INTERNATIONAL CYANIDE MANAGEMENT CODE AUDIT
BALD MOUNTAIN MINE, NEVADA
SUMMARY AUDIT REPORT

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

and

International Cyanide Management Institute
1200 G Street N.W., Suite 800
Washington, D.C. 20005

Submitted by:
Golder Associates Inc.
44 Union Boulevard, Suite 300
Lakewood, Colorado 80228

January 8, 2008
LOCATION AND DESCRIPTION OF OPERATION

The Bald Mountain mine is an open-pit, run-of-mine, heap leach gold mine located in northeastern Nevada, United States, approximately 95 miles northwest of Ely, Nevada and 68 miles southeast of Elko, Nevada. Bald Mountain owns approximately 9,010 claims within the Bald Mountain Mining District and this area covers approximately 154,440 acres. The total land position is 30 miles long north to south by 11 miles wide east to west on average.

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

Mining is conducted at multiple pits located on the property and run-of-mine ore is hauled to two, separate heap leach areas – the 2/3 Pad and the Mooney Pad. The 2/3 Pad incorporates the Process Area 2 (Process 2) processing facilities that includes adsorption, desorption, and recovery facilities. Loaded carbon is stripped and refined at Process 2. The 2/3 Pads are constructed on 80-mil high density polyethylene (HDPE) primary liners with a pad leak detection system, and at least six inches of low permeability compacted soil liner underlying the primary liner. The No. 5, 6, and 7 pregnant solution ponds of Process 2 consist of primary and secondary HDPE synthetic liners with geonet between the liners. The Mooney heap leach pad consists of a composite liner system with an 80-mil HDPE liner placed above a prepared 12-inch thick compacted low permeability soil layer. Pregnant solution from the leaching operations at both the 2/3 Pads and Mooney reports to the pregnant ponds where it is pumped to the adsorption, desorption and recovery (ADR) plants at the respective facilities. The pregnant ponds are designed and constructed with an 80-mil HDPE primary liner and a 40-mil HDPE secondary liner placed over a prepared native soil subgrade. Sandwiched between the primary and secondary liners is an HDPE geonet which serves as a leak detection system. The pregnant solution is pumped to the carbon columns where it gravity flows, countercurrent to the activated carbon for precious metal recovery. Barren solution reports to the barren tank where the pH is adjusted, if necessary, and sodium cyanide is added prior to pumping to the heap. The loaded carbon from the last column is removed and transported to Process 2 for stripping and refining. Processing facilities at Process 2 and Mooney 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.
Bald Mountain receives liquid sodium cyanide from DuPont De Nemours &Co., Inc. (DuPont) located in Carlin, Nevada in specially engineered tanker trucks. Sentinel Transportation LLC (Sentinel) delivers the sodium cyanide to the mine site. Both DuPont and Sentinel are signatory to the Code and have been certified as compliant with the Code by third-party auditors. Bald Mountain stores and manages sodium cyanide in engineered tanks, pipelines and lined ponds that have had appropriate quality control and quality assurance. Bald Mountain employees are trained in cyanide hazards and first aid, first response, emergency response, and specific operational task training. Bald Mountain facilities are fenced to preclude wildlife and livestock from entering cyanide process areas. Bald Mountain 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 the continuous operations. Bald Mountain has approved closure and reclamation plans along with financial assurance to complete the appropriate management of cyanide solutions and solids, and the decontamination of cyanide pipelines and equipment.

Bald Mountain 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. Wildlife monitoring is conducted per shift by the operators during facility inspections.

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

Audit Dates: October 15 -18, 2007
Auditors: Scott Miller, Lead Auditor
Brent Bailey, Gold Mining Technical Expert Auditor

SIGNATURES

This Gold Mining Verification Audit Report presents the detailed findings of our International Cyanide Management Code audit of the Bald Mountain Mine located in Nevada. The audit was conducted according to the IMCI Gold Mining Verification Protocol dated September 2007.

Respectively submitted by:

Scott H. Miller, CEA
Lead Auditor

Brent C. Bailey, P.E.
Gold Mining Technical Auditing Expert

Bald Mountain Mine
Name of Facility

January 8, 2008
Date

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SUMMARY AUDIT REPORT
Bald Mountain Mine ICMC Audit

☑  in full compliance with

☐  in substantial compliance with

☐  not in compliance with

All Code Principles

Audit Company:
Golder Associates Inc.

Audit Team Leader:
Scott H. Miller

E-mail:
Scott_Miller@golder.com

Names and Signatures of Other Auditors:

Brent C. Bailey

Brent C. Bailey
Name of Auditor

Signature of Auditor

January 8, 2007
Date

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.

Scott Miller

My commission expires: 11/01/2010

Notary Public
State of Colorado

Bald Mountain Mine
Name of Facility

Signature Lead Auditor

January 8, 2008
Date

Golder Associates
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

The operation is ■ in substantial compliance with Standard of Practice 1.1

■ not in compliance with

Basis for Audit Finding: Bald Mountain has committed to only purchase cyanide from producers that are compliant with the International Cyanide Management Code (ICMC). Barrick Gold has a supply contract with DuPont De Nemours & Co., Inc. (DuPont) to provide sodium cyanide at Bald Mountain. DuPont has been audited by third party independent auditors and certified as compliant under the ICMC.

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

The operation is ■ in substantial compliance with Standard of Practice 2.1

■ not in compliance with

Basis for Audit Finding: Bald Mountain has a sodium cyanide supply contract with DuPont. DuPont is by contract solely responsible for the production and transport of sodium cyanide to the delivery point at Bald Mountain. DuPont is a signatory producer to the ICMC and subcontracts Sentinel Transportation LLC (Sentinel) for transportation of the cyanide to Bald Mountain. Sentinel has been certified by third party independent auditors as compliant with the ICMC with clear lines of responsibility for safety, security, release prevention, training, and emergency response.
**Standard of Practice 2.2:** Require that cyanide transporters implement appropriate emergency response plans and capabilities and employ adequate measures for cyanide management.

- **X** in full compliance with
- **☐** in substantial compliance with
- **☐** not in compliance with

**Basis for Audit Finding:** DuPont is by contract solely responsible for the production and transport of cyanide to the delivery point at Bald Mountain. Solid sodium cyanide is shipped from the DuPont manufacturing facility in Memphis, Tennessee to the Carlin Terminal via Union Pacific Railroad and Canadian National Railroad. This is followed by truck transportation of liquid sodium cyanide to the mine. DuPont is a signatory producer to the ICMC and has conducted appropriate due diligence by qualified third party independent auditors on the rail transportation security, safety, training and emergency response aspects. DuPont subcontracts Sentinel for transportation of the cyanide to Bald Mountain. Sentinel has been certified by third party independent auditors as compliant with the ICMC with appropriate emergency response plans and capabilities and has implemented cyanide management control measures.

**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
- **☐** in substantial compliance with
- **☐** not in compliance with

**Basis for Audit Finding:** Bald Mt. has two, separate unloading and cyanide storage facilities: (1) Mooney Process Building and (2) the Process #2 Building. A registered Professional Engineer in the State of Nevada evaluated the facilities and provided a stamped report that verifies the containment volumes for emergency spills and leaks from the cyanide storage tank storage areas have been designed and constructed in accordance with existing Nevada State requirements and accepted engineering practices. The Mooney cyanide storage tank is located within Process Building that contains two sets of carbon columns, and the barren tank. The engineering evaluation showed that the secondary containment exceeds the State requirements. Additionally, the design package for Process 2 shows that the concrete containment volume meets emergency containment requirements. A Professional Engineer registered in the State of Nevada stamped the design and as-built drawings. A DuPont inspection report on the cyanide storage and containment facilities showed compliance with their guidelines. Both cyanide off-load areas are within the fenced, secured areas of the mine. The
unloading 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 unloading and storage facilities, including contractors, receive site-specific health and safety training that includes cyanide hazard awareness. The Process #2 cyanide off-load area and storage tank are located outside, adjacent to the process building. Both the Mooney and Process #2 unload areas for the tanker trucks are on concrete pads. The cyanide storage tanks are located on concrete pads and within concrete curbed containment that prevents seepage to the subsurface – the cast-in-place reinforced concrete containments in the cyanide storage areas are competent barriers to prevent leakage. The Mooney tanker truck containment is within the process building that drains into the curbed containments of the building with excess overflow to the adjacent pregnant pond. The Process #2 tanker truck unload pad is outside and drains into the cyanide storage tank concrete containment. The two Bald Mt. cyanide storage tanks have level indicators and high level alarms that prevent overfilling.

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.

☑ in full compliance with

☑ in substantial compliance with Standard of Practice 3.2

☐ not in compliance with

Basis for Audit Finding: Bald Mt. has developed and implemented standard operating procedures to prevent exposure and releases for cyanide during unloading, storage, and use. The SOPs “Receiving Cyanide Shipment”, “Reagent Receiving Checklist”, “Cyanide Tank Level Reference Charts for Mooney and Process #2” and Sentinel’s “Required PPE and Unloading Procedures 30% Sodium Cyanide Solution Tankers” cover the responsibilities for the transporter and the site personnel. Off-loading does not occur until a Bald Mt. 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 has sufficient capacity for the off-load. The Bald Mt. operator wears a Gas Badge for HCN monitoring and has a site radio for emergency communication if required. Additionally, the Bald Mt. operator and transport driver have ready access to PPE, cyanide antidote and oxygen in the case of an emergency. Bald Mt. has copies of the Sentinel Off-Loading SOP posted on the wall near the storage tanks which includes detailed information on the operation of valves and couplings. The SOPs require the immediate clean up of spill in the offload and cyanide storage area.
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.

- [x] in full compliance with

**The operation is**
- [ ] in substantial compliance with Standard of Practice 4.1
- [ ] not in compliance with

**Basis for Audit Finding:** Bald Mt. has developed a series of procedures for the operation of the carbon columns, heap leach pads, and process ponds that address protection of human health and the environment. There are Process Descriptions, Fluid Management Plans, Monitoring Plans, and Hazardous Materials Spill and Emergency Response Plans for both Mooney Basin and the Bald Mt. Projects. Included in the policies is a policy for managing process changes. The maintenance department uses Oracle® Asset Management that includes identifying, assigning responsibility, scheduling, and tracking the completion of the preventive maintenance activities. The Fluid Management Plans for the two processing areas covers operational water management strategies and includes sections covering Emergency or Unusual Operating conditions. These documents specify actions for differing pond water elevations and management strategies for process solution conveyance to prevent discharge to the environment. Bald Mt. conducts cyanide equipment and facilities inspections on a shift and monthly basis Daily inspections for the Carbon Plant and heap leach area include safety and environmental concerns, pond and pad leak detection systems, reagent offload and storage areas, containment area integrity. Additionally, the daily inspections are conducted to assure the proper function of the process facilities, leach application, wildlife monitoring, plant operations and the integrity of the piping, tanks and containments. The monthly inspections include detailed inspection of the cyanide equipment and facilities and performance of the pads, pond leak detection systems, and reviews of the pond levels. The Bald Mt. preventive maintenance programs are designed to assure the continuous and safe operation of the equipment for cyanide management. There are emergency power generators at both Process #2 and Mooney Basin to operate critical pump functions during power outages.

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

- [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: Bald Mountain 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.

- [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: Bald Mt. has developed both a probabilistic water balance model that allows for simulations of variable climatic conditions and a deterministic model set up for the mine site tracking of operational conditions using Excel®. Two water balances were developed, one for the Bald Mt. (2/3 Pad) side and the second one for the Mooney Basin side. The water balances consider heap leach application rates in a reasonable manner using daily time steps. The application rates are based on actual, typical operating values. The models incorporate variable values for the delivered ore moisture content depending on rock type. The water balances include the evaluation of a number of scenarios to prevent the potential for overtopping of process ponds. The water balance incorporates the precipitation and evaporation data measured from the weather station at Ruby Lake located approximately 15 miles northeast of the Bald Mt. side of the project. Additionally, Bald Mt. measures precipitation at two weather stations, one each at Mooney Basin and Bald Mt. for incorporation into the water balance for calibration and evaluation.

**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: Bald Mt. has implemented several different measures to restrict access by wildlife and livestock to open solutions containing cyanide. At Bald Mt. 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. All mine employees are trained in the monitoring and reporting requirements for wildlife. Bald Mt. has formal written procedures (“Heap Leach Operator SOP”) to avoid ponding and prevent overspray from the lined areas. Bald Mt. primarily uses buried drip-lines which are effective in reducing ponding. The Mine Operations Department is responsible for the heap leach ramp designs to include the construction of swales at the points where the ramps cross the liner to collect and route stormwater and/or process water off the ramp and onto the liner. The Mine Operations Department has developed a formal procedure (“Ramp Construction (Leach Pad)”) that addresses the swale design and construction. Bald Mt. wildlife control practices are effective in preventing wildlife mortality on the heap leach, bird covered ponds and gravel filled channels.
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: Bald Mtn. is designed and operated for zero-discharge of process fluids. Operation performance history, design criteria and the project water balance indicate that facilities operation is consistent with the zero-discharge requirements. Monitoring information indicates there is no impact to groundwater or surface water quality from the heap leach operations or process ponds. Spill prevention and emergency response plans have been developed to comply with the zero-discharge operating requirements.

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

The operation is ☐ in substantial compliance with Standard of Practice 4.6 ☐ not in compliance with

Basis for Audit Finding: Bald Mt. has implemented solution management and seepage control systems to protect ground water below and down gradient of the operation. All pipelines are within HDPE lined channels, corrugated half pipes, or pipe in pipe configurations. The Process #2 heap leach facilities are underlain by 80-mil HDPE liner and 6-inch thick, low permeability, compacted soil layer. The heap leach facilities are divided into cells that drain to process ponds. All ponds are double lined HDPE with leak collection and recovery systems. All pipelines are contained with lined HDPE channels (within corrugated half pipes) or located on the heap leach facility. The Mooney Basin has heap leach facilities underlain by 80-mil HDPE liner and 12-inch thick low permeability compacted soil layer. The solution ditch within the lined area of the heap leach facilities also has a leak collection and recovery system located between double HDPE liners with standpipe monitoring locations. The heap leach cells drain to ponds that are all double lined HDPE with leak collection and recovery systems. All leak collection and recovery systems are monitored on a daily basis and reported to NDEP as weekly averages. Review of the Bald Mt. and Mooney Basin environmental monitoring data indicates that the operations have no detectable WAD cyanide (<0.005 mg/L) in the ground water monitoring points.
**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

**Basis for Audit Finding:** Bald Mt. (Process 2) and Mooney Basin have spill prevention and containment measures for the cyanide unload areas, the storage tanks, and tank process areas. The Process 2 unload pad has an overflow drain to the concrete containment of the storage tank that has been sized to contain 110% of the tank. The storage tank containment has a sump that allows pumping of collected solution into the process building containments or tanks. The single largest tank at Process 2 is the barren solution tank and pump box. If this tank spills, the solution would flow into the Process Building containment area which has the capacity for 110% of this tank. The Mooney Basin cyanide storage tank and unload pad are located with the Process Building. All spills within the process building drain to a central floor sump where solution can be pumped into the process circuit. The process building has a gravity overflow pipe to the adjacent pregnant solution pond. The Mooney Basin barren tank is also located inside the building and is the single largest tank. If the tank were to spill the solution would flow to the sump and over flow to the adjacent pregnant pond. The containments are constructed of cast-in-place, reinforced concrete. Process SOPs require that spills be reported to supervisors and cleaned-up immediately. Bald Mt. has constructed all pipelines with spill prevention and containment measures to collect leaks and prevent releases. The heap leach and ponds are designed to accommodate the barren and pregnant pipeline drainage volumes. Bald Mt. uses carbon steel and HDPE pipelines which are compatible materials for the conveyance of high pH, cyanide solutions and slurries.

**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

**Basis for Audit Finding:** Bald Mt. has implemented QC/QA programs for all earthworks projects related to tank foundations, compacted subgrades, compacted soil liners, geomembrane liners for ponds and heap leach facilities. The QC/QA reports are stamped by Professional Engineers licensed in the State of Nevada and have also been reviewed and approved by the Nevada Department of Environmental Protection. Bald Mt. maintains copies of all available QC/QA documentation in its Environmental Department. These reports have been complemented by engineering evaluations of the (a) heap leach facilities, (b) process solution ponds, and (c) process building and appurtenant facilities that concluded that the facilities have been constructed and are operated in general accordance with industry standards of practice and care and that the facilities comply with the provisions and intent of the ICMC particularly with respect to the presence of secondary containment features that will prevent an uncontrolled release of cyanide-bearing solutions.
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

The operation is ☐ in substantial compliance with ☐ not in compliance with

Basis for Audit Finding: Bald Mt. has developed environmental monitoring programs to evaluate the performance of the cyanide management systems on wildlife, and surface and groundwater quality. The sampling and analytical protocols have been developed by appropriately qualified environmental professionals and include a Quality Control (QC) Plan. These procedures have been reviewed and approved by Nevada Department of Environmental Protection. The water quality sampling document specifies the standard sampling procedures for surface water, process water and ground water including sample preservation requirements. Locations of sampling sites and sample parameter lists including cyanide species are also specified. Chain of Custody procedures are included. Bald Mt. provides wildlife mortality training to all employees with annual refresher training. Bald Mt. conducts monitoring at frequencies adequate to characterize the ground water, leak detection systems, process solutions, and wildlife.

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

The operation is ☐ in substantial compliance with ☐ not in compliance with

Basis for Audit Finding: Bald Mt. has prepared closure plans for review and approval by the US Department of Interior Bureau of Land Management (BLM) and NDEP. Closure will be 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. All Barrick operations are required to have Life-of-Mine Budgets that provides a general schedule for closure activities. The Bald Mt. internal Life of Mine Plan provides a budget and schedule for implementing closure activities. Bald Mt. is required by the Nevada Division of Environmental Protection (NDEP) and Department of Interior Bureau of Land Management (BLM) to review and update the Reclamation Plan at least every three years. Closure planning includes a recent reclamation cost update.
Standard of Practice 5.2: Establish an assurance mechanism capable of fully funding cyanide related decommissioning activities.

☒ in full compliance with

The operation is ☐ in substantial compliance with Standard of Practice 5.2

☐ not in compliance with

Basis for Audit Finding: Bald Mt. has developed cost estimates for the funding of third party implementation of the decommissioning activities for Bald Mt. (Pad 2/3) and Mooney Basin. The cost estimates have been reviewed and approved by the NDEP and the BLM. The total decommissioning and reclamation estimate is approximately $18M, with the process pond sludge disposal, heap leach neutralization, process water disposal, fluid management and post reclamation monitoring totaling approximately $3.3M for the two operations. Bald Mt. is required by NDEP and BLM to review and update the cost estimate at least every three years or as required by changes in planned disturbances. Bald Mt. has established an approved financial mechanism to cover the estimated costs for cyanide related decommissioning activities.

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

The operation is ☐ in substantial compliance with Standard of Practice 6.1

☐ not in compliance with

Basis for Audit Finding: The Bald Mountain operation has procedures and SOPs describing how cyanide-related tasks are performed. These documents describe PPE requirements, operator responsibilities, and procedures for using and handling cyanide. The transportation company’s unloading procedure are posted near the off-load areas and describes the methods, practices and possible hazards associated with unloading cyanide. In combination with the Bald Mt. procedures, these procedures provide a description of the PPE requirements, radio communications, maximum tank levels, eye wash/safety shower check, and description of the “red zone”. Bald Mt. has marked the “red zone” and restricts access without proper PPE during the unloading process. Bald Mt. manuals, SOPs, and task procedure documents include requirements for PPE and inspections for cyanide related tasks. The “Inspection Policy” calls for pre-shift inspections. Bald Mt. has a change management program for evaluation of proposed task and process changes. The program requires that appropriate actions be taken to ensure that safety performance levels are not compromised. Additionally, the “Inspection Policy” calls for a “Field Level Risk Assessment” for new, modified, or unfamiliar conditions. Bald Mountain solicits worker concerns and comments on safety issues through safety training and safety meetings. The SOP development process involves discussions with the crews to solicit their knowledge and opinions.
**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
- [x] not in compliance with

**Basis for Audit Finding**: Bald Mountain has developed management programs and SOPs for the cyanide usage areas designed to prevent the generation of HCN. These programs and procedures include maintaining the pH level between 10.0 and 10.5. SOPs and management programs discuss the use of PPE when working with cyanide facilities or equipment. The training programs include discussions about cyanide exposure and risks and prohibits eating, drinking, smoking, and chewing (tobacco or gum) in areas where cyanide is used and the use of proper PPE when working with cyanide. The cyanide safety class for the process and maintenance workers discusses maintenance of pH of process solutions at proper levels and includes information on hazardous levels of the HCN being generated at pH below 9.5. Fixed cyanide monitors are installed in critical locations the process plants. The location of these monitors was established and confirmed through a formal surveillance study. Training provides information on action levels for the fixed monitors and portable monitors. Prior to maintenance work on cyanide equipment or a confined space entry, work areas are checked for hydrogen cyanide concentrations with hand held HCN monitors. Signs are located at the doors of the Mooney Process building and the Process 2 building indicating the use of cyanide inside the buildings. Signs are provided in all areas were cyanide is used including off-loading areas and process tanks. Shower and eyewash stations are located at the cyanide off-loading areas and throughout the process areas. Fire extinguishers are located throughout the facility. Pipes carrying cyanide are marked and the direction of flow is indicated with arrows on the pipe. MSDS are available throughout the plant at computer terminals via the site-wide Bald Mt. computer network. Bald Mt investigates and evaluates accidents and incidents to prevent future occurrence, including cyanide exposure incidents. The “TapRooT” program is utilized to facilitate the investigation and evaluation to determine the “Root Cause” and helps in the development of a “Corrective Action” report and improved procedures.

**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
- [x] not in compliance with

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Basis for Audit Finding: Bald Mt. has prepared an Emergency Action Plan (EAP) that contains emergency response procedures for a cyanide exposure. The Plan discusses, in detail, the procedures to follow in the event of a cyanide exposure victim. Annual Refresher Training also includes descriptions and discussions of procedures for responding to a cyanide exposure. Personal Protective Equipment, resuscitators, bottled oxygen, and antidote kits (amyl nitrite) are easily accessed in the event of an emergency. The amyl nitrite is stored in refrigerators in heated buildings to maintain the antidote within the manufacturer’s storage requirements. First Responders are trained and informed on the location of the equipment and antidote kits. Cyanide antidote kits, oxygen kits, and general first aid equipment are inspected twice a day (pre-shift inspections) as well as, the first-aid kits are separately inspected on a monthly basis. Bald Mt. has employees trained to serve as First Responders who can administer first aid to a cyanide-exposed victim. In the event of a cyanide accident, Bald Mt. employees will administer first aid and, if necessary, call an emergency helicopter transportation service in Elko, NV to dispatch an air ambulance to the site. Alternatively, Bald Mt. will deploy their emergency response vehicle with the patient and meet a hospital ambulance along the route. Bald Mt. has written correspondence with the hospital of the potential need to administer to cyanide patients. Bald Mt. conducts mock drills on potential cyanide exposure incidents. The mock drills include an action plan to correct identified deficiencies.

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

The operation is ☐ in substantial compliance with ☐ not in compliance with Standard of Practice 7.1

Basis for Audit Finding: Bald Mt. has developed an Emergency Action Plan (EAP) to address potential accidental releases of cyanide and procedures to address cyanide poisoning. The EAP includes programs and procedures to address potential release scenarios at the site that may be reasonably expected to occur from storage or process facilities. The EAP includes a procedure to review the plan annually and update as required. The EAP includes a notification process that is managed by the ‘Crisis Management Team’. Bald Mt. will respond or assist to an emergency situation off-site at the request of the transporter or local emergency response officials. Additionally, Bald Mt. has an Environmental Compliance Manual (ECM) that contains a “Spill Response Plan” that addresses spill response procedures. Instructions for notification of response organizations and agencies are provided in the EAP and the ECM.
Standard of Practice 7.2: Involve site personnel and stakeholders in the planning process.

☐ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

**Basis for Audit Finding:** Bald Mt.’s workforce participates in the emergency response planning process through safety training and mock drills. Consultation and communication with outside stakeholders is facilitated by Bald Mt.’s participation on the White Pine County Local Emergency Planning Commission (LEPC). Through this participation with the LEPC, the county is informed of the possibility of emergency situations at the mine. Bald Mt. has provided the LEPC with a copy of the EAP. The Bald Mt. General Manager has provided written correspondence to White Pine County Commissioners explaining that the site uses cyanide, and provided information on use and handling practices. Bald Mt. has notified Northeast Nevada Regional Hospital that the mine uses cyanide and that it may be necessary to transport a patient exposed to cyanide to the hospital. Also, Bald Mt. has provided Sentinel (the cyanide transporter) with a copy of the EAP. Through its relationship with Sentinel, Bald Mt. is additionally connected to other local response agencies.

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

☐ not in compliance with

**Basis for Audit Finding:** The EAP defines the individuals (primary and alternate) in charge of an emergency situation and provides a list of individuals that will make up emergency response teams. Only trained First Responders serve on emergency response teams. The EAP includes call-out procedures and 24 hour contact information for coordinators and response team members. Specific duties and responsibilities of the coordinators and team members are defined in the EAP and the Environmental Compliance Manual. The EAP contains a list of equipment available for emergency response. Emergency response equipment and supplies are inspected quarterly and records are maintained by the Safety Superintendent. Bald Mt. has provided Sentinel (the cyanide transporter) with a copy of the EAP. Additionally, Bald Mt. has made formalized arrangements with Northeast Nevada Regional Hospital General Hospital regarding the role the hospital would play in the event an employee was overexposed to cyanide. The mock drills have simulated off-site condition requiring implementing procedures for contacting off-site individuals and response organizations.
Standard of Practice 7.4: Develop procedures for internal and external emergency notification and reporting.

☒ in full compliance with

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

Basis for Audit Finding: The EAP and the Environmental Compliance Manual include procedures and telephone numbers for notification of management, regulatory agencies and outside response providers. Further, the EAP defines a Crisis Management Team that notifies and communicates with the public. Additionally, the Environmental Compliance Manual describes notification requirements and lists governmental agencies to call. The EAP provides telephone numbers for ambulance, the BLM, 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 Standard of Practice 7.5
☐ not in compliance with

Basis for Audit Finding:
The EAP calls for moving any released material back into containment or to 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. The Environmental Compliance Manual includes plans to sample and monitor soil and groundwater in the event of a cyanide spill and requires cyanide-contaminated soils to be neutralized and removed. Inspections and monitoring are required to ensure that any discharge is identified and managed in accordance with conditions of the WPCP.

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 2.2
☐ not in compliance with
**Basis for Audit Finding:** The EAP includes a procedure to review the plan annually and update as required. Bald Mt. policy requires accident and emergency investigations to determine if a change in the EAP is necessary. Bald Mt. conducts mock drills to practice and prepare for emergencies and to provide insight into the effectiveness of the EAP.

**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:** The Bald Mt. new hire safety training discusses cyanide usage and necessary safety measures. This program is followed by annual refresher training on the use and hazards of cyanide. Periodic (weekly) safety meetings include instruction and training on cyanide among other safety topics. Employees are repeatedly introduced to cyanide safety issues throughout their employment at Bald Mt. who maintains records of the training. Mill workers and operations personnel who will be working around cyanide are provided several levels of training. Initially they receive the new hire training; then they receive job specific training that follows a multiple point protocol and checklist. Complementing this training is specific training on equipment and circuits. Employees who are assigned to specific areas of the operations, where cyanide is an integral part of the process, are trained on the safe use and handling of cyanide. Testing and observation are used to evaluate the effectiveness of the training. Bald Mt maintains records of this training.

*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

The operation is ☐ in substantial compliance with Standard of Practice 8.2

☐ not in compliance with

**Basis for Audit Finding:** All new employees are required to have cyanide awareness training, which is followed by a written exam to evaluate the effectiveness of the training. Bald Mt.’s employees are trained annually on use and hazards associated with cyanide. Additionally, training includes periodic (weekly) safety meetings that includes instruction and training on cyanide use, handling, and risks. Before employees are allowed to work in areas where cyanide is used, they receive task training and are observed for adeptness. Training includes the use of process SOPs and instruction on the proper use of the equipment and related safety issues. An employee is required to demonstrate competency.
prior to working in an area. Training records that list employees and the areas and tasks where they have been approved to work are maintained by the site. Bald Mt. maintains training records for each employee throughout the entire period of their employment.

*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

**The operation is**

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

**Standard of Practice 8.3**

**Basis for Audit Finding:** Employees involved in the use and handling of cyanide, such as unloading, mill operations, and maintenance, are trained on risks and proper handling techniques along with emergency response procedures. This includes decontamination and first aid procedures. Employees assigned to specific areas where cyanide is an integral part of the operation or process, 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 training. Bald Mt. mill employees working in cyanide areas participate in mock drills to improve their understanding of procedures in the EAP. Emergency Response Coordinators and First Responders are trained on the procedures and guidelines outlined in the EAP including the response to a cyanide spill, release, or emergency. Bald Mt. employees receive annual refresher training that includes training on cyanide hazards, safety measures and response procedures. Training records documenting employee training on cyanide use, safety, and emergency response are retained by the Bald Mt.

9. **DIALOGUE:** Engage in public consultation and disclosure.

*Standard of Practice 9.1:*

Provide stakeholders the opportunity to communicate issues of concern.

- [x] in full compliance with

**The operation is**

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

**Standard of Practice 9.1**

**Basis for Audit Finding:** Bald Mt. is a very remote mining site and one of the methods used to provide information to the regional community is through quarterly information meetings for the employees. These meetings are conducted by the General Manager and provide information to the employees on all aspects of the operation including information about the ICMI Cyanide Code. Bald Mt. has sent correspondence to the White Pine County Commissioners explaining that the site uses cyanide and provided information to the commissioners on cyanide use and handling practices. Further, to help with stakeholder communications, the regional Manager of Communications and
Community Affairs represents Bald Mt. on numerous civic groups in the Northeast Nevada Region. Individuals can easily access the company and express interest and concerns about the Bald Mt. operation and the use of cyanide. Any person or organization can visit the mine site to learn more about the operation. Bald Mt. submitted a proposed Plan of Operations to the Bureau of Land Management that discusses the use of cyanide at the mine. Public meeting have provided stakeholders the opportunity to communicate concerns about the operation including the use of cyanide. Additionally, Bald Mt. (Barrick) has a website that serves as a means for stakeholders to contact the company, to communicate issues of concern related to cyanide use and management. (http://www.Barrick.com/en/social/cyanide/index.asp).

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

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

**Basis for Audit Finding:** Persons or organization can request a visit to the Bald Mt. mine site to learn more about the operation and the use of cyanide. Further, to help with stakeholder communications, the regional Manager of Communications and Community Affairs represents Bald Mt. on numerous civic groups in the Northeast Nevada Region. Individuals can easily access the company via the communications manager and express interest and concerns about the Bald Mt. operation and the use of cyanide. Bald Mt. submitted a proposed Plan of Operations to the Bureau of Land Management where the use of cyanide is discussed. This process provides stakeholders the opportunity to communicate concerns about the operation including the use of cyanide.

**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:** Bald Mt. has prepared a written description of the use and management of cyanide at the site in the Nevada Water Pollution Control Permits. These are public documents and are complemented by Fact Sheets that also describe the operation. Bald Mt. provides quarterly reports to the Nevada Division of Environmental Protection (NDEP) that includes a summary of any cyanide spills and releases, and environmental performance monitoring. These reports are available to the public by request. Bald Mt. is required to complete MSHA reports that would include any cyanide related worker exposure or death. Barrick provides operational and environmental information in their annual corporate safety and health, environment and social responsibility reports on the internet website, www.Barrick.com.