Golder Associates Inc. 44 Union Boulevard, Suite 300 Lakewood, CO USA 80228 Telephone: (303) 980-0540 Fax: (303) 985-2080 www.golder.com



## INTERNATIONAL CYANIDE MANAGEMENT CODE AUDIT PHOENIX MINE, NEVADA SUMMARY AUDIT REPORT

Submitted to:

Newmont Mining Corporation Phoenix Mine P.O. Box 1557 Battle Mountain, Nevada 89820



and

International Cyanide Management Institute 888 16<sup>th</sup> Street, NW, Suite 303 Washington, D.C. 20006

Submitted by:

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

November 21, 2008

053-2280

Name of Project:

Phoenix Mine

Project Owner / Operator: Newmont Mining Corporation

Name of Responsible Manager: Mark Evatz, Mine Manager

Address and Contact Information:

Phoenix Mine P.O. Box 1557 Battle Mountain, Nevada 89820

Phone – 775-635-6521 Fax – 775-635-6628 Email – Mark.Evatz@Newmont.com

Audit Dates: July 14 - July 17, 2008

## **Location and General Description**

The Fortitude/Reona (Phoenix) Project is located in Lander County, Nevada, between 5.5 and 13 miles south of the town of Battle Mountain. The project area has a long history of mining starting with the first recorded discovery of copper ore in the Copper Canyon area in 1864. Copper mining prevailed into the early 20th century and precious metal lode mining occurred throughout the first half of the 20<sup>th</sup> century. Placer gold mining, the Natomas dredge operations, took place in the 1940's and early 1950's alongside open pit copper mining and flotation milling by the Duval Corporation that continued into the 1970's. Mining and milling of lode gold ore began in the late 1970's, with the conversion of the Copper Canyon mill from copper concentrate production to a cyanide leach CIP adsorption facility in 1978, and was continued into the early 1990's by Battle Mountain Gold Company when heap leaching of lower grade disseminated gold ore began (Reona Heap Leach Pad). Mining and milling of ore from the Fortitude Pit commenced in September 1992 and continued until the open pit mine ceased production in early 1993; and the Fortitude Mill ceased operations in March 1993. In October 1993, the Reona Heap Leach Pad was constructed to expand open pit mining and include gold heap leaching of the Reona Heap Leach Pad was discontinued in July 2006.

The Phoenix Project includes mining of the Phoenix, Midas, Reona, and Iron Canyon open pits and excavation of the existing Northeast Extension, Tomboy, Midas, and Fortitude gold ore stockpiles. Waste rock from expanded mining operations is being deposited in existing and sequentially mined open pits, deposited over existing inactive waste rock and copper leach dumps and on new waste rock facilities located on adjacent undisturbed ground.

The Phoenix Mill, constructed in 2005, is designed for the beneficiation of run-of-mine mill (ROM) grade ores from the mining operations. Gold, silver, and copper recovery from the Phoenix Mine ore is achieved by a three circuit milling operation. The circuits include: (1) coarse gold recovery by gravity separation; 2) two- stage flotation to produce a copper sulfide concentrate for offsite processing; and (3) further processing of the second-stage flotation tailings within the new mill

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

amel

November 2008 Date

Signature Dead Auditor

facility using a carbon-in-leach (CIL) cyanide circuit for additional precious metal recovery.

ROM ore is fed at a nominal 35,000 tons per day to the primary crushing plant and then conveyed to the semi-autogenous grinding (SAG) mill where water is added for grinding.

Underflow from the SAG mill drops into a sump and mixes with discharge from the ball mills. The sump slurry is pumped to a bank of cyclones. The grinding cyclone overflow reports to the rougher flotation. The underflow stream is divided and conveyed to each of the ball mills. A split of the discharge from each ball mill is pumped to gravity gold recovery units and the concentrates from the gravity units are diverted to an intensive cyanidation unit. The gravity unit tails are pumped to a contact flotation cell to recover finer-grained gold.

Slurry from the grinding cyclone overflow feeds the rougher flotation cells. The rougher flotation concentrate and contact cell concentrate are combined and cleaned in two (2) stages of gravity separation. Concentrate from the two-stage gravity separation unit is directed to a primary cleaner column flotation cell. Rougher scavenger concentrate, along with concentrate from the cleaner flotation cells and the cleaner scavenger flotation cells, is sent to the flotation regrind mills. The regrind concentrate is then cleaned in three stages of flotation utilizing both mechanical and column flotation technology. A magnetic separator removes magnetic concentrates from the cleaner flotation stream and gold is recovered from the magnetic concentrate via a gravity recovery unit.

Tails material from the rougher and cleaner scavenger circuits is pumped to a pair of deslime cyclones at the head of the CIP leach circuit. Most of the gold in the slurry reports to the cyclone underflow while most of the cyanide soluble copper reports to the cyclone overflow. The cyclone underflow is pumped to the CIP leach tanks and combined with cleaner scavenger tails. Lime and cyanide solution are added at the head CIP tank to respectively control pH and enhance precious metal dissolution. The slimes material from the cyclone overflow is pumped to the fines thickener tank and dewatered using flocculant and reclaim water for make-up. The thickened slurry (underflow) is pumped to the CIP circuit tails tank and the thickener overflow is returned as mill make-up water. The CIP leach tanks discharge to the CIP circuit, where dissolved precious metals are adsorbed onto activated carbon particles. Loaded carbon is collected for stripping and the tails slurry passes through a Caro's acid (peroxymonosulfuric acid (H2S05)) destruction circuit prior to discharge to the tailings impoundment. A Caro's acid generator is located within the mill. The Phoenix Mill secondary containment is adequate to contain 166% of the 100-year/24-hour storm event flow from the pad plus the volume of the largest vessel in the mill building.

Loaded carbon is transferred from the mill CIP circuit by pipeline. The carbon is washed with hydrochloric acid in the acid wash tank, neutralized with caustic soda, and pumped to the strip vessel. Copper is removed from the carbon by an ambient temperature cyanide rinse and the resulting rinse solution is pumped to the leach circuit. Following the cyanide rinse for copper, the carbon is stripped of precious metals with a hot caustic solution. Barren carbon is conveyed through a regeneration kiln and the activated product is mixed with fresh make-up carbon and pumped to CIP agitator tank for reintroduction into the CIP recovery circuit

Pregnant solution from the carbon stripping process is pumped through a circuit comprised of electrowinning cells. The electrowinning precipitate is filtered, heated in a retort to dry the product, and then shipped to Newmont facilities at Twin Creeks or the Carlin complex for refining of precious metals.

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

November 2008 Date

Signature Lead Auditor

Historic tailings impoundments on site consist of two separate impoundments separated by an eastwest earthen embankment. The northern portion of the impoundment was developed first and was used to contain tailings from the historic copper milling process until being filled in 1970. The southern portion of the impoundment was constructed in 1972, to store copper tailings and gold tailings from the more recent gold mining and milling operations. Neither impoundment was constructed with an engineered liner. The Phoenix Project consists of a constructed lined tailings impoundment over the existing northern copper tailings impoundment. The synthetic-lined impoundment basin is covered with a minimum 18-inch thick cover of locally borrowed alluvial silty sand and gravel to protect the synthetic liner and to provide relief for hydraulic head pressure and promote solution collection and flow into the underdrain system.

Tailings slurry is conveyed by gravity from the Phoenix Mill through a 20-inch diameter slurry pipeline. All pipes report solution by gravity to the Phoenix Mine Tailings Impoundment Reclaim Pond. The Reclaim Pond is constructed with 3H:1V side-slopes. The cumulative volume with a 2-foot freeboard is approximately 13,400,000 gallons. This capacity is adequate to contain the operating volume plus the inputs from the 100-year, 24-hour event on the pond and ditch liners and the underdrain water reporting from the impoundment due to a 48-hour power outage.

Auditors:

Pamela Stella, Lead Auditor Brent Bailey, Gold Mining Technical Expert Auditor Mark Montoya P.E. Technical Auditor

Auditors Finding			
8	X	in full compliance with	
The operation is		in substantial compliance with	International Cyanide Management Code
		not in compliance with	
Audit Company:		Golder Ass	ociates Inc.
Audit Team Leader:		Pamela Ste	lla
E-mail:		Pamela Ste	lla@golder.com

November 2008 Date

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

Signature Lead Auditor

Names and Signatures of Other Auditors:

Brent Bailey Name of Auditor

Signature of Auditor

Nov. 21, 2008 Date

Mark Montoya P.E Name of Auditor

Signature of Auditor

Nov. 21, 2008 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.

Henciv Muna Notary Public

State of Colorado

My commission expires:

11 01/2010

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

Signature Dead Auditor

November 2008 Date

**Golder Associates** 

Page 4 of 23

1. PRODUCTION: Standard of Practice 1.1:		Encourage responsible cyanide manufacturing by purchasing from manufacturers who operate in a safe and environmentally protective manner.	
		Purchase cyanide from manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide, and to prevent releases of cyanide to the environment.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 1.1
		not in compliance with	

**Basis for Audit Finding:** Phoenix has committed to only purchase cyanide from producers that are compliant with the International Cyanide Management Code (ICMC). Phoenix has Sodium Cyanide supply contracts with Cyanco.

2. TRANSPORTATION:		Protect communities and the transport.	environment during cyanide
Standard of Practice	<u>2.1</u> :	Establish clear lines of responsible prevention, training and emergency with producers, distributors and tra	ility for safety, security, release y response in written agreements nsporters.
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 2.1
		not in compliance with	

**Basis for Audit Finding:** Phoenix has a Sodium Cyanide supply contract with Cyanco, which specifies that the operation takes ownership of the cyanide at the time of delivery, but does not define responsibility of ICMC Transportation Principles and Standards of Practice. Cyanco is by contract solely responsible for the production and transport of Sodium Cyanide to the delivery point at Phoenix. Cyanco is a signatory producer to the ICMC and subcontracts TransWood Inc. for transportation of the cyanide to Phoenix. TransWood 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.

November 2008 Date

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

Signature Dead Auditor

<u>Standard of Practice 2.2</u> :		Require that cyanide transporters implement appropriate emergency response plans and capabilities and employ adequate measures for cyanide management.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 2.2
		not in compliance with	

**Basis for Audit Finding:** Cyanco is by contract solely responsible for the production and transport of cyanide to the delivery point at Phoenix. Cyanco is a signatory producer to the ICMC and subcontracts TransWood Inc. for transportation of the cyanide to Phoenix. TransWood has been certified by third party independent auditors as compliant with the ICMC with appropriate emergency response plans and capabilities and have adequate cyanide management control measures.

3. HANDLING AND	STORA	GE: Protect workers and the handling and storage.	he environment during cyanide	
Standard of Practice 3.1: Desig consi contr contr		Design and construct unloading consistent with sound, accepted control/quality assurance proced containment measures.	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.	
	$\mathbf{X}$	in full compliance with		
The operation is		in substantial compliance with	Standard of Practice 3.1	
		not in compliance with		

**Basis for Audit Finding:** The Phoenix Mill containment and fluid management systems have been constructed in accordance with the designs reviewed and approved by the Nevada Division of Environmental Protection. AMEC E&C Services, Inc. (AMEC) prepared the design for the mill site and required infrastructure. Ames Construction, Inc. (Ames) performed earthworks and concrete activities around the mill site. The Industrial Company (TIC) performed concrete, structural steel, equipment installation, electrical, and pipework activities. The approved designs include the initial design and drawings were submitted to NDEP May 3, 2004 and approved October 8, 2004. A Professional Engineer (Nevada State) from AMEC Americas Limited provided the containment calculations and design drawings for the secondary containment for emergency spills and leaks from the cyanide storage tank. The cyanide storage tank capacity is 15,000 gallons. The secondary containment has excess capacity for 110% of the storage volume plus storm event.

Review of the original design specifications dated April 2004 indicated that cyanide piping design criteria followed ANSI B36.10 and ASTM A53 for carbon steel. Cyanide tank design criteria used API 650. Both of these design criterions are standard and accepted standards.

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

Signature Dead Auditor

November 2008 Date

Phoenix has implemented QC/QA programs to address the suitability of materials used for construction of the cyanide facilities, including tanks, piping, geosynthetic liners and concrete. Additionally, the materials and adequacy of soil compaction for all earthworks have been addressed by QC/QA programs during construction.

Cyanide storage tanks are located on cast-in-place reinforced concrete pads and within concrete curbed containment that prevents seepage to the subsurface. Cyanide mixing and storage tanks are located on concrete pads and within their own concrete curbed containment which prevents seepage to the subsurface. The concrete pad provides containment for the recovery of small cyanide liquid spills. Should the containment be overtopped there are no sensitive resources that would be impacted and the nearby soils can be readily remediated without impact to groundwater or other sensitive resources. There is a sump at the cyanide unloading area that would automatically pump solution to the tailings collection tank allowing containment and recovery of all spilled solution. All the cyanide storage area is located adjacent to the hydrochloric acid storage area but is separated by concrete containments with separate sump systems. There is an overhead pipeline that connects the cyanide storage tank to the mill. This pipeline crosses over the hydrochloric containment and is painted a special color (yellow) to highlight to workers in the area of the special risk (low probability but high consequence) of this pipe spilling into the acid containment.

The unloading and storage area are located within and/or adjacent to the Carbon Stripping Building. The operation is a secure facility with controlled access. The unloading and storage areas are located away from public access and no surface water bodies are nearby. All personnel with access to the unloading and storage facilities, including contractors receive site specific health and safety training. The cyanide unload pad is constructed with cast-in-place reinforced concrete to prevent seepage to the subsurface.

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

**Basis for Audit Finding:** Phoenix has developed and implemented a Cyanide Off-Loading standard task procedure (STP) that covers the responsibilities for the transporter and the site personnel. Off-loading does not occur until a Phoenix operator is present to observe and document the procedure. Both the transporter and operator check to confirm that the storage tank has sufficient capacity for the volume on the truck. The Phoenix operator is trained in the transporter PPE requirements, procedures, and emergency shut off locations. Additionally, the Phoenix operator has access to PPE, cyanide antidote and oxygen in the case of an emergency. The transporter off-load procedures are designed to prevent the potential for release.

Phoenix has developed and implemented a Cyanide Off-Loading standard task procedure (STP) (Document #HSLP-RP-PR-PH-1507) that references Cyanco's Offloading SOP including the operation of all the valves and couplings. Copies of the transporter cyanide unload procedures are

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

Signature Dead Auditor

November 2008 Date

available to the operators and all operators are trained in the unload procedures. The transporter cyanide unload procedure includes description and photographs of the operation of the valves and couplings.

<i>4. OPERATIONS:</i> <u>Standard of Practice 4.1</u> :		Manage cyanide process solutions and waste streams to protect human health and the environment. Implement management and operating systems designed to protect human health and the environment utilizing contingency planning and inspection and preventive maintenance procedures.		
The operation is		in substantial compliance with	Standard of Practice 4.1	
		not in compliance with		

**Basis for Audit Finding:** Phoenix has operating plans that cover the management and operation of the cyanide facilities including process descriptions for cyanide facilities. Fluid Management System Operating Plans for Water Pollution Control Permits (WPCP) cover specific requirements and plans for the operation of the cyanide facilities. Similar information for the tailings impoundment and mill facilities are described in design reports.

Phoenix has developed and implemented operator task-specific SOPs that address protection of human health and the environment for the operation of cyanide carbon-in-pulp (CIP) processing. These SOPs were found to have adequate contingency planning, routine inspections, and a preventive maintenance program. SOPs address all the cyanide management tasks such as unloading and storage of cyanide; operation of the CIP systems and operation of cyanide destruct circuit for tailings disposal. Contingency planning documents have been developed and implemented to support the process pond management and solution inventory to address power failure, and extreme rainfall management. Phoenix uses a computer based preventive maintenance system, Ellipse, to identify, issue work orders and document all preventive maintenance activities.

Phoenix has contingency plans/procedures for responding to abnormal conditions in the mill, CIP, cyanide treatment plant and tailings. The Phoenix Mine Operating Plan presents procedures for normal and unusual or emergency operating conditions and emergency release response and contingency plans for the facilities. The documents specify actions for insufficient freeboard in the TSF and other ponds, severe weather conditions, power outage or pump failure, cyanide detected in ground or surface water, temporary cessation of operations or closure, shutdown or failure of the Caro's acid system and solution in leak detection systems. The document specifies the available pond storage volumes, pump capacities and strategies for conveyance of solution to prevent overtopping and discharge.

Daily, weekly and monthly inspections are completed by the operators. Daily inspections are conducted of the tailings area (pipe, tailings impoundment, and decant pond) and Leach/CIP/Carbon area and include safety and environmental concerns. The mill operators are responsible for conducting workplace inspections on a daily basis using the operator's checklist. Inspections include piping, pumps, reagent tanks, leak detection and containments, eyewash/shower stations, vents and

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

November 2008 Date

Signature Dead Auditor

fans, housekeeping, gates and fencing, HCN detectors and emergency generators. Phoenix conducts weekly inspections of the drainage systems, containment structures for process chemicals and storage tanks, the labeling of process water, chemical transfer lines and tanks, cracks in outside containment structures or within the plant, the condition of valves/pipe connections and general housekeeping.

Phoenix has two fixed diesel generators located near the mill to operate critical functions during power outages. Power output from the generators is adequate to maintain critical systems within the mill circuit.

Phoenix has a STP for Change Management Environmental that is prepared for an activity, process, or task that, if conducted under uncontrolled conditions could have a significant impact on:

- Security of employees and Newmont property
- Newmont's social responsibility, including impacts to Environment, Safety, and Community relations
- Newmont values.

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:** Phoenix receives ore for processing from a variety of sources including the Phoenix, Midas, Reona, Minnie, and Iron Canyon open pits and excavation of existing Northeast Extension, Tomboy, Midas and Fortitude gold ore stockpiles. The cyanide consumption is continually optimized during process operations. The cyanide dosage rate is established by a monthly ongoing cyanide optimization study.

Phoenix evaluates the cyanide concentration in the first and last CIP tanks using an automatic control that analyzes cyanide content every 20 minutes. If the cyanide content is lower than the target then the first leach tank cyanide set point is increased. If the cyanide is greater than the target, then the first CIP tank cyanide set point is decreased. Cyanide content and pH are also analyzed manually using a titration method every two hours to double check the automated control. The control is identical to the automatic control except the operator retrieves the sample manually and uses manual adjustment to the cyanide flow set point to maintain the cyanide residual target. The manually recorded cyanide concentration and pH are recorded on daily inspection forms.

Phoenix has implemented a strategy and management system to control the addition of cyanide in the mills. The cyanide concentration is regularly monitored and gold extraction evaluated to optimize the recovery.

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

November 2008 Date

Signature Lead Auditor

Standard of Practice 4.3:		Implement a comprehensive water management program to protect against unintentional releases.	
	$\mathbf{X}$	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 4.3
		not in compliance with	

**Basis for Audit Finding:** Phoenix has developed a comprehensive water balance that addresses the uncertainty and variability of climatic data to prevent overtopping. The water balance model considers the Mill production schedule with values averaging around 30,000 tons per day, and incorporates the properties of the ore and tailings material (i.e., the specific gravity of the tailings solids, the percent pulp density of the tailings slurry, water content in the concentrate produced, and the average dry density of the tailings) in simulating the water management performance. Process facility inspection procedures and data collection programs have been implemented to update the water balance model on a regular basis. Phoenix has a weather station on-site and measures and records precipitation data for incorporation into the model and operational planning. Daily shift inspections include pond levels and available freeboard monitoring that is incorporated into the water balance model and operational planning to prevent potential overtopping.

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:** Phoenix has implemented measures for restriction of wildlife and livestock to containments with process solution. These measures consist of wildlife fencing around all facilities and ponds containing process solutions. Propane cannons are used at the TSF to deter waterfowl from using the open water of the supernatant pond.

Phoenix has implemented a tailings cyanide detoxification process that prevents adverse effects of cyanide process solutions on wildlife. The target WAD cyanide concentration in the treated tailings is less than 35 ppm.

Phoenix is required by the Nevada Department of Wildlife (NDOW) to conduct mortality monitoring and report all wildlife mortalities. No cyanide related mortalities have been reported during 2007 the first half of 2008.

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

November 2008 Date

Signature Dead Auditor

**Golder Associates** 

Page 10 of 23

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

$\mathbf{X}$	in full	compliance	with
--------------	---------	------------	------

The operation is	in substantial compliance with	Standard of Practice 4.5
	not in compliance with	

**Basis for Audit Finding:** Phoenix 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 milling operations. Spill prevention and emergency response plans have been developed to comply with the zero-discharge operating requirements.

<u>Standard of Practice 4.6</u> :		Implement measures designed to manage seepage from cyanide facilities to protect the beneficial uses of groundwater.	
	$\mathbf{X}$	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 4.6

not in compliance with

**Basis for Audit Finding:** Phoenix has implemented solution management and seepage control systems to protect groundwater below and downgradient of the operation. The active cyanide facilities at the Phoenix operation consist of the Mill and related conveyance pipes, tanks and containments, the tailings delivery and reclaim water pipelines, and the Tailings Storage Facility (TSF), which includes the tailings impoundment and Reclaim Pond. The plant has adequate concrete spill containment and TSF incorporates liner systems and double piping to minimize seepage and protect beneficial uses. The tailings delivery and reclaim water pipelines either are contained within a lined channel or consist of a double pipe system. The underdrain and decant piping between the tailings impoundment and the Reclaim Pond is underlain by a synthetic liner, consist of a double pipe system, or are contained within concrete structures.

Phoenix conducts groundwater monitoring. Certified laboratories are used for all parameters covered by the State of Nevada Laboratory Certification Program. Handling, preservation and transportation of samples are conducted in conformance with established EPA protocols, where appropriate.

The regulatory numerical standard established for Phoenix's groundwater protection is 0.2 mg/l WAD cyanide, for Primary and Secondary Drinking Water Standards. Groundwater monitoring data was reviewed for representative monitoring wells and two production wells. The data demonstrated that the operation has not exceeded the above referenced numerical standard for WAD cyanide at the groundwater compliance points, and that the operation is protective of the designated "beneficial use" of groundwater. All results reported for WAD cyanide during this period were below the standard.

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

November 2008 Date

Signature Lead Auditor

<u>Standard of Practice 4.7</u>: Provide spill prevention or containment measures for process tanks and pipelines.

- $\mathbf{X}$  in full compliance with
- The operation isin substantial compliance withStandard of Practice 4.7
  - not in compliance with

**Basis for Audit Finding:** The Phoenix operation has secondary curbed concrete containments for all cyanide storage and processing areas. Other secondary containments include pipe-in-pipe and geomembrane-lined channels. The secondary containments in the cyanide unload and storage areas have been designed to contain at least 110 % of the largest tank capacity and the design storm event. Secondary containment in the process areas has automated pumping systems for management of tank leakage. SOPs have been developed to address management of spill response and clean-up within the containments. Review of the operation indicates that all tanks, piping and containments are constructed of materials appropriate for handling high pH cyanide solutions.

Standard of Practice	<u>4.8</u> :	Implement quality control/quality that cyanide facilities are con engineering standards and specific	assurance procedures to confirm astructed according to accepted cations.
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 4.8
		not in compliance with	

**Basis for Audit Finding:** The project construction of the leach process and tailings storage facilities has been verified by qualified engineering companies and includes detailed quality control /quality assurance (QC/QA) data collection and documentation. The QC/QA documents indicate that the construction was completed according to engineering standards and specifications. The QC/QA reports were prepared by qualified engineering companies and document the responsibilities of parties involved in the design, construction and review of the facilities and certify that the facilities were constructed in accordance with project drawings and specifications. Phoenix has committed to retain all QC/QA information in the onsite document library and onsite storage units.

Standard of Practice 4	<u>.9</u> :	Implement monitoring programs to use on wildlife surface and ground	o evaluate the effects of cyanide water quality.
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 4.9
		not in compliance with	
		$\bigcirc$	
Phoenix Mine		Vamela A Ste	November 2008
Name of Facility	7	Signature Dead Audit	or Date
i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\pho	enixsummaudit-fnl	-21nov08.doc Golder Associates	Page 12 of 23

**Basis for Audit Finding:** Phoenix has environmental monitoring programs developed to evaluate the performance of the cyanide management systems on wildlife, surface and groundwater quality. The Phoenix Mine Comprehensive Water Quality Monitoring Plan (WQMP) describes the water quality monitoring program for the mine. The WQMP describes in detail all the monitoring locations with text, tables and figures. The environmental programs have been prepared and approved by qualified professionals and implemented by qualified personnel and include all appropriate sampling and analysis documentation.

5. DECOMMISSIONING: Standard of Practice 5.1:		<ul> <li>Protect communities and the environment from cyanide through development and implementation of decommissioning plans for cyanide facilities.</li> <li>Plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife and livestock.</li> </ul>	
The operation is		in substantial compliance with	Standard of Practice 5.1
		not in compliance with	

**Basis for Audit Finding:** Phoenix has prepared comprehensive plans for decommissioning and reclaiming all project components at the cessation of operations. The Reclamation Plan describes procedures for decommissioning the process components, including the mill and the tailings facilities and any remaining work on the heap leach facilities. Additional procedures are presented under Fluid Management and Process Fluid Stabilization (PFS) that includes decommissioning of all cyanide equipment, pipelines and facilities. Phoenix has developed an implementation schedule that considers the treatment and evaporation of all process solution, detoxification and rinsing of equipment, and removal and decommissioning of ponds and other containments. The closure and reclamation plan includes an implementation schedule and performance monitoring. Phoenix reviews the and updates the requirements and costs of the Closure and Reclamation Plans on a three year basis in accordance with requirements of the regulatory agencies.

<u>Standard of Practice 5.2</u> :		Establish an assurance mechanism capable of fully funding cyanide related decommissioning activities.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 5.2
		not in compliance with	

**Basis for Audit Finding:** Phoenix has developed cost estimates with sufficient financial resources for the closure of the cyanide-related facilities and activities. Phoenix has established an approved financial surety to cover the full cost of cyanide facility decommissioning.

Phoenix Mine	
Name of Facility	

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

November 2008 Date

Signature Dead Auditor

Phoenix has developed a cost estimate for the funding of third party implementation of the decommissioning activities (Reclamation Plan, Phoenix Project, JBR Environmental Consultants, Inc., October 20, 2003 – Revised November 2003).

Phoenix has established an approved financial mechanism to cover the estimated costs for cyanide related decommissioning activities. This mechanism is a Letter of Credit covering reclamation, closure, and cyanide decommissioning activities and valued at \$142,236,580. Not including administrative costs and contingencies, this amount includes approximately \$21 million for Detoxification/Water Treatment/Disposal of Wastes and Structure, Equipment and Facility Removal.

6. WORKER SAFETY: Standard of Practice 6.1:		Protect workers' health and safety from exposure to cyanide. Identify potential cyanide exposure scenarios and take measures as necessary to eliminate, reduce and control them.	
The operation is		in substantial compliance with	Standard of Practice 6.1
		not in compliance with	

**Basis for Audit Finding:** Phoenix has identified potential cyanide exposure scenarios and developed procedures and plans to eliminate, reduce and control worker exposure. Phoenix has individual task specific Standard Task Procedures (STP) and Standard Operating Procedures (SOPs) that provide details for safe operation of cyanide equipment, personal protective equipment requirements and inspection requirements. The Inspections SOP provides procedures for conducting pre-work inspections that includes the responsibilities of workers, supervisors, foremen, superintendents, managers and HSLP personnel. Additionally, the procedure includes a Hazard Report form, General Inspection Report Form and Process Inspection Check List.

Phoenix has a Change Management Policy that requires any proposed changes in SOPs be discussed with the area supervisors prior to implementation. All changes are communicated to the workforce and training requirements updated. Worker input is solicited in STP review meetings (when there is change or when procedures are routinely reviewed), during safety meetings and via a telephone hotline established to solicit complaints. Worker input is required (defined as vital) for the Task Analysis & STPs (PowerPoint Presentation provided to workers).

The Phoenix Corrective Action Register documents the actions taken to resolve any inspection issues, safety issues, accidents, audits, risk assessments, etc. (two reports, including a report related to a change in the cyanide offload area, were obtained and reviewed).

Phoenix Mine
Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

November 2008 Date

Signature Dead Auditor

Standard of Practice	<u>6.2</u> :	Operate and monitor cyanide faci safety and periodically evaluate th measures.	lities to protect worker health and be effectiveness of health and safety
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 6.2
		not in compliance with	

**Basis for Audit Finding:** Phoenix has established the minimum pH level for limiting the evolution of hydrogen cyanide gas during mixing and production. The Safe Job Procedures – Sodium Cyanide, of the Utilities and Reagents Operating Manual states that in weak cyanide solutions (leach solution), the pH should be at a minimum of 10.5 and in strong cyanide solutions (such as in cyanide makeup), the pH should be at a minimum of 12.5. The discussion of "Process Variables" and "Leach Tank pH Control" of the Leach and Carbon Handling operating manual lists the pH target range as 10 to 10.5 at the leach tanks where cyanide is added.

Phoenix utilizes eleven (11) monitors total to confirm that controls are adequate to limit worker exposure to HCN gas (seven handheld monitors and four stationary continuous monitors). The stationary monitors have a digital readout and an alarm system, consisting of a siren and flashing warning lights, and the readings are displayed continuously in the Mill control room. The low-level and high-level alarm settings are 4.7 parts per million (ppm) and 10 ppm, respectively. Additionally, a warning is automatically displayed in the Mill control room when the alarms are activated. The alarms are activated when HCN gas levels reach 4.7 ppm.

Phoenix has identified four (4) high-risk areas at the Mill that pose the highest risk to workers being exposed to cyanide in excess of safe levels. Stationary HCN monitors are installed in these areas and the monitor alarms are checked each shift by the area operator as part of the daily workplace inspection. Specifically, these high-risk areas are:

- Intensive Cyanidation Unit (ICU);
- Carbon-In-Pulp (CIP) next to the tails screens;
- Carbon Acid Wash Vessel; and
- Cold Strip Solution Tank.

Phoenix also has mobile HCN detectors for use in confined space entry. Phoenix has established requirements for personal protective equipment at all relevant process areas and for all cyanide-related activities. Phoenix has implemented monitoring equipment maintenance and calibration programs. Phoenix has installed safety showers with eye wash stations and non-acidic fire extinguishers at relevant cyanide usage areas. Phoenix provides the cyanide safety information (Material Safety Data Sheets and first aid procedures) at all key process locations, the Mill control room office and on the Phoenix Intranet. Phoenix and Newmont Corporate have implemented an accident investigation process to report and investigate all cyanide related incidents.

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

November 2008 Date

Signature Lead Auditor

Warning signs are located in areas of cyanide usage to alert workers that cyanide is in use and include the use of PPE. Unloading, storage, mixing and process tanks and piping containing cyanide are identified to alert workers of their contents, and in the direction of cyanide flow in pipes is designated.

Showers, low pressure eyewash stations and non acidic sodium bicarbonate fire extinguishers are maintained, inspected and tested on a regular basis. Locations of shower/eyewash stations and fire extinguishers are presented on Safety Equipment Maps developed by Emergency Response personnel.

Standard of Practice 6.3:

Develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.



**Basis for Audit Finding**: Phoenix has developed an Emergency Response Plan (ERP) and implemented the Plan through training and installation of emergency response equipment. Phoenix has safety equipment including safety showers with eye wash stations, first aid equipment (amyl nitrite, medical oxygen and resuscitator), an emergency response vehicle, and employee first aid training. Phoenix has a First Responder Team. They are trained to provide first aid for cyanide exposure including oxygen and amyl nitrite administration. Phoenix has a program to store and replace cyanide exposure antidotes in accordance with the manufacturer's requirements at several locations on the property. In the event of a worker exposure Phoenix will provide on-site first aid and provide a kit with intravenous cyanide antidote for transport with the patient to the local hospital. Phoenix has made formal arrangements with local hospitals to treat cyanide exposed workers. Phoenix has conducted cyanide exposure drills and tests the relevant emergency procedures at least once per year.

Phoenix has a radio system providing coverage of the mine site with a channel dedicated to emergency response. Phoenix also provides cards to be carried by all personnel with emergency response radio and telephone numbers. The ERP contains a "MayDay Procedure" for responding to emergencies. The ERP is posted at various locations around the mine site. Routine training for this procedure is also provided.

Locations of emergency equipment, which includes first aid kits, fire extinguishers, shower/eyewash stations, cyanide antidote kits and escape packs are provided on Safety Equipment Maps developed by Emergency Response personnel for all areas. The ERP provides the locations and contents of the on-site Emergency Response Vehicles (3), firefighting truck and bus, technical rescue vehicle, and hazmat response trailer. The ERP outlines storage quantities and locations of high-strength and dilute sodium cyanide solutions. Response procedures are provided in the ERP, including procedures to treat victims exposed to cyanide.

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

November 2008 Date

Signature Lead Auditor

**Golder Associates** 

Page 16 of 23

Phoenix HSLP personnel conduct monthly inspections of the emergency equipment. Emergency Response personnel inspect the cyanide antidote kit located in the ambulance monthly, and the emergency response vehicles and their contents quarterly. Operations personnel conduct inspections each shift. An outside contractor performs annual inspections of the fire extinguishers.

Phoenix has established formalized arrangements with the Lander County Hospital District, Battle Mountain General Hospital, and has determined that the facilities have adequate, qualified staff, equipment and expertise to respond effectively to victims exposed to cyanide. Phoenix conducts mock drills on a minimum frequency per the ERP.

7. EMERGENCY RESPONSE:		: Protect communities and development of emerge capabilities.	l the environment through the ency response strategies and
Standard of Practice	<u>7.1</u> :	Prepare detailed emergency responses releases.	onse plans for potential cyanide
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 7.1
		not in compliance with	

**Basis for Audit Finding:** Phoenix has developed and implemented an Emergency Response Plan (ERP) and procedures to respond to cyanide related emergencies and emergency control management that address potential cyanide releases including containment plans and analysis of potential scenarios. The ERP includes descriptions of actions to be taken in response to a cyanide incident or spill. These include evacuating an area and taking steps to minimize danger to the public. The ERP describes measures and guidelines to evaluate situations, provide first aid, administer antidote, report the situation, and undertake appropriate control and cleanup measures. Instruction for notification of response organizations and agencies are provided in the ERP and the "Emergency Release Response and Contingency Plan" (ERRCP). If the incident was determined to be major, the Newmont "Rapid Response Program" would be activated and a Rapid Response Team would be assembled. The Rapid Response Team manages wide-area notifications.

The emergency response plans are evaluated and updated at least annually.

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 S	Standard of Practice 7.2
		not in compliance with	
		P. O. KIO	0
Phoenix Mine		Vamela Atl	November 2008
Name of Facility		Signature Dead Auditor	Date
i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoeni	xsummaudit-fnl-2	Inov08.doc Golder Associates	Page 17 of 2

**Basis for Audit Finding:** Phoenix works with members of the Emergency Response Team (ERT) in reviewing and updating the ERP. The ERT members are employees and stakeholders. ERT members review proposed revisions and provide suggestions. An example of this participation was the suggestion to provide grid maps in the ERP that allows quick pin-pointing of a problem to facilitate communications on where the ERT needs to meet in the event of an emergency. Phoenix's workforce participates in the emergency response planning process through mock drills and safety training.

The Phoenix Emergency Response Coordinator is a member of the Lander County Local Emergency Planning Committee (LEPC). Through his participation with the LEPC, they are informed of Phoenix's emergency plan and planning process.

The town of Battle Mountain is the nearest community to the Phoenix Facility and is located between 5.5 and 13 miles north of the mine facility. Therefore the nearest community is highly unlikely to be directly affected by a release of cyanide from the site. However, the Phoenix Emergency Response Coordinator advocates for cyanide safety, by communicating with Battle Mountain community members. The ERP outlines the procedures for involving external emergency services (fire response, police, ambulance, rescue, etc), and the liaison with government agencies in the event of an emergency at the facility. The ERP also requires the Mine Emergency Response Team to ensure that drills include and are conducted in coordination with external agencies and relevant stakeholders as under the Rapid Response Program.

<u>Standard of Practice 7.3</u> :		Designate appropriate personnel and commit necessary equipment and resources for emergency response.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 7.3
		not in compliance with	

**Basis for Audit Finding:** The ERP defines the individuals in charge of an emergency situation. The plan identifies the Site Manager as responsible for the overall management of an emergency and that if the manager is not on site the Mine Foreman will take charge. Reporting to the Site Manager are the General Forman and Supervisors who will coordinate emergency response efforts for an accident in their respective areas. The Emergency Response Team Captain directs the activities of the ERT at the accident scene and reports to the Supervisor. The ERP provides a list of individuals who will make up emergency response teams.

Emergency response equipment and supplies are inspected quarterly and records are maintained by the Emergency Response Coordinator.

Phoenix has made formalized arrangements with Battle Mountain General Hospital regarding the role the hospital would play in the event an employee was overexposed to cyanide. Access Air (air ambulance service) has been contacted by telephone and provided with the mine site "landing" coordinates. A mock drill was conducted that involved a cyanide exposure incident requiring implementing procedures for contacting the hospital and transporting the victim to the hospital.

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

November 2008 Date

Signature Dead Auditor

Only State of Nevada certified First Responders or Emergency Medical Technicians (EMT) serve on Emergency Response Teams (ERT). All of the ERT members are certified as Hazardous Material Technicians through CFR 1910.120 within one year of joining the team. The ERT meet monthly for training; and each month they review a response scenario, practice the use of the equipment, and inspect the equipment. The list of individuals, whom serve on the emergency response teams, includes their status as First Responder or EMTs, their shift, and the area where they work.

The ERP includes call-out procedures and 24 hour contact information for coordinators and outside responders listed above. There are emergency response team members at the mine during all shifts and an emergency response team can be assembled via radio contact, as necessary.

Standard of Practice 7.4:		Develop procedures for internal and external emergency notification and reporting.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 7.4
		not in compliance with	

**Basis for Audit Finding:** The ERP and the ERRCP include procedures and telephone numbers for notification of management, regulatory agencies and outside response providers, internal and external emergency notification and reporting. The ERP incorporates the Newmont Rapid Response (NRR) system that addresses notifications and communications with the public.

Standard of Practice	<u>7.5</u> :	Incorporate into response pla monitoring elements that account j cyanide treatment chemicals.	ans and remediation measures for the additional hazards of using
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 7.5
		not in compliance with	

**Basis for Audit Finding:** Phoenix has prepared cyanide response and remediation plans that address appropriate uses and situations for cyanide treatment chemicals. Phoenix has developed plans to sample and monitor soils and groundwater in the event of a cyanide spill. The ERP and the ERRCP state that any "wet soil" will be moved to the heap leach pad. Additionally, the ERRCP states that "Cyanide releases will be disposed of on the heap leach pad, in the event pond, tailings facility, or returned to the leaching circuit, depending on the nature of the release." The ERRCP requires sampling to identify the extent of a contaminated area. All cyanide contaminated soil with WAD cyanide  $\geq 0.2$  ppm must be excavated or treated in place. Spill sites must be monitored to validate clean up.

November 2008 Date

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

Signature Dead Auditor

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

 $\mathbf{X}$  in full compliance with

The operation is	in substantial compliance with	Standard of Practice 2.2

not in compliance with

**Basis for Audit Finding:** Phoenix has committed to annual evaluation and update of the Emergency Response Plan, if needed. Additionally, at least once per year Phoenix will conduct a cyanide-related emergency response drill. The ERP includes a procedure to review the plan annually or after emergencies and update as required. In addition, Phoenix conducts mock drills to practice and prepare for emergencies and to provide insight into the effectiveness of the ERP. The ERP was recently modified (April 2008) as a result of information collected from a mock drill.

8. TRAINING: <u>Standard of Practice 8.1</u> :		Train workers and emergency cyanide in a safe and environment	response personnel to manage tally protective manner.
		Train workers to understand the hazards associated with cyanide use.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 8.1
		not in compliance with	

**Basis for Audit Finding:** Phoenix provides training to all employees on the hazards of cyanide and will provide annual refresher training. Phoenix retains all cyanide training records for all employees. The cyanide related performance assessment tests are also retained in the employees' permanent record. Mill workers and personnel who will be working around cyanide are provided several levels of training. Initially they receive the new hire training that includes "Cyanide Safety". 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. Employees receive job specific training that includes cyanide safety and training on each of the circuits where they will work.

Standard of Practice 8.2	<u>2</u> :	Train appropriate personnel to open systems and procedures that protect and the environment.	rate the facility according to human health, the community
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 8.2
		not in compliance with	
		Pala	0
Phoenix Mine		amely Al	November 2008
Name of Facility		Signature Dead Auditor	Date
i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoeni	xsummaudit-fnl-	Golder Associates	Page 20 of 23

**Basis for Audit Finding:** All new employees are required to have the "Cyanide Safety" class; and employees who work in process operations and maintenance receive additional training on cyanide safety prior working with and around cyanide equipment. 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 includes the use of process STPs, such as "Reagent Delivery/Offloading", "HCN Detection and Evacuation", and "ICU Post Batch Cleanout" and training documents, such as "Phoenix Reagent Operator" and "Phoenix Leach & Carbon Handling Operator", that include instructions on the proper use of the equipment and related safety issues. A competent person (trainer) provides the training. An employee is required to demonstrate competency prior to working in an area.

The training materials include the STPs for the operating equipment and performing functions such as "Cyanide Offloading" that identify specific cyanide management elements with each job; and training documents that address "Task Analysis and STPs" and "Cyanide Equipment Decontamination". Each employee receives instructions on performing tasks and operating equipment and initials a form listing the training elements, acknowledging that they have received this instruction. Employees are trained and observed for proficiency and skill prior to unsupervised assignment to an area or job.

Phoenix employees are trained annually on use and hazards associated with cyanide. The annual training is evaluated with examination. Additional training includes periodic (monthly) safety meetings that include instruction and training on cyanide and other safety topics.

Phoenix 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 any test results.

<u>Standard of Practice 8.3</u> :		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	Standard of Practice 8.3
		not in compliance with	

**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 and emergency response procedures. The training includes decontamination and first aid procedures. Phoenix mill employees working in cyanide areas participate in mock drills. Employees 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 STPs and includes instruction in decontamination and first aid procedures for cyanide release incidents. STPs include requirements for understanding the emergency response procedures and knowing where emergency response equipment is stored. Also, emergency response procedures are provided to all employees through the "Cyanide Safety" training.

The Emergency Response Coordinators and First Responders are trained on the procedures and guidelines outlined in the ERP including the response to a cyanide spill, release, or emergency.

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

November 2008 Date

Signature Lead Auditor

Page 21 of 23

e

Training includes the use of the cyanide antidote, SCBA, other PPE necessary to respond to a cyanide emergency and HazWoper training.

Phoenix employees receive annual refresher training that includes training on cyanide hazards, safety measures and response procedures. Mill workers and operations personnel who will be working around cyanide are provided with "Cyanide Safety" training. In addition, responses to cyanide exposures are discussed, periodically, in the safety meetings. Emergency Response Team members also receive annual refresher training as part of their periodic re-certification, and also participate in the mock drills.

Phoenix has presented their ERP to the Lander County LEPC. Phoenix has exchanged communications with Battle Mountain General Hospital on the use of cyanide at the site and the ability of the hospital to respond to a cyanide emergency. Through Phoenix's direct participation in the Lander County LEPC, the mine is connected with local response agencies, including: Lander County Sherriff's Office, County Fire Department, Ambulance, Nevada Division of Emergency Management, NDEP, and Lander County Public Safety Complex. Phoenix is committed to at least one annual mock cyanide emergency response drill that will include both human exposure and environmental release. The drill will be analyzed and improvements made to training procedures and the emergency response plan as required.

Training records documenting employee training on cyanide use, safety, and emergency response are retained by the Phoenix. The records include the names of the employees and the trainers, the date of training; the topics covered, and any test results demonstrating an understanding of the training materials. Additionally, the mine retains certificates of HazMat Technician training.

9. DIALOGUE:	Enga	ge in public consultation and disclos	ure.
<u>Standard of Practice 9.1</u> :		Provide stakeholders the opportuce concern.	unity to communicate issues of
	$\mathbf{X}$	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 9.1
		not in compliance with	

**Basis for Audit Finding:** Phoenix provides the opportunity to communicate issues of concern with the public through quarterly communicy communication sessions that Phoenix sponsors and conducts. At these meetings, the members of the general public and government leaders are encouraged to attend and discuss issues related to the mining operation including the use of cyanide. Newmont provides a toll-free telephone number and internet email address for the public to call or email if they have concerns regarding Phoenix.

The Phoenix Operation has conducted several community breakfasts with the Community of Battle Mountain and the Battle Mountain Band, the local Native American tribe. These meetings have featured presentations on the mining operation and the use and handling of cyanide. These meetings provide interaction with the stakeholders and provide them with information regarding cyanide

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

November 2008 Date

Signature Lead Auditor

management practices and procedures. Further, to help with stakeholder communications, the External Relations Specialist represents Phoenix on numerous civic groups in the Battle Mountain and Lander County. Individuals can easily access the External Relations Specialist and express interest and concerns about the Phoenix operation and the use of cyanide.

<u>Standard of Practice 9.2</u> :		Initiate dialogue describing cyanide management procedures and responsively address identified concerns.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 9.2
		not in compliance with	

**Basis for Audit Finding:** Phoenix provides the opportunity to communicate issues of concern with the public through contact with the local stakeholders during mock drills, the quarterly communication sessions and public tours.

<u>Standard of Practice 9.3</u> :		Make appropriate operational and environmental information regarding cyanide available to stakeholders.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 9.3
		Not in compliance with	

**Basis for Audit Finding:** The Phoenix Operation has a handout titled "How Gold is Mined" that includes a description of ore processing and the use of cyanide. Phoenix has a handout titled "Phoenix Mill Overview". These documents are available to anyone visiting the site or who request information on the operation.

The Phoenix Operation was permitted to operate in October 2004. During the permitting process the Plan of Operations was reviewed by the Bureau of Land Management and subjected to an Environmental Impact Statement (EIS). This involved Public Scoping meetings, public meetings on the draft EIS, and official notifications in the local newspapers. These meetings and notifications included written descriptions of the operation and how cyanide is managed.

The Phoenix operations are covered by a Water Pollution Control Permit (WPCP) that is accompanied by a Fact Sheet describing the use and management of cyanide at the site. This public document is available from Phoenix or from Nevada Division of Environmental Protection (NDEP).

Phoenix provides quarterly reports to the NDEP Bureau of Mining Regulation and Reclamation that includes a summary of cyanide spills and releases, and environmental performance monitoring. These reports are available to the public by request. Phoenix is required to complete MSHA reports that would include any cyanide related worker exposure or death. Newmont provides operational and environmental information in Newmont's annual corporate sustainability report, "Now and Beyond" and on Newmont's website (www.newmont.com). The website has an environmental record for spill management and cyanide incidents and includes Phoenix.

Phoenix Mine Name of Facility

i:\05\2280\0400\phoenixsummaudit-fnl-21nov08\phoenixsummaudit-fnl-21nov08.doc

Signature Lead Auditor

November 2008 Date