyanide process solution management. BMM has prepared and submitted to Nevada Department of Environmental Protection (NDEP), Detailed Project Descriptions, Fluid Management Plans, Monitoring Plans, and Emergency Action Plan, Hazmat Response Plan, for the two Mooney Basin operations and Process #2. These plans along with the SOPs cover the safe operation of the entire cyanide management facilities including detail for the specific task operating procedures. The 2013 Recertification Audit included review of written procedures, SOPs, plans, and interviews.

The BMM Fluid Management Plans have a section that covers upset operating conditions and process component shutdown. BMM has also developed and implements inspection and preventive maintenance programs which include practices for safe and environmentally sound operation of the facilities.

BMM has established inspection frequency on a daily, weekly, and monthly basis. Inspections include: cyanide tanks, secondary containments, leak detection and collection systems, pipelines, pumps, valves, ponds and leach pad areas. Inspection information includes information on the performance of the pad and pond leak detection and review of the pond levels. These inspections are sufficient to assure and document that cyanide facilities are functioning with the design parameters. The inspection documentation includes the name of the inspector, date and observed deficiencies. The BMM preventive maintenance programs are designed to assure the continuous and safe operation of the equipment for cyanide management. The elements necessary for cyanide safety (e.g., HCN monitors, tank level alarms, cyanide pumps, storage tanks, and others) are included in the preventive maintenance programs. BMM has two backup generators to ensure that pregnant and barren solution pumps operate. BMM has inspections that include regular testing of the backup power generators.

BMM utilizes the Barrick Management of Change (MOC) Procedure that is supplemented by the Bald Mountain Mine, Safety Policies & Procedures when an operational or process change, modification, or alteration (with the potential of impacting the environment or the health and safety of workers) is
proposed.

BMM has emergency power generators at Process #2, Mooney Basin North, and Mooney Basin South, which will operate critical pump functions (during power outages) for the barren and pregnant ponds.

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

☑ in full compliance with

☐ in substantial compliance with ☐ not in compliance with

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 4.2. BMM is a heap leach operation and does not employ milling technology.

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

☑ in full compliance with

☐ in substantial compliance with ☐ not in compliance with

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 4.3. BMM has developed both a probabilistic water balance models that allows for simulations of variable climatic conditions and a deterministic model for the mine site tracking of operational conditions using Excel. A probabilistic model using GoldSim has been developed for the permitting and operation of the Mooney Basin South and was developed with the assistance of Golder Associates. The models and supporting documentation using Excel were developed for Process #2 and Mooney Basin North operations and were developed by Knight Piesold Process facility inspection procedures and data collection programs have been implemented to update the water balance model on a regular basis. Daily shift inspections include operating levels in the process ponds, flow totalizers for pregnant and barren solutions and available freeboard monitoring that can be incorporated into the water balance model and operational planning to prevent potential overtopping. BMM measures precipitation for incorporation into the water balance for calibration and evaluation. The water balances are updated on an as needed basis to support tracking and evaluation of the system to prevent overtopping and discharge.

The water balance models include the potential effects of equipment failure and power outages with the
capacity of the pond system being available for gravity flow and considering a potential 24-hour drain down of solution from the heap leach facilities.

The BMM heap leach and pond facilities are designed and operated with adequate freeboard above the operating levels and contain sufficient design storm containment capacity. The Mooney Basin North area has three double lined process solution ponds and the Mooney Basin South area has two doubled ponds (solutions/barren and events). All ponds have an available 2-foot freeboard that can be used in emergencies to store excess solution.

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

☑ 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 is in full compliance with Standard of Practice 4.4. BMM has implemented several different measures to protect birds, wildlife, and livestock from contacting process solution with WAD cyanide concentrations at or above 50 mg/L. All pregnant and barren solution ponds are provided with bird balls and perimeter fencing to prevent wildlife access. All ditches on the heap leach facilities are gravel filled or pregnant solution conveyance is in HDPE piping within the ditches, i.e. pregnant solution collected from the Mooney Basin South heap leach facility is conveyed to the pregnant solution tank at the CIC process area in HDPE pipes. BMM has formal written procedures (“Heap Leach Operator SOP”) to avoid ponding and prevent overspray from the lined areas. BMM primarily uses drip-lines which are effective in reducing ponding. Areas of active leach are inspected every shift. All mine employees are trained in the monitoring and reporting requirements for wildlife.

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

☑ in full compliance with

The operation is    ☐ in substantial compliance with    Standard of Practice 4.5

☐ not in compliance with

**Basis for Audit Finding:**

The operation is Full Compliance with Standard of Practice 4.5. BMM does not discharge cyanide solutions to surface waters and does not have any indirect discharge of cyanide solutions to surface waters. BMM operates with zero discharge of process solutions. BMM conducts monitoring to
characterize the leak detection systems. No impact to beneficial uses has occurred according to the data presented in the monitoring reports. No surface water bodies are present at or near the site.

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

☑ in full compliance with

☐ in substantial compliance with Standard of Practice 4.6

☐ not in compliance with

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 4.6. BMM has implemented solution management and seepage control systems to protect groundwater below and down gradient of the operation. All cyanide facilities and process ponds have all been constructed with liners to prevent seepage. The Process #2 and Mooney Basin plants are designed to provide more than 110% containment capacity for process solution held within the plants for treatment in the carbon circuit. The Process #2 and the Mooney Basin North heap leach pads incorporate a composite liner with a solution collection system. The liner consists of an 80-mil high density polyethylene (HDPE) primary liner placed over a prepared 12-inch thick, imported low hydraulic conductivity soil layer. An underdrain system of perforated piping is placed over the 80-mil HDPE liner for solution collection and reduction of head on the liner system. The heap leach pad solution collection channels consist of a HDPE lined channel and a leak detection, collection and removal system to contain any process solution leaks from the collection channels. The Mooney Basin South heap leach pads also incorporate a composite liner with a solution collection system. However, the liner consists of an 80-mil high density polyethylene (HDPE) primary liner placed over a prepared 12-inch thick, imported low hydraulic conductivity soil layer or over a Geosynthetic Clay Liner (GCL) with equivalent or lower maximum permeability placed on a prepared subbase. An under drain system of perforated piping is placed over the 80-mil HDPE liner for solution collection and reduction of head on the liner system. The collection pipe system conveys fluids to the 30-inch diameter main collection header pipe running process facilities. Process ponds are double lined with leak collection/detection systems. The entire heap leaching facilities are designed as a zero-discharge system. Leak detection systems are monitored on a regular basis to provide early detection of potential releases of process solution from the fluid management system.

Review of the monitoring data indicated that the operation has no detectable WAD cyanide (<0.01 mg/L) in the groundwater at compliance points or down gradient of the operation. Review of the monitoring data indicated that BMM operations are protective of the beneficial uses of groundwater.
Standard of Practice 4.7: Provide spill prevention or containment measures for process tanks and pipelines.

☑ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

Standard of Practice 4.7

Basis for Audit Finding

The operation is in full compliance with Standard of Practice 4.7. Process #2 and both Mooney Basin process areas have spill prevention and containment measures for the cyanide offload area and storage tanks, and tank process areas. The Process #2, Mooney Basin North, and Mooney Basin South unload areas for the tanker trucks are on concrete pads. The Process #2 tanker truck unload pad is outside and drains into the cyanide storage tank concrete containment. The overflow of this containment drains to sumps in the plant into the process building containments or tanks. The Mooney Basin North and Mooney Basin South unload pads and storage tank containments are within the process buildings. Should either of the Mooney Basin floor sumps be overwhelmed the process building has a drain ditch to the adjacent ponds (pregnant pond for the Mooney Basin North and Solutions/barren pond for the Mooney Basin South). All the process tanks have secondary containments sized to hold a volume greater than that of the largest tank within the containment. The containments are constructed of cast-in-place reinforced concrete. SOPs require that spills be reported to supervisors and cleaned-up immediately. All of the process pipelines are constructed within HDPE lined ditches or within half pipe containments. BMM uses carbon steel and HDPE pipelines which are compatible materials for the conveyance of high pH, cyanide solutions, and slurries.

BMM has constructed all pipelines with spill prevention and containment measures to collect leaks and prevent releases. All of the process pipelines are constructed within HDPE lined ditches or within half pipe containments. The South Mooney Basin heap collected leach solutions are conveyed to the process plant in HDPE Pipe placed in lined channels on the periphery of the heap leach pad. The heap leach and ponds are designed to accommodate the barren and pregnant pipeline drainage volumes plus storm water as described in the Fluid Management Plans.

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.

☑ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

Standard of Practice 4.8
Basis for Audit Finding:

The operation is in full compliance with Standard of Practice 4.8. QC/QA programs have been implemented during construction of all new cyanide facilities and modification to existing facilities conducted since the Initial Certification Audit. BMM has implemented QC/QA programs for all earthworks projects related to tank foundations, compacted subgrades and geomembrane liners for ponds and heap leach facilities. The available QC/QA reports include information on subgrade preparation, grading, soil liner material properties and compaction characteristics, leak detection construction, solution collection piping, geomembrane liner seams and testing. The reports include copies of the field inspection reports, lab and field data, construction observations, and photographs.

The QC/QA documents indicate that the construction of the new and existing cyanide facilities was completed according to engineering standards and specifications. QC/QA reports have been verified by qualified engineering companies and include detailed QC/QA data collection and documentation. BMM maintains copies of all QC/QA documentation in its Engineering Department.

The 2013 Recertification Audit verified that QC/QA documentation previously reviewed for construction of BMM facilities is being maintained on site and that it is available for inspection and review. Also, the 2013 Recertification Audit included inspection and review of documentation for QC/QA programs for all new cyanide facilities and modifications made to existing facilities since the 2010 Recertification Audit.

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

- [☐] in full compliance with
- [☐] in substantial compliance with **Standard of Practice 4.9**
- [☐] not in compliance with

Basis for Audit Finding

The operation is in full compliance with Standard of Practice 4.9. BMM has developed environmental monitoring programs to evaluate the performance of the cyanide management systems on wildlife and groundwater quality. The environmental programs have been developed by appropriately qualified professionals, and reviewed and approved by NDEP. The plans include sampling and analysis documentation as required by the Code. The “Integrated Water Monitoring and Management Plan” includes groundwater monitoring sites, sampling and analytical protocols, monitoring data evaluation and sampling and reporting frequencies including sampling parameters (cyanide species). Appendix A of the plan entitled “Water Quality Sampling Plan” describes sample labeling, sample preservation and storage, field measurements, sample handling, equipment decontamination, chain of custody procedures and quality control procedures.

BMM does not discharge cyanide process waters to surface water. BMM monitors groundwater in two water supply wells (Process #2) and monitoring wells (Mooney Basin) annually and quarterly, respectively.
BMM inspects for and record wildlife mortalities on a daily basis as part of their inspection programs. BMM conducts monitoring at frequencies adequate to characterize the ground water, leak detection systems, process solutions, and wildlife.
PRINCIPLE 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

☐ in substantial compliance with Standard of Practice 5.1

☐ not in compliance with

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 5.1. BMM has prepared closure plans for review and approval by the BLM and NDEP. Closure plans are in accordance with the applicable state and federal requirements. The plans contain guidelines to decommission the cyanide facilities including, the heap leach facility, process ponds, collection ditches, and equipment that has contained process solutions. Measures include cyanide stabilization/neutralization, and treatment of outflows, residual chemicals, or fluids. BMM is required by NDEP and BLM to review and update its reclamation plans at least every three years and to incorporate project changes. The closure and reclamation plan includes an implementation schedule and performance monitoring.

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

☑ in full compliance with

☐ in substantial compliance with Standard of Practice 5.2

☐ not in compliance with

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 5.2. BMM has developed cost estimates for the funding of third party implementation of the decommissioning activities for the cyanide-related facilities and activities. The cost estimates have been reviewed and approved by the NDEP and the BLM. NDEP and BLM require BMM to review and update the cost estimate at least every three years or as required by changes in planned disturbances. Additional reporting requirements by the U.S. Securities Exchange Commission require that mine closure liabilities be re-evaluated every year. Barrick requires ongoing review and update of the Life of Mine Plan. BMM has established an approved surety bond to cover the estimated costs for cyanide related decommissioning activities.
PRINCIPLE 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 and control them.

☑️ in full compliance with

☐ in substantial compliance with **Standard of Practice 6.1**

☐ not in compliance with

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 6.1; requiring that that site identify potential cyanide exposure scenarios and take measure as necessary to eliminate, reduce, and control them. Bald Mountain Mine (BMM) has Standard Operating Procedures (SOPs) describing how cyanide-related tasks are performed. These documents describe personal protective equipment (PPE) requirements, hazards, permits required, health and safety training required, special equipment required, special tools, operator responsibilities, and require a field level risk assessment to be undertaken prior to the task commencing.

The Inspection Policy calls for pre-shift or pre-use inspections by both employees and supervisors. These are recorded on daily work inspection forms. Procedures to review proposed process and operational changes and modification for their potential impact on employees’ health and safety are controlled under the Barrick Corporate Management of Change (MoC) Procedure and Formal Risk Assessment. This ensures the safety aspects of proposed process and procedural changes address worker safety. Worker input is sought and implemented while developing or modifying safe work procedures, through the use of continuous improvement forms and Health Risk assessments of personnel working in the heap leach pads and process plants.

Employees can use Environmental Health and Safety meetings that take place every day to bring up any areas of concern or topics. The mine also has suggestion boxes to make suggestions for improvements regarding worker safety and other concerns.

**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.

☑️ in full compliance with

☐ in substantial compliance with **Standard of Practice 6.2**

☐ not in compliance with
Basis for Audit Finding:

The operation is in full compliance with 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. The 'Heap Leach Operator' SOP discusses the importance of maintaining the pH level between 10.0 and 10.5. The operator checks the pH and cyanide concentration at several locations twice during a shift and records the information on the 'Process Operations Shift Report.' BMM uses both fixed and portable HCN monitors to ensure that worker exposure to HCN gas is limited. Operators and maintenance workers who work on cyanide equipment or a confined space entry wear GasBadge Pro HCN monitors at all times. BMM has identified the areas where workers may be exposed to cyanide in excess of 10 ppm and require the use of PPE. This is documented in the 'GasBadge Pro Personal HCN Gas Monitor' SOP. The fixed HCN monitors are calibrated every month in accordance with the manufacturer's recommendations. Portable HCN monitors are equipped with a docking station that maintains the electrical charge, performs monthly calibrations, and registers a continuous, digital maintenance record. Every time the monitor is docked the high and low level alarms are tested.

Signs are provided in all areas where cyanide is used including offloading areas, process tanks, and leach pond areas. Pipes carrying cyanide are marked and color coded and the direction of flow is indicated with arrows on the pipe. Boards within the process plants show the color coding used for the different pipes. No mixing of solid cyanide takes place at BMM. Shower and eyewash stations are located at the cyanide offloading areas and throughout the process areas. Fire extinguishers are located throughout the facility. These are checked regularly as part of a planned maintenance program. MSDS are available throughout the plant at any computer terminal via the site-wide computer network on the 3E database. The MSDS's are in English, the language of the workforce. BMM's 'Safety Policies and Procedures - Accident/Incident Reporting & Investigation' details reporting and accident investigation requirements to prevent future occurrences, including cyanide exposure incidents.

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

- [x] in full compliance with

**The operation is**

- [ ] in substantial compliance with Standard of Practice 6.3
- [ ] not in compliance with

Basis for Audit Finding:

The operation is in full compliance with Standard of Practice 6.3; develop and implement emergency response plans and procedures to respond to worker exposure to cyanide. BMM has cyanide antidote kits and other equipment required for treating potential victims of cyanide exposures at suitable locations. First aid equipment (including cyanide antidotes) is regularly inspected to ensure it will function correctly and remains within its useful life. BMM has specific written plans for dealing with cyanide exposures. BMM has appropriately trained First Responders and all workers who work with cyanide have received cyanide training which includes first aid training. BMM has formal arrangements with Northeastern Nevada Regional Hospital in Elko and William Bee Ririe Hospital in Ely through written correspondence,
that BMM uses sodium cyanide at the mine site; and that there may be cyanide exposed victims needing to be transported and treated in hospital. The hospitals have acknowledged, in writing, that they are prepared to treat cyanide exposure victims. A number of mock drills have taken place in the last three years. Drills are performed to test the emergency response procedures developed at BMM, and to incorporate learnings from these drills into revised procedures. The last drill took place in October 2013.
PRINCIPLE 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.

- [X] in full compliance with

The operation is

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

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 7.1; prepare detailed emergency response plans for potential cyanide releases. BMM has developed an Emergency Action Plan (EAP) to address potential accidental releases of cyanide. The EAP considers all reasonably foreseeable cyanide failure scenarios, including on-site transportation incidents. The cyanide supplier and transporter take primary responsibility for any accidents resulting in a cyanide spill up to the point of unloading at BMM. However, the BMM Cyanide Emergency Response Plan - Attachment A, states that BMM will respond or assist in an emergency situation at the request of the transport company or local emergency response officials. Cyanco supplies cyanide from their Winnemucca, Nevada terminal and TransWood delivers (transports) the cyanide to the BMM facility. Both of these companies have been certified to be fully compliant with the ICMC. The EAP addresses the potential need for evacuation of both the operation and potentially affected communities. The EAP describes measures and guidelines to evaluate situations, provide first aid, administer antidote, report the situation, and undertake appropriate spill control and cleanup measures.

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

- [X] in full compliance with

The operation is

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

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 7.2; involve site personnel and stakeholders in the planning process. BMM's workforce participates in the emergency response planning process through participation in mock drills and safety training and Safety Huddles. The BMM Mine Rescue Coordinator is a member of the White Pine County Local Emergency Planning Committee (LEPC). Members of LEPC include representatives of the fire department, local hospitals, the sheriff’s office, media, radio, the Red Cross, Nevada Department of Transport and another mine located in the county. Through the participation with the LEPC, the committee is informed about possible emergency situations.
at the mine and the availability of the mine to respond to county emergencies. The committee meets four times a year. BMM gives a copy of their EAP to the committee on an annual basis as well as to William Bee Ririe Hospital in Ely. Local emergency responders have been involved in the emergency planning process through LEPC. BMM consults and communicates with stakeholders to ensure the emergency response plan is kept current.

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

☑ in full compliance with

☐ in substantial compliance with Standard of Practice 7.3

☐ not in compliance with

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 7.3; designate appropriate personnel and commit necessary equipment and resources for emergency response. BMM has designated appropriate staff equipment and other resources for emergency response. BMM has confirmed that outside responders understand their roles in an emergency situation and their willingness to be involved in mock drills. BMM has notified Northeastern Nevada Regional Hospital in Elko and William Bee Ririe Hospital in Ely that the mine uses cyanide and that it may be necessary to transport a patient exposed to cyanide to hospital. The EAP and Spill Emergency Response Plan have a list of equipment including PPE, spill kits, gas detectors, and amyl nitrate locations. A Haz-mat response trailer, containing emergency response equipment, can be quickly deployed to the site of an emergency. The EAP provides contact information and defines roles for off-site responders including ambulance, hospital, fire, and sheriff. The EAP states that in multiple patient incidents emergency dispatch (911) should be called immediately.

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

☑ in full compliance with

☐ in substantial compliance with Standard of Practice 7.4

☐ not in compliance with

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 7.4; develop procedures for internal and external emergency notification and reporting. The EAP includes procedures and telephone numbers for notification of management, regulatory agencies, and outside response providers and includes local community officials in Elko, Eureka, and Ely, state, federal, and government agencies along with Nevada Division of Environmental Protection, hospital, and ambulance details. The EAP defines a Crisis
Management Team that notifies and communicates with the public. It describes notification requirements and lists governmental agencies to call. The EAP provides telephone numbers for: Northeastern Nevada Region Hospital - Elko and William Bee Ririe - Ely, Access Air, Bureau of Land Management, and facility personnel responsible for emergency response. The EAP also provides telephone numbers for the local radio and television stations as well as the newspaper.

**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
  - [ ] not in compliance with

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 7.5; incorporate in response plans and remediation measures monitoring elements that account for the additional hazards of using cyanide treatment chemicals. The EAP and Cyanide Emergency Response Plan specifies specific remediation measures required for a range of solid and liquid cyanide releases. They call for moving any released material back into containment or an area approved for the storage of materials laden with cyanide. Usually this would be a heap leach pad, but the EAP calls for coordination with the Environmental Department. SOP012 details the use of sodium hypochlorite for plant solution spills. There are no natural surface water bodies on the property or adjacent to the property and treatment of a cyanide release to surface waters is not applicable. The sampling plan requires performing sampling as per Nevada Division of Environmental Protection's (NDEP's) requirements to assure proper sampling and analytical test methods are used.

**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
  - [ ] not in compliance with

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 7.6; periodically evaluate response procedures and capabilities and revise them as needed. The EAP includes a procedure to review the plan annually and update as required. For example changes at the mine have required the addition of new process areas and emergency equipment to be updated in the 2013 version. In addition, BMM conducts
mock drills to practice and prepare for emergencies and to provide insight into the effectiveness of the EAP. Mock drills are undertaken on a regular basis to test response procedures for various cyanide exposure scenarios; lessons learnt from the drills are incorporated into response planning. Following each drill a debrief takes where the drill is discussed and corrective actions are written. In addition, if the drill did not go according to plan a walk back over the drill is undertaken to provide immediate continuous improvement training.
PRINCIPLE 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

☐ in substantial compliance with Standard of Practice 8.1

☐ not in compliance with

**Basis for Audit Finding:**

The operation is in full compliance with Standard of Practice 8.1; train workers to understand the hazards associated with cyanide use. All personnel and contractors receive site hazard training which includes an element on cyanide awareness including the health effects of cyanide, symptoms of cyanide exposure, and procedures to follow in the event of exposure. Annual refresher cyanide training is given. Training records are retained by the Safety Department and the Process Department. MSHA Annual refresher training records (Part 48) for each employee are retained on site by the Safety Department.

*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.

☑️ in full compliance with

☐ in substantial compliance with Standard of Practice 8.2

☐ not in compliance with

**Basis for Audit Finding:**

The operation is in full compliance with 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. Employees assigned to operational areas where cyanide is used (such as unloading, processing, and maintenance) are trained on the safe use and handling of cyanide. Training is provided on process SOPs and instruction on the proper use of the equipment and related safety issues. A competent person provides the training. An employee is required to demonstrate competency prior to working in an area. This is achieved through dialogue with the trainer and by the trainer observing and testing the employee. A record is maintained demonstrating the training the employee has received. All jobs involving cyanide are detailed in SOPs. Annual training is given on all SOPs and training records showing this are retained. The mine's training program is submitted to Mine Safety and Health Administration (MSHA) every two years for approval.
The Process Department provides annual refresher classes that are specific to the tasks undertaken. Following these classes each employee completes a Cyanide Safety Review test which is documented and kept on site. Annual training is given on all SOPs and training records showing this are retained. BMM maintains training records for each employee throughout the entire period of their employment. The records include the names of the employee and the trainer, the date of training; the topics covered, and test results. The Process General Supervisors also maintain a 'Training Tracker' that lists the SOPs and the MSHA 5000-23 categories that are applicable to the cyanide process areas. All process employees who work with cyanide are listed on the tracker. 'Checks' are provided to indicate where the employees have been trained on certain SOPs or types of equipment. Appropriately qualified personnel deliver the training, with external specialists engaged as required. Specific task training where cyanide management activities are involved is given by competent workers or supervisors in these departments. Trainers providing the cyanide awareness courses are MSHA certified trainers.

**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**

The operation is in full compliance with Standard of Practice 8.3; train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide. All employees, including those assigned to a specific area where cyanide is an integral part of the operation or process, such as unloading, mill operations, and maintenance, are trained on the safe use and handling of cyanide. The training includes the use of process SOPs and includes instruction in decontamination and first aid procedures for cyanide release incidents. SOPs include requirements for understanding the emergency response procedures and knowing where emergency response equipment is stored. Emergency response procedures are provided to all employees through the 'Cyanide Safety Hazard' training.

BMM requires that Emergency Responders (First Responders) are either First Responder Emergency Medical Services or Emergency Medical Technician certified. First Responders and Mine Rescue receive Hazardous Waste Operations and Emergency Response (HAZWOPER) training. Mine Rescue also receive Wildland Fire Fighting training from the Bureau of Land Management, ropes training, medical (first aid, administering oxygen, and amyl nitrate). In addition, twice a month Emergency Response personnel meet for training. The topics vary each month and include Cardiopulmonary Resuscitation (CPR), first responder refresher training, Wildland Fire Fighting, HAZWOPER refresher (which includes spill response, decontamination procedures, paperwork and records training, hazard classes, use of PPE, chemistry, toxicology and use of SCBA).

Mock drills are undertaken on a regular basis to test response procedures for various cyanide exposure scenarios and environmental releases. Lessons learnt from the drills are incorporated into response planning. Following each drill a debrief takes where the drill is discussed and corrective actions are
written and implemented. In addition if the drill did not go according to plan a walk back over the drill is undertaken to provide immediate continuous improvement training. The Safety Department conducted 8-hour MSHA (Part 48) annual refresher training with all employees on a number of safety related subjects, including an hour long presentation on cyanide awareness during 2011 and 2012. This consisted of a PowerPoint presentation covering cyanide emergencies, symptoms of cyanide poisoning, how to recognize cyanide solution amongst other topics. During 2013, the mine started providing all employees and contractors with general information on cyanide operations. All employees and contractors that work with and or around cyanide operations are provided with detailed training on SOPs, emergency response and first aid training procedures.
PRINCIPLE 9 – DIALOGUE
Engage in public consultation and disclosure.

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

☑️ in full compliance with

☐ in substantial compliance with Standard of Practice 9.1

☐ not in compliance with

Basis for Audit Finding:
The operation is in full compliance with Standard of Practice 9.1; provide stakeholders with the opportunity to communicate issues of concern. BMM has continued to hold a number of community engagement initiatives including site visits, participating with White Pine County Commissioners and Local Emergency Planning Committee (LEPC) and attending other community groups to enable the groups to learn about the mine operations and voice concerns.

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

☑️ in full compliance with

☐ in substantial compliance with Standard of Practice 9.2

☐ not in compliance with

Basis for Audit Finding:
The operation is in full compliance with Standard of Practice 9.2; initiate dialogue describing cyanide management procedures and responsively address identified concerns. Any person or organization may request a visit to the BMM to learn more about the operation. This would provide them with the opportunity to ask questions about the use of cyanide. Further, to help with stakeholder communications, the regional manager of Communications and the Community Affairs manager, represent BMM on numerous civic groups in the Northeastern Nevada Region. Individuals can easily contact BMM to express interest and concerns about the BMM operation and the use of cyanide.
Standard of Practice 9.3: Make appropriate operational and environmental information regarding cyanide available to stakeholders.

☑️ in full compliance with

☐ in substantial compliance with Standard of Practice 9.3

☐ not in compliance with

Basis for Audit Finding:

The operation is in full compliance with Standard of Practice 9.3; make appropriate operational and environmental information regarding cyanide available to stakeholders. BMM makes operational and environmental information regarding cyanide available through its website, site visits and in presentations provided to local community groups; the majority of the local population is literate and written information is considered adequate; information regarding cyanide releases is made available through a number of company and official outlets such as the websites, sustainability report, and regulatory authorities.