

# **ICMI Cyanide Code Gold Mining Recertification Audit**

## **Summary Audit Report**

**Nevada Gold Mines,  
Phoenix mine**

**Nevada, USA**

**Submitted to:  
The International Cyanide Management Institute  
1400 I Street, NW – Suite 550  
Washington, DC 20005  
USA**

***2024 Audit Cycle***



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PHOENIX MINE  
ICMC SUMMARY AUDIT REPORT

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**Mining Operation:** Phoenix Mine

**Mine Owner:** Barrick Gold Corporation

**Mine Operator:** Nevada Gold Mines


**Name of Responsible Manager:** Robert Tucker, General Manager

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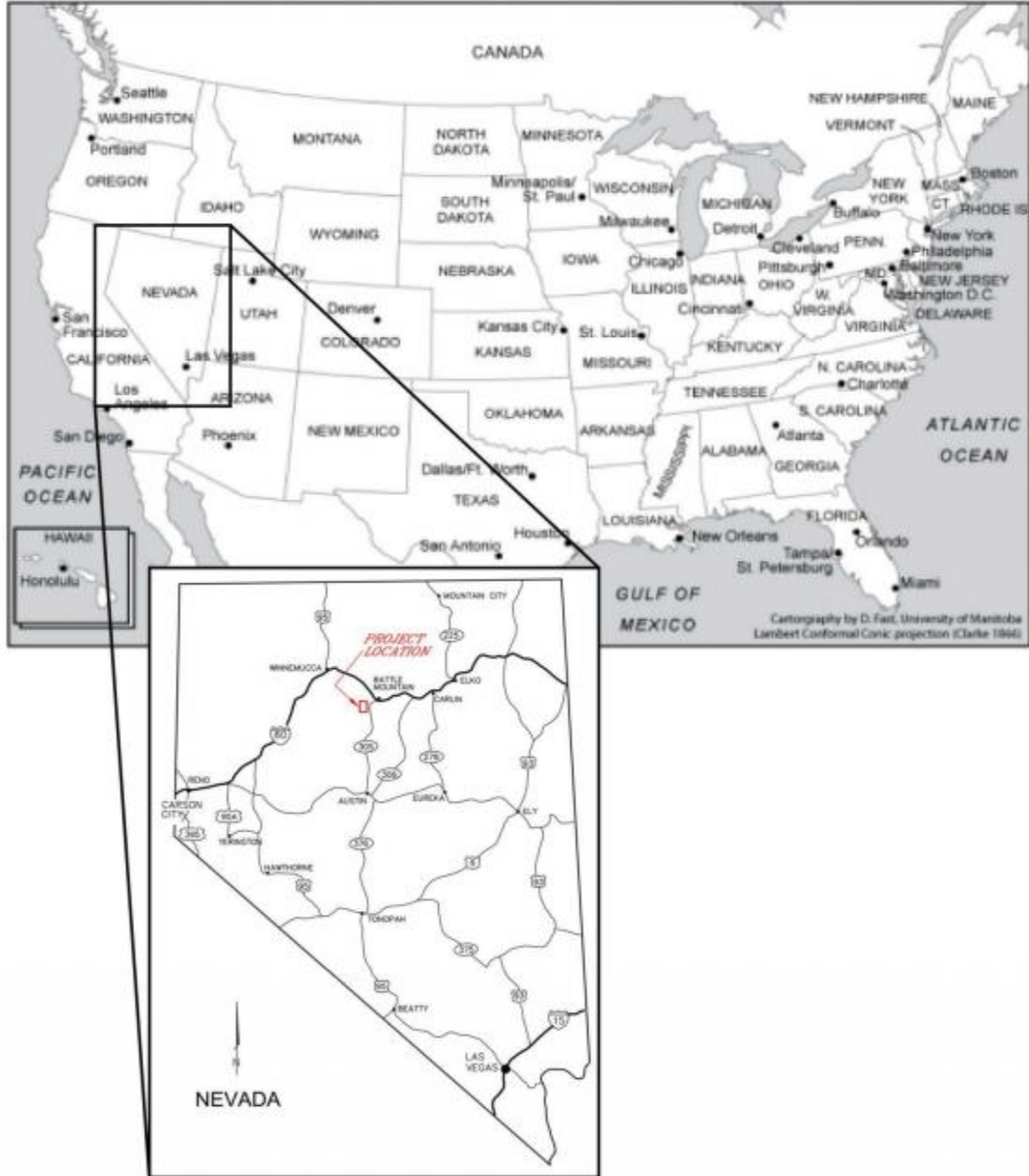
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**Location and description of the operation**

The Phoenix mine location is presented in the picture below



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The Phoenix Mine is located in Lander County, Nevada approximately 12 miles to the southwest of the community of Battle Mountain via Interstate Highway 80 and Nevada State Highway 305. It includes the Phoenix, Midas, Reona, and Iron Canyon open pits and excavation of the existing Northeast Extension, Tomboy, Midas, and Fortitude gold ore stockpiles.

The Phoenix mill, constructed in 2005, is designed for the beneficiation of 35,000 tons per day of run-of-mine grade ores from the mining operations. Gold, silver, and copper are recovered by: (1) coarse gold recovery by gravity separation; (2) two-stage flotation to produce two concentrates, copper/gold and gold/sulphide concentrates, both for offsite processing; and (3) further processing of the flotation tailings using a cyanide leach and carbon-in-pulp (CIP) circuit for additional gold and silver recovery. Gravity concentrates are diverted to an intensive cyanidation unit (ICU) for gold recovery

Cyanide and lime are added to the leach and CIP tanks for precious metal dissolution and pH control. The leach tanks discharge to the CIP leach circuit, where dissolved precious metals are adsorbed onto activated carbon particles. Loaded carbon is collected for stripping and the tails slurry passes through an ammonium bisulfite (ABS) cyanide destruction circuit prior to discharge to the tailings storage facility (TSF). Loaded carbon is transferred from the mill CIP leach 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 end of the CIP circuit. Following the cyanide rinse for copper, the carbon is stripped of precious metals with a hot cyanide solution. Barren carbon is conveyed through a regeneration kiln and the activated product is mixed with fresh make-up carbon and pumped to the carbon attrition tank for reintroduction into the CIP recovery circuit.

Pregnant solution from the carbon stripping process and from the ICU is pumped through a circuit comprised of electrowinning cells. The electrowinning precipitate is filtered, heated in a retort to dry the product and remove mercury, and then shipped to Nevada Gold Mines facilities at Turquoise Ridge or the Carlin complex for refining of precious metals.

Tailing's slurry is conveyed by pump from the Phoenix mill to the TSF through a 24-inch diameter slurry pipeline. Reclaim water reports to the reclaim pond, which is lined and contains a leak detection system. Reclaim water is pumped back to the Phoenix mill via a pipeline that shares a common corridor with the slurry pipeline. Reclaim water used in the milling circuit has WAD (Weak Acid Dissociable) cyanide concentrations below 0.5 mg/L. Both pipelines are largely constructed above ground.

Historic tailings impoundments on site consist of two separate impoundments separated by an east-west 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

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gold tailings from the more recent gold mining and milling operations. Neither impoundment was constructed with an engineered liner. The Phoenix mine includes a constructed lined tailings impoundment over the existing northern copper tailings impoundment. The synthetic lined impoundment basin is covered with a minimum 18" 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 an underdrain system. The southern portion of the historic impoundment has been covered for closure.

The Reona heap leach pad continues to be permanently inactive and no longer receives process solutions, as was the case during the previous audits. It has been demonstrated that the concentration of WAD cyanide in the residual solution is continuously below 0.5 mg/l and the facility is not considered a "cyanide facility".

The scope of the recertification audit at the Phoenix mine comprises the process plant facilities including the leach tanks, CIP tanks, intensive cyanidation unit (ICU), carbon handling, cyanide offloading and storage facilities, and the cyanide detoxification area. The scope also includes the tailings pipeline corridor, the TSF, the reclaim water pond, and the Reona booster station. There are no treated cyanide water discharges to the environment at the Phoenix mine.

Liquid cyanide at 30% concentration is delivered at Phoenix in tanker trucks. Cyanide is stored in a cyanide tank before it is distributed for use in the production facilities.

The only new facilities constructed and put in operation since the previous recertification audit are the two raises of the TSF dam (Reference Elevations 4993 and 5001).

The Phoenix mine process flowsheet is presented below:

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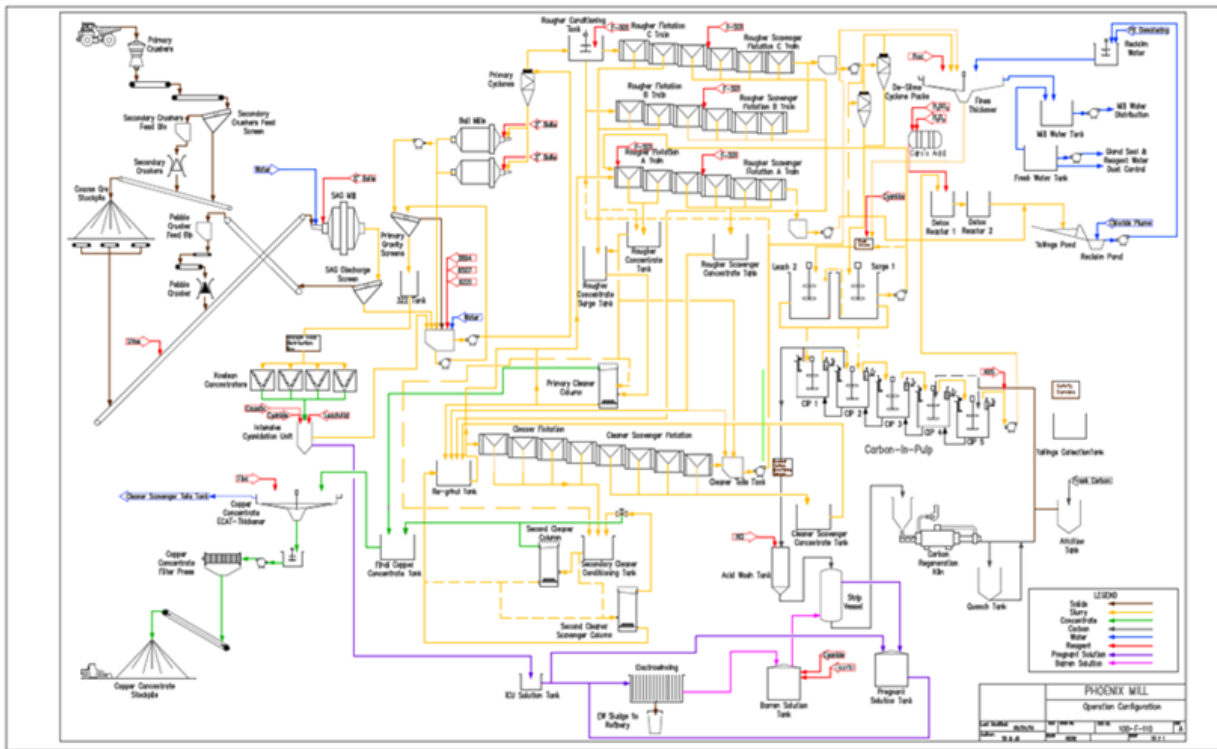
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## Auditor's Finding


The International Cyanide Management Institute (ICMI) approved Audit Team verified that the Phoenix mine is in **FULL COMPLIANCE** with ICMI Cyanide Code requirements for Gold Mining operations.

**This operation has not experienced any compliance issues during the previous three-year audit cycle.**

**The Phoenix mine has experienced zero significant cyanide incidents during this 3-year recertification audit cycle.**

**This operation was determined to be in FULL COMPLIANCE with the International Cyanide Management Code.**

## Auditor's Attestation


Audit Company:	Paterson & Cooke
Lead Auditor:	Luis (Tito) Campos E-mail: <a href="mailto:titocampos@smartaccess.us">titocampos@smartaccess.us</a>
Mining Technical Auditor:	Chase Ruff Email: <a href="mailto:Chase.Ruff@patersoncooke.com">Chase.Ruff@patersoncooke.com</a> 
Date(s) of Audit:	December 2 <sup>nd</sup> – 5 <sup>th</sup> , 2024

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 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 Institute for Mining Operations Verification Protocol and using standard and accepted practices for health, safety and environmental audits.

Phoenix Mine

Name of Operations

  
Signature of Lead Auditor

May 19<sup>th</sup>, 2025

Date

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## SUMMARY AUDIT REPORT

**1. PRODUCTION AND PURCHASE:** Encourage responsible cyanide manufacturing by purchasing from manufacturers that operate in a safe and environmentally protective manner.

### ***Standard of Practice***

1.1 Purchase cyanide from certified manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide, and to prevent releases of cyanide to the environment.

The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 1.1

*Discuss the basis for this Finding/Deficiencies Identified:*

Phoenix purchased all of the cyanide used on site from Cyanco Company, LLC during the audit period. Cyanco's production facilities in North America are currently certified according to the ICMI website. The Phoenix Cyanide Management Plan states that the site will only purchase cyanide from procedures that are certified in the Code.

**2. TRANSPORTATION:** Protect communities and the environment during cyanide transport.

### ***Standards of Practice***

2.1 Require that cyanide is safely managed through the entire transportation and delivery process from the production facility to the mine by use of certified transport with clear lines of responsibility for safety, security, release prevention, training and emergency response.

The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 2.1

*Discuss the basis for the Finding/Deficiencies Identified:*

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During the audit, it was verified through site records that TransWood was the sole cyanide transporter involved in Cyanco's cyanide supply chain to Phoenix. TransWood is currently certified under the Code and has maintained certification since 2006. The Phoenix Cyanide Management plan states that the site will only use transporters that are certified in the Code.

Cyanco provides shipping papers documenting chain of custody from the point that the trailer is filled through offload at the mine site. Review of sample paperwork for the recertification period indicates that this practice has remained consistent during the recertification.

No interim storage takes place between the production facility and the storage tanks at the mine site. Bills of Lading for cyanide deliveries show that the cyanide was produced by Cyanco and transported by TransWood to Phoenix, and TransWood is the sole transporter of cyanide to the site. Safety and maintenance of the means of transportation throughout transport is the seller's responsibility, as well as task and safety training and emergency response for the seller's transporters throughout the process. Security is addressed as part of TransWood's ICMI certification.

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

#### **Standards 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.

The operation is: ☒ in full compliance

☐ in substantial compliance

☐ not in compliance with Standard of Practice 3.1

*Discuss the basis for this Finding/Deficiencies Identified:*

The Phoenix mine has cyanide offloading and storage facilities that were designed and constructed in accordance with sound and accepted engineering practices. This was verified during the initial certification audit for the Phoenix mine. No changes or modifications have been made since the initial audit and subsequent recertification audits. The field component of the audit confirms that the cyanide tank area is located next to the mill on concrete hardstanding maintained in good condition. The cyanide tank has a capacity of 14,200 gallons and is located within a containment concrete berm, which is sized to contain at least 110% volume of the tank. The cyanide tank area is also subject to daily inspections at shift start to detect any obvious releases or failure in containment. The cyanide offloading and storage facilities were designed

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and constructed by consulting firm AMEC. Design and drawings for the cyanide offloading systems have been retained from the initial certification audit and were available for review by the auditors.

The Phoenix mine offloading and storage facilities for liquid cyanide are located outside of the mill far away from people and surface waters. This facility remains substantially unchanged since the initial certification audit and subsequent recertification audits and is not located near any offices or places where workers might congregate. Appropriate warning signage is placed at cyanide offloading and storage facility to alert operators of cyanide presence and hazards associated with it. Although the offloading and storage facilities are not within their own fenced areas, they are located within the fenced and secured areas of the mine where public access is controlled. The Phoenix mine is located in an arid area and there is no surface water in the vicinity. There is a fixed HCN monitor installed at the cyanide offloading and storage area. All personnel with access to the offloading and storage facilities, including contractors, receive site specific health and safety training. All these measures minimize the potential for human exposure. The offloading platform has sumps that should be inspected prior to cyanide offloading and, if there is presence of fluids, pumped into the secondary containment of the cyanide tank. Any release from the cyanide tank will be contained within the secondary containment and pumped into the system.

The Phoenix mine offload area has a concrete pad for trucks carrying liquid cyanide. This pad is constructed with cast-in-place reinforced concrete to prevent seepage to the subsurface. It is sloped to sumps to collect any potential spillage during offloading. This area is inspected daily to detect any deficiencies. The field portion of the audit verified that the concrete pad was in relatively good condition, with no significant damage, cracking or spalling evident. The offloading pad has a capacity of approximately 20,000 gallons that would hold the content of the cyanide truck. The checklist for liquid cyanide offloading includes an item to ensure that the sumps do not have presence of water prior to initiating offloading activities.

The Phoenix mine has a storage tank for liquid cyanide. There are ultrasonic level indicators and high-level alarms installed at the tank. Tank levels are continuously monitored from the mill control room. Arrangements remain unchanged since the previous recertification audit. The offload standard procedure is designed to prevent overfilling the tanks. The operators verify that the tank levels are low enough to receive the expected delivery. Cyanide offload should only occur if the tank level is 45% or lower. In addition, the cyanide supplier, Cyanco, has remote telemetry monitoring of the cyanide tank levels to track cyanide usage and inventory, allowing them to dispatch cyanide loads when needed. The cyanide delivery driver is required to verify the tank levels prior to offloading. Tank levels before and after cyanide offloading are documented in the cyanide offloading checklist and bill of lading. There are both a Hi-level and Hi-Hi level alarm on the cyanide tank. The Hi-level alarm is set at 95% and the Hi-Hi level alarm at 100%. There is also a level indicator at the tank with a visible alarm that is inspected visually during the cyanide offloading process. The level indicator in the cyanide tank is continuously monitored to ensure it is operational. The auditors observed screenshots in the control room showing that the level indicator was functioning correctly. The reliability and the functionality of

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the level alarms are maintained through checks of tank level, checks for the offloads, and routine testing and monitoring by the operations. These sensors are included in the preventive maintenance program and are tested monthly. Immediate attention and repair are given for an improper functioning high-level alarm.

The cyanide storage tank area remains substantially unchanged since the initial certification audit and subsequent recertification audits. The cyanide storage tank is secured to a solid, reinforced concrete pedestal-type foundation and is contained within concrete berms with good condition concrete flooring that is an adequate barrier to prevent seepage to the subsurface. The bermed containment area is sized to contain 110% of the tank volume and has been confirmed previously as part of engineering specification checks. The containment area is equipped with a sump, pump, and automatic controls to return liquids to the process circuit. The cyanide storage tank is located away from other products and no smoking is allowed. The tank, berms and containment area are subject to daily inspections at the beginning of each shift. During the field inspection, the containment areas were noted to be in relatively good condition, with no significant damage, spalling or cracking evident.

The cyanide storage area for liquid cyanide remains substantially unchanged since the initial certification audit and subsequent recertification audits. The cyanide storage area is located outside of the mill, and the tank is vented on top. The tank is insulated and heat traced, and there is a fixed HCN monitor and a windsock to indicate wind direction. Build-up of hydrogen cyanide gas is unlikely to occur. The offloading and liquid cyanide storage facilities do not have their own fenced area; however, it is located within the fenced and secured area of the mine where public access is controlled. There is warning signage indicating that only authorized personnel are allowed in the area. In addition, all the valves associated with the cyanide storage tank are locked. There is a tank of caustic solution within the secondary containment of the liquid cyanide storage tank; however, the caustic solution is compatible with cyanide. The cyanide tank containment is located adjacent to the hydrochloric acid containment but is separated by concrete walls with separate sump systems. There is an overhead pipeline that connects the cyanide storage tank to the mill. This pipeline crosses over the hydrochloric acid containment and is checked every shift for leakage and documented in the workplace inspection reports. Any leaks would be reported and maintenance work initiated with notification in the SAP maintenance management system.

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.

The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 3.2

*Discuss the basis for this Finding/Deficiencies Identified:*

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The Phoenix mine only uses liquid cyanide delivered in tanker trucks; no drums or wooden crates are involved. Cyanco/TransWood's offloading procedure requires the driver to monitor and control the entire offload operation. The procedure also details responses to any leaks or spillage. At the end of the offload, the driver is required to wash down the end of the delivery hose, the dust cap and the immediate area. The driver is also required to inspect the truck by walking completely around the tractor-trailer before moving it. The inspection ensures that spillage or leaks, if they occurred during the offloading and disconnecting activities, have been cleaned and fittings are securely closed. If there is any spillage or residue on the outside of the truck, offload piping, or pad, the driver washes it off where the material is collected in the offloading pad sump. In addition, the Standard Operating Procedure (SOP or procedure) "Offloading Bulk Reagent" specifies that the process operator shall monitor the connection / disconnection of the offloading process and supplement the observation process with video cameras that are monitored from the mill control room. The procedure also indicates that any spilled product (on containment) is to be noted and cleaned up immediately, as appropriate, and to report a product release (off containment) to the area supervisors and environmental departments to determine appropriate clean up and disposal. Any spills or leaks related to a cyanide offload and onto the pad are captured in the sumps and pumped out with portable pumps to the adjacent secondary containment for the cyanide storage tank. The sump in the secondary containment of the cyanide tank has a pump and automatic controls to return liquids to the process circuit. Any spills captured in the offload sumps would be manually pumped following the procedures outlined in the environmental spill response plans. Any spills that flowed off the pads would be cleaned up following the "Remediation of Cyanide Contaminated Soils" procedure.

The Phoenix mine has SOP "Offloading Bulk Reagents" that outlines the requirements for inspection, observation and offloading of liquid cyanide; as well as the operation, maintenance, and function of valves, pumps and various interlocks within the cyanide offloading process. There is also a reagent offloading checklist that is used by mill operators to inspect and monitor the offloads. The checklist includes inspection of emergency showers and eye wash stations, HCN monitors, and to ensure that the sumps do not have presence of water prior to initiating offloading activities. In addition, Cyanco/TransWood's offloading procedure "Sodium Cyanide Delivery SOP Cyanco" describes safe practices to complete the offload. Both the transporter and operator have to confirm that the storage tank has sufficient capacity for the offload. The bills of lading document the pH of the liquid cyanide and tank level prior and after offloading. The operators sign off the form to authorize the offload. The operators have radios for communication with the control room in the event of an emergency. The mill operators are familiar with the Cyanco/TransWood delivery and emergency shut-off procedures. SOP "Offloading Bulk Reagents" also includes a requirement to immediately clean up any spilled cyanide. No spills related to cyanide offloading were reported during this recertification cycle. Both Phoenix SOP "Process Reagent Offloading" and Cyanco/TransWood's offloading SOP "Sodium Cyanide (NaCN) Solution Delivery" require the driver to use the appropriate PPE during offloading activities. The mill operators will observe the offload and are not required to wear the PPE, unless it is needed in case of an emergency. The required PPE includes rubber boots, face shield and/or goggles, rubber gloves, rubber or

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neoprene suit, approved respirator, and hardhat. The SOP also specifies that Phoenix operators shall monitor the connection/disconnection of the offloading process that is conducted by the Cyanco/TransWood driver, and supplement the observation process with video cameras, which are monitored remotely from the mill control room. The liquid cyanide already comes with a red colorant dye. This was verified by the auditors during the field visit. A cyanide offloading event was observed during the audit. The review indicated that the Phoenix mine has appropriate SOPs and practices to handle and offload cyanide solutions in a safe manner.

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

##### **Standards of Practice**

4.1 Implement management and operating systems designed to protect human health and the environment including contingency planning and inspection and preventive maintenance procedures.

The operation is: ☒ in full compliance

☐ in substantial compliance

☐ not in compliance with Standard of Practice 4.1

##### *Discuss the basis for the Finding/Deficiencies Identified:*

The scope of the recertification audit at the Phoenix mine comprises the process plant facilities including the leach tanks, CIP tanks, intensive cyanidation unit (ICU), carbon handling, cyanide offloading and storage facilities, and the detox area. The scope also includes the tailings pipeline corridor, the TSF, and the reclaim water pond, and the Reona booster station. There are no treated cyanide water discharges to the environment at the Phoenix mine.

The Water Pollution Control Permit (WPCP) dated June 2023 describes operating requirements for the Phoenix mine. This permit authorized the mine to construct, operate, and close the operations in accordance with the requirements and conditions of the permit, which includes specific requirements for the cyanide facilities. These requirements and conditions are based on information provided by the operations to the Nevada Department of Environmental Protection (NDEP), describing the facilities and operating methods. Additionally, there are manuals, operating plans, and SOPs for the safe operation of cyanide facilities. The Phoenix mine has renewed ISO14001:2015 certification of its environmental management system in August 2022 and is valid for three years, which ensures document control practices. SOPs were reviewed and found to be sufficiently detailed to enable safe operation.

The Phoenix mine has operating manuals, plans and permits documentation in place that include critical assumptions and parameters for the safe operation of cyanide facilities. The WPCP permit

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for the Phoenix mine, dated June 2023, describes regulatory requirements, such as monitoring of the supernatant pond and the reclaim pond for the TSF, and a minimum freeboard of 3 feet for the TSF supernatant pond and 2 feet for any solution or stormwater pond. The WPCP states that the Phoenix mine TSF reclaim pond and diversion ditches were designed for the 25-year, 24-hour event. The Reona heap leach continues to be permanently inactive and no longer receives process solution, as was the case during previous audits. The TSF OMS (Operation, Maintenance, and Surveillance) Manual also indicates a minimum freeboard of 3 feet for the supernatant pond and 2 feet for the reclaim pond, and consideration of the 100-year, 24-hour storm event for freeboard calculations. The Cyanide Management Plan indicates that the target WAD cyanide concentration range in treated tailings is 25 – 50 ppm. The Cyanide Management Plan indicates that a minimum pH of 9.5 shall be maintained throughout the leach/CIP circuit to minimize the evolution of hydrogen cyanide gas. The Phoenix mine does not discharge any solution containing cyanide to the environment, including surface water.

The Phoenix mine has developed and implemented standard operating procedures (SOPs) for cyanide related tasks, which describe the standard practices necessary for the safe and environmentally sound operation of cyanide facilities. The operation has identified equipment, personnel, and procedures for cyanide offloading as well as for processing facilities, TSF, and all associated piping and pumps as having contact with cyanide. The Operation, Maintenance, and Surveillance (OMS) Manual for the Phoenix TSF include in Section 6 a list of critical aspects and areas to be inspected and inspection frequencies, as well as water management procedures to retain storage capacity during operations. The Phoenix mine has implemented an inspection program with frequencies that vary from daily, weekly, monthly, and biannually for the reagents area, leach/CIP/carbon area, and tailings facilities. Inspections are conducted by process operators following requirements specified in permits and internal documents (i.e. OMS TSF Manual, Cyanide Management Plan). The inspections are documented using forms that include the name of the inspector, date, and a comments section where deficiencies are noted. Deficiency notifications are sent to maintenance planners where they schedule corrective maintenance via work orders. The inspection program is sufficient to assure and document that the systems are operating within design parameters. Workplace inspections are conducted every shift by process operators including safety equipment, piping, containments, process equipment, tailings impoundment, tailings pipeline, reclaim pond and Leak Collection Recovery Systems (LCRS). The Phoenix mine also monitors pH levels and cyanide concentrations according to operational parameters. Wildlife inspections at the TSF and reclaim pond are also conducted on a daily basis. Identified deficiencies are noted and corrected or reported to supervision for corrective action. The auditors verified inspection records for the last 3 years and found them to be complete.

The Phoenix mine uses a corporate-wide procedure for Management of Change (MoC) that includes the identification and review of the proposed changes; identification of relevant stakeholders for the project, analysis and evaluation of the changes by a multidisciplinary team including health, safety and environmental aspects; sign off by all areas that participated in the evaluation, approval, implementation of the change, action plan, and evaluation of the change. The procedure requires Environmental and Safety personnel to review and sign-off on proposed

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cyanide-related process changes and modifications, prior to implementation of the changes and modifications. There is a MoC App in the SharePoint platform to complete and manage MoC processes. The App includes a section to mark if the change is related to cyanide management.

The Fluid Management System Operating Plan for the Phoenix mine describes contingency actions for numerous situations related to cyanide facilities (including tailings), such as leaks, spills, and releases; impoundment and slope failures; earthquakes; seasonal and temporary closure. The TSF Operation, Maintenance, and Surveillance (OMS) Manual includes abnormal operating conditions and emergency response activities such as, leakage or failure in the tailings delivery and reclaim return lines, excessive supernatant pond limits, extreme climatic events, and seepage or slope instability. Also, the OMS Manual covers seasonal, temporary and tentative permanent closure. The Phoenix mine Operating Plan includes a temporary closure plan for unplanned scenarios. Activities related to cyanide management to be implemented in case of an unplanned shutdown include, among others: Tailings deposition will stop, and the size of any supernatant pool will be controlled using the decant line; sufficient capacity will be maintained in the reclaim pond to accommodate the designed emergency storage volumes; maintenance and inspection of processing facilities will take place regularly to ensure maintenance of adequate storm storage capacity in the process and reclaim ponds and to ensure that the integrity of all pipelines, trenches, diversion structures, berms and embankments are maintained; monitoring of the leach pad/solution ditch leak detection system, pond leak detection system, groundwater and all other permitted solution monitoring will continue as outlined in the permits. The major consideration for temporary closure is to ensure that accumulations of precipitation received during the shutdown period can be accommodated in the solution ponds and the tailings facility. Following any period of temporary closure, a thorough inspection of all pipelines, drainage channels, ponds and pumping and processing equipment will be made prior to start-up.

Tanks holding cyanide solutions are inspected every shift. Inspection forms for the last 3 years were sampled and found to be complete including inspection items such as structural integrity, signs of corrosion and leakage of tanks. Nondestructive tests (NDT) are conducted annually for tanks holding cyanide solutions including CIL #1 and #2, CIP tanks #1 to #5, ICU reactor, and cyanide storage tank. The auditors reviewed evidence of these tests for the recertification period. These nondestructive tests are included in SAP as part of the preventive maintenance program. Secondary containments configuration remains substantially unchanged from the previous recertification audits. None of the containment areas have any drains to the adjacent land surface. During the field visit, the secondary containments were observed to be generally free of any fluids or materials stored within them. Inspection forms include conditions of tanks, pipelines, sumps, and valves, as well as specific items to check for conditions of secondary containments (integrity, presence of fluids, available capacity). The reclaim pond is inspected daily. The LCRS from the reclaim pond is inspected every week and monitored for flow; no analysis is conducted to detect cyanide presence. The LCRS did not report any flow for the recertification period. Pipelines, pumps and valves are inspected every shift by process operators and weekly by the maintenance area as part of their preventive maintenance program. Inspection forms include specific items related to deterioration and leakage of pipes, pumps, and valves. The inspection

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forms for the reagents/CIP/Carbon areas include an item to inspect for presence of salts. The TSF is inspected daily for critical aspects including available freeboard. The historical freeboard for the recertification period at the TSF and reclaim pond were reviewed and verified that they were managed according to their design criteria. The integrity of surface water diversions around the TSF are inspected annually as part of the Dam Safety inspection conducted by the Engineer of Record. The auditors conducted a field inspection during the site visit and verified the condition of tanks, secondary containments, pipelines, pumps, valves, water diversions, and tailings freeboard. These inspections also included cyanide offloading and storage facilities. The auditors reviewed inspections records and verified that inspections to cyanide facilities are conducted in a consistent manner.

The Phoenix mine has implemented an inspection program with frequencies that varies from daily, weekly, monthly, and biannually for the reagents area, leach/CIP/carbon area, and tailings facilities. Inspections are conducted by process operators following requirements specified in permits and internal documents (i.e. OMS TSF Manual, Cyanide Management Plan). The inspections are documented using forms that include the name of the inspector, date, and a comments section where deficiencies are noted. Deficiency notifications are sent to maintenance planners where they schedule corrective maintenance via work orders. The inspection program is sufficient to assure and document that the systems are operating within design parameters. Workplace inspections are conducted every shift by process operators including safety equipment, piping, containments, process equipment, tailings impoundment, tailings pipeline, reclaim pond and Leak Collection Recovery Systems (LCRS). The Phoenix mine also monitors pH levels and cyanide concentrations according to operational parameters. Wildlife inspections at the TSF and reclaim pond are also conducted on a daily basis. Identified deficiencies are noted and corrected or reported to supervision for corrective action. The auditors verified inspection records for the last 3 years and found them to be complete. It is the professional opinion of the auditors that the inspection program of cyanide facilities, including offloading and storage activities, and the frequency of inspections are sufficient to assure and document that the operation is safe and functioning within design parameters. The auditors reviewed inspections records and verified that inspections are conducted in a consistent manner.

Records of inspections are retained and were reviewed by the auditors. The inspections are documented and include the date of the inspection, the name of the inspector and observed deficiencies. Inspection forms are reviewed by the supervisor to ensure good quality of inspections. The inspection program also includes cyanide offloading and storage facilities. Corrective actions identified that are related to maintenance of equipment are managed by the Maintenance area. These corrective actions are managed using the SAP maintenance management system, where work orders are tracked, prioritized, planned and closed. The auditors verified that corrective actions related to cyanide facilities were prioritized for prompt implementation. The auditors reviewed examples of items identified during inspections and records of the implementation of the corrective actions until they were closed. All other corrective actions not related to maintenance of equipment that are identified through inspections conducted by Process personnel are actioned and followed up on a daily basis until closure.

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The Maintenance area has a preventive maintenance program for pumps, pipelines, valves, flow meters, gauges, pH meters, sump pumps, filters, HCN sensors, tanks and cyanide facilities in general. The preventive maintenance program is used to perform necessary maintenance and inspect the integrity of process equipment, piping and tanks, according to a maintenance program and every time it is needed to keep equipment and facilities working properly. The Phoenix mine uses the SAP maintenance management system for identifying, assigning responsibility, scheduling, and tracking the completion of the preventive maintenance activities. Preventive maintenance plans are generated automatically. Work orders generated from inspection forms are entered in the system, including assigned priority. Examples of preventive maintenance records for the recertification period for different facilities were reviewed during the audit and were found to be complete.

The Phoenix mine receives electricity from the public grid to run its operations. In case of power outage, there are two diesel generators to run the mill, both of them with 500-kilowatt capacity. In the event of a power outage, these generators would run the control room, agitators, chillers, and other critical facilities at the plant. These generators are test run and maintained on a monthly basis. The Phoenix mine provided examples of preventive maintenance records for the backup power generators for the recertification period. A review of these records confirmed that the generators are checked on a monthly basis for fuel level, lighting, heating and are also start-tested. This inspection would trigger a corrective maintenance work order if required. The operation also performs routine maintenance on the generators (e.g., oil changes, fuel flushes, etc.) as needed based on set time periods.

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

- The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 4.2

*Discuss the basis for this Finding/Deficiencies Identified:*

Cyanide concentration of the process solution is dictated by metallurgy and mineralogy. There is presence of cyanide soluble copper in the ore which needs to be considered in the cyanide addition rates. The Phoenix mill receives ore from different pits and the presence and mineralogy of copper is variable. To assist in the control of cyanide ore is blended to provide a more consistent feed and lower cyanide addition rate. To control cyanide addition, Phoenix monitors free cyanide in the Leach tanks and all the CIP tanks along with other process parameters. Samples are taken every morning at the beginning of the shift and provided to the site process team for review. The site targets a total cyanide concentration of 0.2-0.3 lbs/ton in the final CIP tank prior to the detoxification process. The results of the samples are discussed daily and adjustments to cyanide addition and cyanide detoxification operation are made based on these

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samples. The Phoenix mine manages cyanide addition to meet the post-destruction WAD cyanide target of 50 mg/l at the spigots at the TSF, however, the process aims to achieve a concentration of 25-50 mg/l of to manage variability. In this regard, cyanide levels are measured at CIP#5 tank to determine if it is at a target level prior to cyanide destruction. Adjustments in cyanide addition are made accordingly to meet the target. In addition, cyanide levels are measured at the feed to detox, at the TSF spigot, and at the supernatant pond. Phoenix has two major parameters to control cyanide addition: a) the permit issued by the State of Nevada related to a maximum WAD CN concentration at the tailings slurry spigot; and, b) to have adequate cyanide concentrations in the solution to extract gold from the ore. The site has experienced several spikes in tailings spigot WAD CN concentrations over the audit period where the WAD CN concentration was over 50 mg/l. These spikes were short lived and under control within 1-2 shifts indicating that the site is monitoring the cyanide addition and making adjustments to regain compliance. The number of spikes per year has reduced over the audit period also indicating that the site is improving its cyanide management practices.

4.3 Implement a comprehensive water management program to protect against unintentional releases.

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

*Discuss the basis for the Finding/Deficiencies Identified:*

The Phoenix mine continues to use a comprehensive, probabilistic water balance via the Goldsim software platform. The water balance is calibrated every month by using real precipitation data and tailings deposition. The Phoenix mine water balance includes the following factors: tailings production; tailings deposition rates; precipitation, evaporation and seepage rates; impacts of freezing and thawing; potential power outages; and freshwater input. The Phoenix mine has zero process water discharges to surface waters. A description of the water balance model and calculations is described in the Phoenix Mine Water Balance Model developed by Golder Associates, dated March 2017. No major updates to the water balance model have been made for the recertification period.

The Water Balance Model considers the tailings deposition rates into the TSF during the calibration process. Bathymetric surveys of the TSF supernatant pond are conducted every quarter to evaluate consolidation of the tailings and are included in the calibration of the model. According to the Water Balance document, the 100-year, 24-hour precipitation event has been considered in the models to provide a sufficient degree of probability that overtopping of the TSF impoundment can be prevented during the operational life of the facilities. The 100-year, 24-hour storm event considered in the model is 7.6 inches. The freeboard in the TSF is regularly monitored to meet the design criteria of 3.0 feet. The reclaim pond freeboard is also monitored

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to meet the design criteria of 2.0 feet. The model covers a considerable range of operational parameters that govern how the impoundment area is managed. There are 3 weather stations at the Phoenix mine; however, only one is used for water balance purposes. The weather stations have collected rainfall data since 2011. Evaporation data is calculated using other weather parameters such as temperature and relative humidity. The weather stations are calibrated every quarter to ensure collection of good quality data. The TSF has a surface water control system for controlling and safely directing runoff generated from upgradient watersheds around them. The water balance takes into account conditions of freezing and thawing, including snowmelt and an allowance for an average spring breakup (thawing) period. The water balance considers evaporation losses and calculated infiltration rates. The TSF has a clay liner to reduce the potential for seepage to the subsurface and includes a reclaim pond below the TSF dam to collect and return seepage back to the system. The mine has emergency backup power generators. Power outages of various durations or equipment failure are considered and can be simulated in the water balance model. The models can predict situations and conditions that would result in possible releases to the environment. The Phoenix mine does not discharge any solution containing cyanide to the environment, including surface water. As such, this component is not considered in the water balance. Seepage from the TSF is collected in the reclaim pond and pumped to the process. In addition, water from a groundwater chloride plume from an adjacent area is pumped from 5 groundwater wells and discharged to the TSF supernatant pond and added to the process. The amount of water pumped from these wells into the process is also included in the water balance. The Phoenix mine also monitors the depth of water in the groundwater wells around the TSF. The mine staff stated that the water table is approximately 250 feet below ground surface and does not affect the water balance.

The Phoenix mine incorporates inspection and monitoring activities into its procedures to implement the water balance and prevent the overtopping of the TSF and the reclaim pond. Inspection records for the TSF were reviewed for the last 3 years and found to be complete. The auditors also reviewed monitoring data for the last 3 years and verified that the design freeboard for the TSF (3 ft.) and the reclaim pond (2 ft.) were maintained at all times. A bathymetric survey is conducted every quarter at the supernatant pond to evaluate consolidation of the tailings. The engineer of record also conducts periodic inspections of the TSF.

The Phoenix mine conducts daily inspections of the TSF and monitoring activities to ensure these facilities are operated according to the design criteria. Records of inspection forms for the last 3 years were reviewed and found to be complete. The tailings dam is being constructed in stages and the current stage elevation is well above the required storage level for storing supernatant, impounded tailings, and storm events. The tailings operators conduct daily inspections of the reclaim pond and impoundment area to record water levels in addition to the regular instrumentation recordings. Monitoring data is used to compare the freeboard with available storage. Freeboard in the TSF and the reclaim pond are visually inspected on a daily basis. The auditors reviewed data for the last 3 years and verified that 3 feet and 2 feet of freeboard has been maintained at all times for the TSF and reclaim pond, respectively. The minimum freeboard registered in the last 3 years for the TSF was 23 feet. A bathymetric survey is conducted quarterly at the TSF pond to evaluate consolidation of the tailings.

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The Phoenix mine measures precipitation daily and the data is uploaded into the water balance model. The water balance model is updated and calibrated monthly by adding real precipitation data and tailings deposition records as mentioned in the Water Balance Model document. No major updates to the water balance model have been made for the recertification period. The auditors reviewed on-site meteorological monitoring data. The Phoenix mine maintains the information in an Excel spreadsheet, which is then uploaded into Goldsim. The records are complete.

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

- The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 4.4

*Discuss the basis for the Finding/Deficiencies Identified:*

The Phoenix mine does not operate ponds, impoundments, or other areas of open waters with WAD cyanide concentrations above 50 mg/l. The TSF supernatant pond and the reclaim pond are generally maintained below the 50 mg/l WAD cyanide. Regardless of that, the site has implemented measures to restrict wildlife and livestock access to open waters such as barbed wire fence around the mine perimeter and chain link fence around the reclaim pond. In addition to the physical restrictions mentioned above, the operation uses mobile propane cannons around the perimeter of the TSF supernatant pond for temporary hazing, as needed.

The Phoenix mine does not operate ponds, impoundments or other areas of open waters with WAD cyanide concentrations above 50 mg/l. The Cyanide Management Plan indicates that the WAD cyanide concentration target in the treated tailings ranges between 25 – 50 ppm. The TSF is the only facility with significant open waters with cyanide-related solutions, including the supernatant pond and the reclaim pond. The operation uses ammonium bisulfite to destroy cyanide in the tailings before discharge to the tailings impoundment. WAD cyanide concentrations measured twice a day at the discharge spigots to the TSF had some exceedances above 50 mg/l during this recertification period due to operational upset conditions (11% of samples in 2022, 5% in 2023, and 3% in 2024). The maximum WAD cyanide levels recorded were 195 mg/l in 2022, 86.7 mg/l in 2023, and 137 mg/l in 2024. The Phoenix mine detected and regained control of these events promptly and implemented corrective actions to improve management of these upset conditions. There were no events that exceeded WAD cyanide concentrations above 50 mg/l in the supernatant pond during the recertification period. A review of monitoring results of the supernatant pond for the last three years indicated maximum WAD cyanide concentrations of 35 mg/l in 2022; 15 mg/l in 2023; and 28 mg/l in 2024. Maximum WAD cyanide concentration at the reclaim pond was 0.86 mg/l for the recertification period.

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During the recertification period, the Phoenix mine has been successful at preventing wildlife mortalities related to cyanide facilities. The TSF and reclaim pond are inspected daily for wildlife mortalities. There have been no wildlife mortalities attributed to cyanide management for the recertification period. The WAD cyanide values at the TSF have been below the recommended value of 50 mg/l most of the time, with a few exceedances due to operational upset conditions. Maximum WAD cyanide reported value at the discharge spigots was 195 mg/l in 2022. There were no events that exceeded WAD cyanide concentrations above 50 mg/l in the supernatant pond during the recertification period. The Phoenix Mine has a procedure “Wildlife Mortality Investigation” that describes wildlife mortality investigation and reporting requirements. The Phoenix Mine has an Industrial Artificial Pond permit with the Nevada Department of Wildlife (NDOW), where the site is required to maintain concentrations in open waters to prevent any cyanide mortality, conduct wildlife monitoring, and report all wildlife mortalities. If an animal mortality is found, the Phoenix mine holds the carcass until authorized by NDOW to dispose of it. If there are concerns whether the mortality is related to cyanide, NDOW has the authority to require testing. The auditors reviewed the wildlife mortalities register for the recertification period and there were no mortalities classified by the Phoenix mine and NDOW as related to cyanide, although some of the mortalities were found inside or near cyanide facilities.

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

- The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 4.5

*Discuss the basis for the Finding/Deficiencies Identified:*

Not applicable to the Phoenix mine, as it does not have direct discharges to surface water. The mine operates with zero discharge of process solutions. The mine is located in an arid climate with no natural surface water bodies on the properties or within close proximity.

The TSF is designed to seep water through the toe of the dam. Seepage from the TSF is collected and contained in the reclaim water pond and pumped back to the mill as make up water. Water quality data from the reclaim pond is monitored quarterly to detect the presence of cyanide. The maximum WAD cyanide value reported for the recertification period was 0.86 mg/l, which is higher than the 0.022 mg/l for free cyanide; however, this water is collected and pumped back to the process circuit.

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

- The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 4.6

*Discuss the basis for the Finding/Deficiencies Identified:*

The main facility that may contribute to seepage to groundwater is the TSF. The Phoenix mine employs a number of specific water management and control measures to protect beneficial use of groundwater. These facilities remain substantially unchanged since the initial certification audit and subsequent recertification audits. As stated in previous audit reports, the Phoenix mine cyanide facilities consist of the mill and related conveyance pipelines, tanks and containments, the tailings delivery and reclaim water pipelines, the TSF and the reclaim pond. The mill has adequate concrete spill containment to prevent seepage. The tailings delivery pipelines are contained within an 80-mil high density polyethylene (HDPE) lined channel. The reclaim water pipelines are constructed of Tite-Liner® pipe, composed of an outer steel pipeline with a HDPE pipe insert. The outer pipeline contains monitoring valves to detect any water presence. The underdrain and reclaim piping between the TSF and the reclaim pond is underlain by a synthetic liner, consisting of a double pipe system, or contained within concrete structures. The TSF consists of an historic unlined portion divided into a northern (copper operations) portion and southern (gold operations) portion and a new partial synthetic-lined impoundment constructed over a portion of the northern copper operations impoundment. The impoundment expansion over the northern copper operations impoundment has a synthetic lining system, which caps the copper tailings and provides containment for the new gold tailings. The TSF was designed in accordance with the NDEP "Zero Discharge" requirements and the Nevada Department of Water Resources (NDWR) Department of Dam Safety criteria. A drainage system constructed throughout the impoundment above a geomembrane liner, consisting of a network of perforated piping, serves to lower the hydraulic head on the geomembrane liner and enhance consolidation of the tails via bottom drainage of the tailings mass. Tailings underflow water collected by the underdrain system is conveyed beneath the dam to an external reclaim pond. Supernatant water that pools on the surface of the tailings is directed to the reclaim pond by gravity via an inclined decant riser. Solution flowing to the reclaim pond is pumped back to the mill through a reclaim water pipeline for reuse in the milling process. Reclaim water used in the milling circuit has WAD cyanide concentrations below 0.5 mg/L. The reclaim pond also has an LCRS system to collect and pump back any fluid detected between the synthetic liners of the pond. The Phoenix mine conducts regular inspections of the reclaim pond and leak collection systems to ensure that the facilities are functioning as designed and protective of the environment. Additionally, the Phoenix mine has installed several monitoring wells immediately downgradient of the TSF to monitor groundwater. The auditors reviewed completed inspection forms for the TSF, reclaim pond and leak collection systems, and a figure showing groundwater monitoring locations to verify compliance.

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The Phoenix mine continued monitoring 8 downgradient point-of-compliance wells in accordance with its WPCP. The direction of the gradient is approximately to the south of the cyanide facilities. Biannual monitoring for the recertification period showed no detectable WAD cyanide in groundwater. The beneficial use for groundwater downgradient of cyanide facilities, as designated by the State of Nevada, is agricultural and livestock use. The standard is 0.2 mg/l WAD cyanide. The Phoenix mine has not caused cyanide concentrations in groundwater to rise above levels protective of beneficial use.

4.7 Provide spill prevention or containment measures for process tanks and pipelines.

The operation is: ☒ in full compliance

☐ in substantial compliance

☐ not in compliance with Standard of Practice 4.7

*Discuss the basis for the Finding/Deficiencies Identified:*

The Phoenix mine has spill prevention and containment measures for all cyanide offloading, storage and process solution tanks. These facilities remain unchanged since the initial certification audit and subsequent recertification audits. This includes the offloading area and cyanide storage tank, the leach and CIP areas, the carbon circuit area that contains the intense cyanidation solution tank, the tailings collection box, the, and the detox tank. There are automated pumps within the containments to pump collected solutions into the process circuit. Automated sump pumps are included in the preventive maintenance program. The containments are constructed of cast-in-place reinforced concrete. The cyanide storage tank area is within a concrete containment with sufficient capacity to contain 110% of the largest tank plus the 100-year, 24-hour storm event. The containment volumes for the CIP/leach area, carbon circuit and the grinding circuit buildings (includes the intense cyanidation unit) are constructed to contain 110% of the single largest tank in the area. The secondary containment systems are inspected as part of the process facilities inspection system. The auditors observed that the concrete containment systems were in relatively good condition at the time of the audit.

As stated in previous recertification audit reports, secondary containments for cyanide offloading, storage, and process tanks are sized to hold a volume at least 110% of the largest tank within the containment and piping draining back to the tank with additional capacity for the design storm event. The secondary containment volume calculations were reviewed and deemed as sufficient. Furthermore, those containments have remained unchanged since the last recertification audit. The entire process area for the Phoenix mine is contained within a concrete pad surrounded by curbs and walls, providing a competent barrier to seepage. The concrete floor is sloped to drain to concrete trench drains, where any spills or rainwater will be pumped back to the process, or they are equipped with gravity flow-through capabilities to adjacent process ponds. The containment system of the offload area is adjacent to the milling area. Containment areas have sump pits with dedicated pumps that return collected solutions back into the process circuit. The

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secondary containment areas are constructed of reinforced concrete. The Reona booster tank has a concrete secondary containment with an overflow to an adjacent plastic-lined solution pond, which acts as a large containment area for the tank. The auditors observed that the secondary containments were maintained empty, with no materials stored inside them.

The Phoenix mine has several procedures, plans and manuals in place which are implemented to prevent discharge to the environment of any cyanide solution or cyanide-contaminated water that is collected in a secondary containment. In the case of the mill, all tanks and cyanide facilities are located inside concrete secondary containment systems with dedicated pumps that remove solutions and return them to the process circuit. The pumps have automatic level sensors to keep the secondary containments free of any fluids. The automatic pumps are included in the preventive maintenance program. There is no discharge of cyanide-containing water from the secondary containment areas as the secondary containments are not designed to discharge into the environment. As stated in the Code, no specific written procedures are necessary as the containment systems have sumps and dedicated pumps and piping to return solutions to the production process. Regardless of this, the Phoenix mine has SOPs to prevent discharges of cyanide solutions to the environment, or cyanide-contaminated water from secondary containments. In addition, the procedure "Remediation of Cyanide Contaminated Soil" provides details for soil remediation if a release occurs.

The Phoenix mine has spill prevention and containment measures for cyanide process solution pipelines. These facilities remain largely unchanged since the initial certification audit and the subsequent recertification audits. The Phoenix mine has constructed all pipelines with spill prevention and containment measures to collect leaks and prevent releases. Pipelines have been constructed either as pipe-in-pipe configuration or within lined ditches and pipelines between separate processing buildings are connected with HDPE pipelines in concrete, underground utility corridors. Cyanide pipelines are inspected daily using an inspection checklist. The tailings delivery and reclaim water pipelines between the process area and the TSF are located predominantly above ground. The above ground tailings slurry pipeline is constructed within a HDPE lined ditch whereas the reclaim water pipeline is constructed of a Tite-Liner® System that is composed of an outer steel pipeline with a HDPE pipe insert. The outer pipeline contains monitoring valves to detect any water presence. Where buried, the pipelines have a pipe-in-pipe configuration. The TSF pipeline has additional protection devices over the flanges to avoid overspray outside of containment in case of pipeline failure or leak.

As mentioned in previous audit reports, no cyanide pipelines present a direct risk to surface water. There are no perennial or ephemeral surface water bodies in the vicinity of the Phoenix mine requiring special protection for pipelines. All outside pipelines have secondary containment: pipe-in-pipe, concrete ditch or enclosure, or pipe within a lined channel. Pipelines to and from the TSF remain unchanged and retain the same safety features identified in previous audits. All facilities are far away from areas that may require special protection.

As stated in previous audit reports, all cyanide storage and process tanks are constructed of coated carbon steel placed on concrete foundations; liquid cyanide pipelines are constructed of

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carbon steel; and cyanide solution pipelines are constructed of steel or HDPE. All these materials are compatible with high pH cyanide solutions. All tanks and pipes were well supported and in good condition.

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

The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 4.8

*Describe the basis for the Finding/Deficiencies Identified:*

Quality assurance and quality control (QA/QC) programs have been implemented during the construction of cyanide facilities at the Phoenix mine. The site maintains files with QA/QC reports for the facilities constructed before the last recertification audit in 2021, which was found in compliance with the Code requirements, and has implemented QA/QC programs for the new cyanide facilities built during this recertification period. Appropriately qualified personnel (Nevada registered Professional Engineers) have prepared the documents and subsequently approved by the NDEP and the Bureau of Mining Regulation & Reclamation. New cyanide facilities constructed since the 2021 audit at the Phoenix mine are: i) Completion of Reference Elevation (RE) 4993 of the tailings impoundment, and ii) Completion of Reference Elevation (RE) 5001 of the tailings impoundment. The auditors reviewed the record of construction for these facilities: Reference Elevation 4993 Record of Construction addendum Phoenix TSF, dated May 2023; and Reference Elevation 5001 Record of Construction Phoenix TSF, dated July 2024. The embankment and impoundments have been designed and constructed according to Nevada Administrative Code (NAC) Chapter 445A and WPCP NEV0087061. Golder Associates (now WSP) prepared the design and conducted the construction oversight for the Phoenix mine TSF, as Golder is both the Engineer-of-Record and the firm that conducted the QA/QC. A review of the Record of Construction for the RE 4993 and 5001 reports demonstrating and discussing QA/QC measures and procedures confirmed that the construction through the 5001 raise was in accordance with accepted engineering standards and specifications. A Registered Professional Engineer signed the reports.

All QA/QC programs at the Phoenix mine addressed the suitability of materials and adequacy of soil compaction. The mine maintains files with the QA/QC reports for its cyanide facilities. The QA/QC reports include suitability of materials and adequacy of soil compaction for earthworks including tank foundations, subgrade and concrete testing, fabrication material certificates and technical specifications for HDPE drainage products, geo-synthetic, liners, piping, electrical and mechanical instrumentation. For the new raises of the TSF impoundment, the auditors verified that QA/QC activities were conducted for placement of mine waste rock in the embankment, relocation of tailings distribution lines and installation of inclinometers. As-built drawings are also

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included in the QA/QC reports. QA/QC reports also include non-destructive test logs, destructive test logs, vacuum tests, pre-weld tests, destructive sample tests, and repair controls.

QA/QC records for cyanide facilities are retained by the Phoenix mine. For the cyanide facilities built since 2021, the auditors reviewed the following documents in electronic version: i) Reference Elevation 4993 Record of Construction addendum Phoenix TSF, dated May 2023; and, ii) Reference Elevation 5001 Record of Construction Phoenix TSF, dated July 2024. The auditors also verified that QA/QC records are retained for all other cyanide facilities including previous stages of the Phoenix TSF (Stages 1-6) and the tailings pipeline. QA/QC records for the mill were evidenced in the document "Phoenix Project Final Completion Report" dated March 2006, developed by AMEC.

Qualified engineering companies performed the QA/QC inspections and reviews during construction of the cyanide facilities at the Phoenix mine and prepared the final construction reports certifying that the facilities were constructed in accordance with the design drawings and technical specifications. The auditors reviewed records of construction reports, including as-built drawings for the new cyanide facilities. As-built drawings were properly stamped by a qualified engineer. QA/QC reports are signed by qualified personnel from reputable engineering companies and provided documentation that the facilities were built as designed.

4.9 Implement monitoring programs to evaluate the effects of cyanide use on wildlife, and surface and groundwater quality.

- The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 4.9

*Describe the basis for the Finding/Deficiencies Identified:*

The Phoenix mine "Sampling and Analysis Plan" dated January 2023 addresses monitoring requirements related to groundwater, process fluids, supernatant and reclaim water. The plan includes SOPs as appendices that describe the requirements for field quality control, calibration of sampling equipment, blanks and duplicate samples, field data collection, collection and preservation of samples, well sampling, chain of custody, data management, and a map indicating location of compliance sampling points. The Phoenix WPCP permit NEV0087061 dated June 2023 includes the cyanide species and other parameters to be analyzed, as well as frequency and sampling locations. Additionally, the Phoenix mine has a procedure "Wildlife Mortality Investigation" dated January 2024 that describes wildlife mortality investigation and reporting requirements. Water monitoring activities are conducted by Environmental department personnel. Samples are sent to Western Environmental Testing Laboratory (WET Lab) in Sparks, NV, and is certified by the State of Nevada.

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Qualified personnel of the Phoenix mine environmental department prepare and update the Sampling and Analysis Plan as needed. Staff in charge of preparing the plan are suitably qualified, with many years of experience in environmental management and in mining activities. The plan is updated by environmental technicians with guidance and peer review, and it is ultimately revised and approved by the Environmental manager. The plan is reviewed and updated as necessary, when there have been significant changes in sampling, analytical methods or regulatory requirements. Analytical protocols for environmental samples are provided by WET Lab in Sparks, NV; which is certified by the State of Nevada. The auditors reviewed letters of certification and website documentation to verify compliance.

The Phoenix WPCP permit includes the cyanide species and other parameters to be analyzed (Profile 1), as well as frequency and sampling locations. The Sampling and Analysis Plan describes preservation techniques, equipment calibration, quality control, chain of custody procedures and shipping instructions. The samples are analyzed at WET Lab located in the city of Sparks. The analytical protocols have been selected using standard methods to achieve the desired detection limits. Examples of completed chain-of-custody forms showing proper use of the forms were reviewed. Maps showing the monitoring locations with respect to cyanide facilities were also reviewed by the auditors.

The Phoenix mine documents sampling conditions on field logs that accompany each sample. The log includes the date, the sampler, weather conditions, sampling method, field parameters, purge volume (for wells), sample volume and sample preservation. A comments section is used to document abnormal sampling conditions as well as wildlife activity and anthropogenic influences. Completed monitoring field forms were reviewed by the auditors and verified that these conditions are being registered consistently.

The Phoenix mine conducts monitoring at frequencies adequate to characterize the groundwater and identify wildlife mortalities. Groundwater samples are collected and analyzed on a quarterly basis. Wildlife monitoring is continuous while employees are outside the properties and during daily inspections. The Phoenix mine does not monitor surface water because it operates with zero discharge of process solutions and there are no natural surface water bodies on the properties or within close proximity.

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

***Standards of Practice***

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5.1 Plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife, livestock, and the environment.

- The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 5.1

*Describe the basis for the Finding/Deficiencies Identified:*

The Phoenix mine has prepared a Closure and Reclamation plan as part of their permitting programs for the operations. The current version of the Phoenix mine Reclamation plan is dated June 2022 and was approved by the NDEP-BMRR (Bureau of Mining Regulation and Reclamation). This June 2022 version did not suffer any changes from the previous 2018 version, except for the closure costs. The closure plan addresses decommissioning and reclamation of all project components at the cessation of operations including the decommissioning of all cyanide facilities such as TSF, the mill and plant buildings. This includes removal of contained process water from facilities through evaporation, and reducing the amount of water that is added to the facilities from precipitation. In addition, the closure plan addresses disposal of buildings, equipment, piping, scrap, reagents, equipment and materials. Phoenix has a Tentative Plan of Permanent Closure (TPPC) in the Fluid Management System Operating Plan for the Water Pollution Control Permit (WPCP). Activities and cost estimates specifically related to decontamination of equipment that has been in contact with cyanide are included in the June 2021 TPPC. There is no solid cyanide storage at the Phoenix mine and as such, it is not considered as a reclamation item in the closure plan. No water treatment needs for cyanide facilities are considered for the post closure phase. Decommissioning activities include all the necessary steps to bring the facility's components to a safe, chemically stable condition, such that they do not present a risk to people, wildlife or the environment due to their cyanide content.

The Closure Plan for the Phoenix mine has an implementation schedule for decommissioning activities including the sequence and duration of facilities closure. The schedule includes activities to be conducted starting in the year 2026 with partial closure of the TSF until 2039 when closure of the TSF is projected to be completed. All other facilities are expected to be closed between 2031 and 2034. This schedule will continue being refined as Phoenix approaches the closure period.

The Phoenix mine reviews its reclamation plan and updates it periodically. The Reclamation plan is updated on an as-needed basis (when closure strategies significantly change). The current version of the Reclamation plan is dated June 2022. NDEP-BMRR requires an update of surety bonds for reclamation every 3 years. The Tentative Plan of Permanent Closure (TPPC) is developed based on the reclamation plans and needs to be revised and updated every 5 years as a requirement of the WPCP. The most recent version of the Phoenix mine TPPC is dated June 2021. In addition, Barrick corporate office requires its operations, including the Phoenix mine, to review and update its Asset Retirement Obligation (ARO) cost estimation for the mine, including cyanide facilities decommissioning costs. These costs are reviewed every quarter and

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updated annually and submitted to the corporate office, where it is audited financially by an external party.

5.2 Establish a financial assurance mechanism capable of fully funding cyanide-related decommissioning activities.

- The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 5.2

*Describe the basis for this Finding/Deficiencies Identified:*

The Phoenix mine has developed cost estimates for full funding of third-party implementation of reclamation and decommissioning activities described in the reclamation plans. Cost estimates utilize the "Standardized Reclamation Cost Estimator" (SRCE), a cost-estimating model developed by the Nevada Division of Environmental Protection and the Bureau of Land Management. The cost estimates include third party unit costs, local equipment rental rates, costs for engineering design, contingency, insurance, performance bond, contractor profit, and agency indirect costs. Nevada Gold Mines asset retirement obligation (ARO) cost estimation for each mine, including cyanide facilities decommissioning costs, are reviewed and updated every quarter and submitted to the Corporate office, where it is audited by an external party. These costs are calculated using third party rates.

The Phoenix mine reviews its reclamation plan and updates it periodically. The current version of the Reclamation plan is dated June 2022. NDEP-BMRR requires an update of surety bonds for reclamation every 3 years. The total reclamation cost included in the closure plan for bonding purposes is US\$ 614 million, including decommissioning costs of cyanide facilities. ARO cost estimation is reviewed internally every quarter and submitted to the corporate office and audited every year as part of the financial statement of the company. The 2024 ARO reclamation cost estimate for the Phoenix mine is \$187 million and includes decommissioning measures for the TSF, process buildings and equipment, heap leach facility and process ponds, pipeline removal, disposal of wastes, and associated overhead and administrative costs. This amount is for closure and reclamation of all facilities at the Phoenix mine, including decommissioning of cyanide facilities.

The Phoenix mine has established financial assurance mechanisms approved by the Bureau of Land Management (BLM) Nevada State Office. For the Phoenix mine, BLM issued a Decision Letter dated July 21<sup>st</sup>, 2023, accepting a Surety Bond Rider for US\$777.45 million. This amount is based on the 2022 Phoenix Reclamation Plan cost estimate. This surety bond is updated and renewed every 3 years.

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

### **Standards of Practice**

6.1 Identify potential cyanide exposure scenarios and take measures as necessary to eliminate, reduce and control them.

- The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 6.1

#### *Describe the basis for the Finding/Deficiencies Identified:*

Phoenix has established Standard Operating Procedures (SOPs), Operating Guidelines, related checklists and fatality risk management protocols to ensure that worker exposure to cyanide is minimized and/or controlled when performing tasks as unloading, plant operations, entry into confined spaces, and equipment decontamination. All procedures and instructions are detailed and contain the risks involved with each task and adequately describe safe work practices. These documents also describe task specific PPE. Work permit systems have been developed for more general activities which apply across various areas of the plant. These include, for example, lock out/tag out, hot work and confined space entry.

Procedures were reviewed and found to be sufficiently detailed to enable a safe operation and to minimize worker exposure. Verification also included worker interviews while conducting field inspections. Observations during the audit confirmed that hard hat, rubber boots, rubber gloves, chemical suits, face shields, and handheld two-way radio, were in use for tasks that were performed at the cyanide offload area. The cyanide offload area also includes a fixed HCN monitor to alert employees of elevated HCN levels. Pre-work inspections are completed at the beginning of every shift and recorded using the Workplace Inspection form for each area. In addition, there is a Reagent Offloading Safety Checklist for the delivery of all bulk reagents, including cyanide, that is filled out by the operator. The auditors reviewed records of these inspections for the cyanide-related circuits for the last three years and found them to be complete.

The Phoenix Mine routinely solicits input from the workers when developing and evaluating procedures. This is also accomplished through review of the procedures during safety meetings and during area or task training. Operators can communicate directly with supervisors regarding effectiveness and opportunities for improvement for the training and procedures. Operators conduct pre-task and job hazard analyses as well as field level risk assessments, which also provide an opportunity for feedback regarding procedures. Changes to procedures are communicated during safety meetings and additional training is conducted, if required. The

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processing operational crews have also instituted a 'safety reset' in the middle of each shift where the crew gathers to discuss what has occurred during the first half of the shift and if there are any safety or other operational changes that need to be considered for the second half of the shift.

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

The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 6.2

*Describe the basis for the Finding/Deficiencies Identified:*

The Phoenix Mine has determined the appropriate pH for limiting the generation of HCN gas during cyanide production activities. The Cyanide Management Plans indicate that a pH greater than 12 exists in the 30% cyanide solution delivered to the sites. The plans also require a minimum pH of 9.5 in the leach/CIP areas, which is measured with installed process instrumentation, as well as checked manually by the operators and metallurgical technicians. A screenshot from the control room and a visual trend screen were reviewed to verify that the pH was maintained as recommended. Operator logs were also reviewed, and the pH was recorded at or above the minimum specified value. Calibrations for the pH probes are performed on a regular schedule or as needed based on manual measurements.

The Phoenix Mine has identified areas where workers may be exposed to cyanide more than 10 parts per million on an instantaneous basis and 4.7 parts per million continuously over an 8-hour period. Working and operational areas where potential for worker exposure to cyanide are identified and monitored with stationary HCN gas monitoring units. Fixed monitors at Phoenix are located at the Acid Wash Vessel, Cyanide Detox, Intense Cyanidation Unit (ICU), Carbon Handling between Cold Strip and Pregnant Solution Tanks, Trash Screen Feed Box, and Cyanide Offload Area.

Portable HCN meters are provided and made available for use in areas where there is potential for HCN exposure, such as confined spaces, and to aid in investigation should a fixed HCN monitor show elevated levels of HCN. SOPs and STPs (Standard Task Procedures) have been developed for activities in which cyanide management is involved. These procedures include PPE requirements, particularly if they differ from the standard PPE required for process operations. Should operators be required to perform a task for which an SOP has not been developed (non-routine task, special situation, etc) either a Field Level Risk Assessment or Job Hazard Analysis is to be conducted depending on the risks associated with the task. The Standard task procedure for HCN Detection and Evacuation requires that in the event of a stationary alarm being triggered at levels above 4.7 ppm, but below 10 ppm, the area is cleared

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of nonessential personnel, barricaded, and checked by authorized personnel using a handheld multi-gas monitor ensure continuous safe working conditions and evaluate potential causes. Where HCN levels exceed 10 ppm, the procedure requires evacuation of the area for all employees to the designated assembly area until the area is deemed safe for workers to return.

Hydrogen cyanide monitoring equipment is maintained, tested and calibrated as directed by the manufacturer, and records are retained. The Electrical and Instrumentation (E&I) group is responsible for the calibration of the fixed HCN monitors. Calibration is conducted on a monthly basis. The calibration and maintenance schedule are considered to meet the manufacturer's recommendation for maintenance of these units. The calibration records for the recertification period were reviewed and found to be complete. Handheld gas monitors are used only for specific tasks such as working in confined spaces or to enter an area after HCN levels were detected above 4.7 ppm. Phoenix has multiple portable gas monitors available that are capable of monitoring HCN levels. Site procedures require portable gas monitors to be 'bump tested' at a docking station prior to use. If a calibration is due for the unit, it will be completed automatically by the docking station when it is docked. Calibration records are automatically uploaded to a third-party online portal where they can be viewed by the site. In the event of a failed calibration the site will receive an email detailing the defect, and the third-party will send a replacement unit within 1-2 days. The site maintains enough units in operation to ensure the safety of the site personnel.

Warning signs are posted in all areas where cyanide is present advising workers that cyanide is present and that smoking, open flames and eating and drinking are not allowed. No special signage is posted for PPE, as no areas require special PPE beyond that worn for routine operations. Any special task requiring PPE is indicated in the STP or SOP. The signs are in English, which is the language of the workforce. Verification was through visual inspection of the signs located in areas where cyanide solution is stored and used. These areas included cyanide storage and the process plants, including the detox circuit, as well as the Phoenix tails storage facility.

Phoenix uses high-strength sodium cyanide solution from Cyanco. The cyanide arrives on site dyed red for easy identification.

Phoenix has installed showers, eye wash stations and fire extinguishers at strategic locations throughout the operation in all areas where there is a potential for exposure to cyanide. Showers and eye wash stations are inspected and tested every shift and prior to beginning a task that has the potential for cyanide exposure, such as cyanide delivery. The auditors randomly checked showers and eyewashes during the site tour to verify functionality. Fire extinguishers are inspected monthly and serviced annually. The auditors randomly checked fire extinguishers to confirm they are an acceptable type for use with cyanide. All extinguishers observed were fitted with inspection tags, which documented monthly inspection checks. Verification was conducted by reviewing Phoenix pre-shift inspection forms for records of shower and eye wash stations checks. The fire extinguisher tags provided evidence of the monthly checks, and the record of

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annual inspections and maintenance was provided by confirming the validity of the annual sticker.

The operation has identified all tanks and pipes that contain cyanide solution to alert workers of their contents. Pipes containing cyanide are marked as containing cyanide solution and flow direction is indicated. Cyanide storage and process tanks are marked as containing cyanide. Verification was by visual inspection. The auditors followed the cyanide solution circuit from the cyanide storage areas the mill circuits where cyanide is used. Tailings delivery and reclaim water return pipelines have labels that identify the contents, flow, and state "May Contain Cyanide" located in several places throughout the pipeline so that they are visible from any point along the pipeline.

The Phoenix Mine has available Safety Data Sheets (SDS) and first aid procedures in all areas where cyanide is managed. All information relating to cyanide management including SDS information, SOPs and emergency response plans are provided in English, the workforce language at the site. Electronic safety data sheets (SDS) are accessible to all staff from computers located throughout the facility using the online portal and which all staff are trained to use. Employees receive training in the use and interpretation of SDS, in accordance with Mine Safety and Health Administration (MSHA) requirements for hazard training. Cyanide hazard information is also available on signs provided by the cyanide manufacturer and in cyanide specific training provided to all employees who may be exposed to cyanide..

Incidents, injuries, occurrences of property damage, loss to process and near misses are recorded onto an online reporting system Isometrix. Reporting is required immediately on occurrence to a supervisor who is then required to provide the preliminary report into Isometrix within 24 hours. The incident report is submitted, and appropriate personnel are notified. The incidents are routinely assessed further, and the findings are shared at crew safety meetings. Incidents are investigated in accordance with mine's guideline with root cause analyses completed. Incidents are retained on the database for categorization and aid in prevention of recurrence. Corrective actions are followed up until closure and tracked within the Isometrix system. There have been no major health, safety or environmental cyanide related incidents reported during the recertification period. The investigation procedures were implemented, as required, for non-cyanide related events.

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

- The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 6.3

*Summarize the basis for this Finding/Deficiencies Identified:*

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The Phoenix Mine has made available antidote kits, water, oxygen, resuscitators, radios, telephones, and alarms at the site. Escape respirators are located throughout the process plant where cyanide in reagent grade is present. The locations of the emergency equipment were deemed to be appropriate for the operation. All operators carry a radio while performing their tasks. The site Mayday procedure dictates communication among operators and the emergency response team in the event of an emergency. There is also a phone located at the cyanide offload and storage area. All fixed HCN monitors and most of the eye wash/emergency showers are equipped with an audible and visual alarm system and report back to the DCS system in the control room.

Two Cyanokits are available in the emergency response vehicle and are stored per the manufactures recommendation in a temperature controlled environment. Ten-minute air escape packs are located at key plant areas to provide emergency air supply to a single area occupant. Self-Contained Breathing Apparatus (SCBA) equipment is maintained in the emergency response bay, hazardous material response trailer, and on the fire truck. Showers and eye-wash stations are located at strategic areas of the plant where cyanide and other chemicals are used. The showers and eyewash stations are tested each shift and prior to cyanide offloading or other tasks in cyanide related areas. Key areas, such as the cyanide offload and storage area are also monitored in the control room by the plant closed circuit television (CCTV) system. The control room is staffed 24 hours per day. Emergency response equipment is regularly checked by emergency response team members and other health and safety personnel. This includes inspections of Cyanokits and first aid stations. Mine Rescue personnel inspect the emergency response vehicle monthly, including oxygen bottles, and the Cyanokits.

The Phoenix Mine has an Emergency Response Plan (ERP), Cyanide Management Plan (CMP), and Operating Plan. In addition, Phoenix also utilizes the Operation, Maintenance, & Surveillance Manual for the TSF. The documents include communication roles and responsibilities, evacuation procedures, required notifications, reporting procedures, incident categories and risk assessment. Sections within the ERP and Operating plan specifically address emergency response procedures related to cyanide releases and cyanide exposures, and the CMP is wholly intended to address cyanide related emergencies. The documents have been developed for multiple scenarios including transportation incidents, releases during unloading, releases during fires and explosions, pipe, valve and tank ruptures, overtopping of ponds, power outages and pump failures, uncontrolled seepage, failure of cyanide treatment and failure of tailings impoundments.

The Operation, Maintenance, and Surveillance Plan for the TSF outlines steps and measures to be undertaken in the event of a Tailings Storage Facility emergency condition. They detail the actions and measures assigned to individuals/organizations that are responsible for responding to an emergency. These include emergency communication procedures both internal and external communications with the public and government agencies.

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The Phoenix Mine has its own onsite capability to provide first aid and medical assistance to workers exposed to cyanide. The Phoenix Mine has a fully staffed emergency response team (ERT). The team is comprised of 15 members, covering all four operating crews. Training to the ERT is provided on a monthly basis. Training includes medical/trauma response and firefighting, as well as specialized training in HAZMAT, confined space rescue, and technical (high angle rope) rescue. ERT members have achieved different training levels, including emergency medical responders (EMR), emergency medical technicians (EMT), Advanced EMT (AEMT), and Paramedic, all of which are achieved through the National Registry of Emergency Medical Technicians (NREMT). The Chief of Emergency Response organizes or provides certified training in all aspects mentioned above.

In addition to the ERT, all personnel on the mine are trained in basic first aid and response to cyanide exposure, including recognizing the signs and symptoms of cyanide poisoning, administration of oxygen and use of an automated external defibrillator (AED). The first aid room is equipped with oxygen, and first aid equipment. A manual defibrillator and AED are also located in the ambulance, which is ready to provide basic life support in the event of an emergency. The Cyanokits must be administered intravenously (IV). As the site personnel are not authorized for IV administration, the Cyanokits are transported with the patient and transferred to local emergency response personnel (ambulance or hospital) to be administered.

Phoenix has a dedicated emergency response vehicle housed in a designated bay at the warehouse. The emergency response vehicle is operated by members of the ERT and in the event of an emergency will act to stabilize the scene, perform rescue operations to recover and stabilize the patient and, will transport the patient to rendezvous with local emergency medical services (EMS) or air ambulance as required. Lander County Ambulance provides intercept with the ERT, if required, for ground transport to Battle Mountain General Hospital. A local air ambulance provider would likely transport to Northeastern Nevada Regional Hospital in Elko. The site also has a designated landing zone to accommodate rotor wing air ambulance transports, and the means to set up temporary landing zones if needed. The ERP describes the process for transporting a patient to off site medical facilities and includes contact information for local emergency services.

Phoenix has informed local emergency services of the potential for cyanide exposure. Formal agreements are in place Northeastern Nevada Regional Hospital in Elko and being discussed with Battle Mountain General Hospital to assist in treatment of cyanide exposures, including retention by the facilities of cyanide antidote kits for use in an emergency.

## **7. EMERGENCY RESPONSE: Protect communities and the environment through the development of emergency response strategies and capabilities.**

### ***Standards of Practice***

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7.1 Prepare detailed emergency response plans for potential cyanide releases.

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

*Describe the basis for the Finding/Deficiencies Identified:*

The Phoenix site has an Emergency Response Plan (ERP), Cyanide Management Plan (CMP), and Operating Plan. In addition, Phoenix also utilizes the Operation, Maintenance, & Surveillance Manual (OMS) for the TSF. The documents include communication roles and responsibilities, evacuation procedures, required notifications, reporting procedures, incident categories and risk assessment. Sections within the ERP and Operating plan specifically address emergency response procedures related to cyanide releases and cyanide exposures, and the CMP is wholly intended to address cyanide related emergencies. The various plans set out emergency response procedures for the mine sites, including cyanide releases. Procedures for initial response, first aid and spill response, and reporting are provided in the plans.

The plans referenced above consider different scenarios appropriate to the site-specific circumstances and include procedures to respond to emergency incidents including cyanide releases. Specific incident types, including transportation accidents, power outages, failure of cyanide destruction systems, etc. are all addressed by the plans.

The ERP and OMS describe procedures for TSF failure, leach pad failure (for the closed Reona Heap Leach and the active Copper Heap Leach), and large cyanide spills on the facility, including plans for evacuation, containment and cleanup, and required notifications

Under the agreement between the Phoenix and Cyanco as the supplier, Cyanco and TransWood (as transporter) are responsible for shipping of cyanide to site. This responsibility extends to consideration of transport routes, storage and packaging of sodium cyanide solution, the condition of transport vehicles and response in the event of an emergency or release during transport. As noted above, Cyanco and TransWood are certified in full compliance under the Code.

The ERP and CMP detail responses specific to cyanide spills or leaks including mill solution and reagent spills and makes provision for initial response, first aid, spill reporting contacts and spill control and cleanup. The ERP and CMP also detail first aid measures for cyanide exposures and transportation of the cyanide antidote kits to emergency response personnel that are trained and certified to administer the antidote. Annual training for all employees at the site includes training on first aid measures to be taken in the event of cyanide exposure including activation of the site emergency response plan. The location of cyanide emergency equipment such as SCBAs, HAZMAT equipment, first aid equipment, etc. are also provided. All ERT members are trained to

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respond to emergency incidents. The ERP provides responders rapid access to key information necessary to address a variety of potential emergency scenarios, including cyanide related incidents.

The OMS provides specific procedures related to the Tailings Management Area and provides for specific roles and responsibilities, resources to be allocated, lines of communication, and actions to be undertaken in the event of an emergency situations which include scenarios such as overtopping, embankment failures, and earthquakes.

The CMP and ERP include procedures and references to follow to contain/control any spill if safe to do so, and assess and mitigate any future release during the emergency. Following any incident the ERP requires a debrief meeting where follow up actions around the response including assessment of a root cause for the incident and mitigation to prevent any future incidents.

Any emergency that has the potential to affect a community will trigger the notification requirements outlined in the Crisis Management Plan and ERP. The appropriate designated team member will notify all necessary parties, as required. Assigned personnel will contact emergency services, if necessary, and will inform potentially affected communities and parties.

## 7.2 Involve site personnel and stakeholders in the planning process.

- The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 7.2

### *Describe the basis for the Finding/Deficiencies Identified:*

The Phoenix Complex involves its workforce in cyanide emergency response planning. During training of the ERT and after emergency mock drills, the workforce has the opportunity to provide feedback. Since all employees who work around cyanide are also trained in basic cyanide emergency response, those employees also have the opportunity to provide input in the process.

Phoenix has made potentially affected communities aware of the nature of their risks associated with accidental cyanide releases. The Phoenix Mine is approximately 18 miles southwest of Battle Mountain.

Phoenix includes external responders in ERP development/planning to a limited extent. The mine maintains periodic communication with community emergency response stakeholders through participation in the Local Emergency Planning Committee (LEPC) by the Chief of Emergency Response. The site coordinates with LEPC and the Battle Mountain General Hospital but they are not necessarily involved in ERP planning; however, the role of each of the outside agencies

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that may be involved in an emergency are indicated in the ERP, as is the party responsible for requesting outside assistance. Phoenix has a formal mutual aid agreement in place with LEPC to provide outside assistance to the site.

Phoenix interacts with potentially affected stakeholders by regular communications and meetings with LEPC, local emergency responders, the hospital, and other community partners, as well as periodically engaging local partners to participate in tabletop exercises and emergency response drills.

The ERP documents state that the plans are to be reviewed and updated at least once a year or after emergencies or drills to reflect any information gathered during the response. The revision process involves responsible personnel from all mine areas. Review of the plans indicated that they are updated at least annually if not more often as needed.

7.3 Designate appropriate personnel and commit necessary equipment and resources for emergency response.

- The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 7.3

*Describe the basis for the Finding/Deficiencies Identified:*

The ERP provides primary and alternate designation of responsible parties for the management of an emergency, including the General Manager who has authority to ensure that sufficient and adequate resources are allocated to carry out the ERP.

An ERT Personnel Matrix, which is maintained by the site Chief of Emergency Response, lists all ERT members, department/crew, phone numbers, and radio channel. The matrix also indicates the personnel identified as assistant chiefs, captains, and members. Contact information in the ERP include call-out procedures and 24-hour contact information for the ER Chief and assistant chiefs. The mayday procedure issues a call for resources over the radio, contacting personnel who are already onsite. The ER Chief or Captain will request additional resources, if required. Contact information for external resources are listed in the ERP.

The ERP mandates that training must be undertaken by the ERT and it is the responsibility to the Chief of Emergency Response to ensure that training is provided and maintained. The ER Chief has overall responsibility to ensure that the current ERT is current and viable and is supported by the General Manager. Training records reviewed during the audit indicate that ERT members received training, as required, during the recertification period.

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The cyanide emergency response equipment is checked monthly by the ERT and records are retained for a minimum of 3 years. Equipment is also inspected on a regular basis as it is used by the ERT and during training sessions. The ERT has switched to an online application that assists in tracking inventory of all emergency response equipment as well as inspections and operability of equipment. If an inspection is missed or a defect is found in the equipment the Chief is notified via email and any actions needed are tracked within the system until completed.

Emergency response planning requirements have been confirmed with LEPC, Battle Mountain General Hospital, and Northern Nevada Regional Hospital in Elko by means of regular communications and letters confirming willingness to support the operations by housing and maintaining proficiency training on the cyanide antidote kits. In addition, MedX AirOne, and others are included in coordination with LEPC. Outside entities are engaged regularly and included in mock drills, as appropriate.

#### 7.4 Develop procedures for internal and external emergency notification and reporting.

The operation is: ☒ in full compliance

☐ in substantial compliance

☐ not in compliance with Standard of Practice 7.4

*Describe the basis for the Finding/Deficiencies Identified:*

The Crisis Management Plan and ERP provides the communication and notification process and procedures in the event of an emergency including request of support to outside agencies, if necessary. Among other responsibilities, the General Manager oversees all operations at the facility during an emergency and is responsible for briefing other team members and notifying corporate personnel and determining whether activation of the Crisis Management Team is warranted. The External Relations Coordinator (or designee) responds to media enquiries; the Health and Safety Manager (or designee) advises when reporting to government agencies is required and requests mutual aid assistance if required. The Environmental Manager (or designee) provides technical expertise related to emergencies which may have an impact on the environment and is responsible for notifying the regulators when reporting is required. The ERP, CMP, Operating Plan, and OMS provide contact information for the relevant regulatory agencies, outside responders and medical facilities.

The ERP and Crisis Management Plan contains procedures for communications and includes emergency response contact information. In the event of an incident, the site or crisis management team will contact relevant State and Federal regulators who will in turn notify affected parties in local communities as necessary. Procedures for notifying outside agencies and the media are provided in the ERP, CMP, OMS, and the Crisis Management Plan. Contact information for potentially affected communities and the media are included.

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Section 5.14.4 of the ERP describes a significant cyanide incident (in accordance with ICMI's Definitions and Acronyms documents), identifies that notification must be made to ICMI with 24 hours of a significant cyanide incident and includes contact information for ICMI. During the recertification period the Phoenix Mine did not have any significant cyanide incidents as defined by ICMI.

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

The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 7.5

*Describe the basis for the Finding/Deficiencies Identified:*

The CMP provides procedures in the event of cyanide release and addresses cyanide recovery and remediation if necessary. Section 5.7.5 of the CMP requires that any cyanide containing solution spilled in the process area but outside of a contained area at the mill be placed back into the leach circuit or on the historic Reona gold leach pad. Any spills of cyanide solution within containment will be returned to the process circuit through the use of the area floor sumps. Cyanide impacted soils are to be excavated to depth of impact and deposited into the process or tailings facility with repeated sampling until the cyanide levels are below 0.2 ppm WAD cyanide. Equipment decontamination is achieved through sufficient rinsing with water prior to beginning work.

Drinking water is prepared through onsite generation of potable water. In the event of an emergency, potable water could be trucked to site, if necessary. Bottled drinking water is also available in break rooms throughout the mine site.

The various response plans do not explicitly prohibit the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat any cyanide that would have been released into surface water. However, the plans also do not indicate or promote the use of these chemicals in treating cyanide that has been released to surface water, and as there are no surface waters within the vicinity of the operation that would be reasonably expected to be impacted through a release of cyanide, no further action was required to be in compliance with the Code.

Section 5.14 of the ERP as well as the Remediation of Cyanide Contaminated Soils SOP outlines procedures for responding to a cyanide release, as well as the cleanup methods and sampling requirements. The plan and SOP also provides the verification requirement to confirm that adequate cleanup has occurred, requiring verification that residual impacted soils have a

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WAD cyanide concentration of less than 0.2 ppm. Excavation and sampling will continue until all samples achieve the required cyanide concentration

For process solution spills, the ERP requires operators to immediately stop the release of material, and the CMP requires immediate notification to the Area Supervisor or other responsible person named in the Plan. Samples are collected and provided to the laboratory for analyses. Guidance for assessing the area of impact is provided. A spill report is then generated indicating the type and location of spill/discharge, the cause and the total area affected. Final sampling of the affected area is specified. The Environmental Department would manage the characterization and remediation of any larger spills and is responsible for reporting spills to the regulatory agencies. In the unlikely event that cyanide was to be identified downstream of the tailings dam, the Environmental Department would plan a detailed sampling and monitoring program to investigate the extent of potential impact. The OMS includes routine groundwater sampling and regulatory reporting program for the installed ground water monitoring wells. The sampling frequency and conditions are indicated in the OMS and if an event occurred, the sampling frequency could be adjusted to determine if any potential impacts to groundwater have occurred. There is no surface water present in the areas that would be impacted by a spill.

7.6 Periodically evaluate response procedures and capabilities and revise them as needed.

The operation is: ☒ in full compliance

☐ in substantial compliance

☐ not in compliance with Standard of Practice 7.6

*Describe the basis for the Finding/Deficiencies Identified:*

The ERP requires the site to annually review the Plan to identify any required changes, and to test and review the adequacy of Emergency Response Procedures with drills and exercises. The Plan is also to be reviewed following implementation during any actual emergency. The Plan updates and reviews are conducted by multiple parties, including the health & safety manager, chief of emergency response, process operations manager, and surface operations manager. Final approval of plan changes, including the annual review of Emergency Response Plan is by the General Manager. During the recertification period, the plan has been reviewed and updated multiple times as additional information is added or if improvements can be made. The evolution of the document, including specific changes between versions, were reviewed by the auditors. No cyanide related incidents or releases have occurred during the recertification period that would require implementation of the ERP.

Phoenix performs cyanide emergency mock drills at least once per year and holds regular training sessions for the ERT. All site personnel, including the ERT, also undergo annual training for cyanide management and emergency response.

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Some of the drills reviewed included scenarios of HCN gas exposure, cyanide solution releases, and a series of tabletop exercises performed where scenarios (such as a Tailings Storage Facility failure) are not practical to simulate. Drills were reviewed covering all three years of the recertification period. Drills are developed to include a variety of locations and scenarios including environmental release and exposure responses and include personnel on site that would be expected to respond to an emergency. Drills are developed in advance and risk assessed to minimize potential impact of event unpreparedness. ERT training exercises and mock drills were debriefed to identify and document improvement opportunities. The ERP contains language that requires a debrief meeting following any incident or mock drill and includes all personnel that were involved with the response. Both the ERP and CMP include sections that require the plans to be reviewed and updated following any emergency situation, mock drill, or annually.

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

***Standards of Practice***

**8.1 Train workers to understand the hazards associated with cyanide use.**

- The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 8.1

***Describe the basis for the Finding/Deficiencies Identified:***

All new hires, contractors and visitors at Phoenix Mine receive an initial general induction training on health, safety and environmental matters before they can start working or enter the mine. New workers at the mine, including both employees and contractors, receive orientation training in accordance with Mining Safety and Health Administration (MSHA). As the MSHA training only covers general hazardous chemical training, new employees receive cyanide specific training prior to beginning work.

The training on cyanide awareness to all employees covers general information related to cyanide, including uses, physical forms, smell, symptoms of exposure, routes of exposure, and exposure limits. For employees working in or around cyanide, additional training is provided which addresses, HCN monitors, addition points of cyanide in the operation, required PPE, pH controls, safety showers and eyewash stations, SDS information, routes of exposure, cyanide intoxication symptoms, first aid, cyanide antidotes, cyanide spill response, and sampling. The cyanide awareness training also includes a test administered to each employee to demonstrate an understanding of the training content.

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Verification of compliance was done by interview with process and training personnel, and review of employee training records covering the recertification audit period. Several plant operators that participated in field interviews during the audit were selected for a random review of training records. In all cases the auditors found evidence of training records.

Annual refresher training including cyanide and environmental modules are provided and completed every year to meet MSHA requirements. The annual training provided by the Phoenix Mine does include cyanide specific training for all employees, including properties of cyanide, hazards of cyanide, symptoms of cyanide exposure, emergency response, and first aid, including use of oxygen and amyl-nitrite (when it was available) and information on the Cyanokits that are used currently. The training includes a written test.

Training content is developed by the process trainer, health and safety personnel, environmental personnel, and emergency response personnel. Annual refresher training may be conducted by one or more of the contributing parties who are approved to provide the training. The training department retains electronic copies of the most recent cyanide-related training records for each employee. Training is recorded on sign-in sheets with training records signed by both trainer and trainee as well as with the knowledge test which is retained in the employee's files.

ERT specific response training records are maintained by the Chief of Emergency Response. Records are available electronically through scans of documents and certifications for ERT members, as well as being tracked in the ERT training matrix spreadsheet, which is also managed by the chief. Cyanide hazard training for ERT members is administered and recorded in the same manner as for operations personnel, as noted above. Contractors that come to the site are required to refresh their site-specific training annually, which includes information on cyanide management and the Cyanide Code.

Training records, including cyanide hazard training for all employees who may be exposed to cyanide are retained by the process trainer in the form of electronic copies of the training in each employees training record. The process trainer retains cyanide-related training provided to process personnel, while the Administrative Service area retains training records for all other employees. Records for new employee training including orientation training are retained in accordance with MSHA requirements and recorded on MSHA 5000-23 forms. Records are stored electronically in each employees training file.

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

The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 8.2

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*Describe the basis for the Finding/Deficiencies Identified:*

New mill employees and any worker with cyanide related tasks receives specific training on SOPs and STPs that apply to their job position. This training is provided by a qualified operator under the supervision of a supervisor or process trainer and is conducted on operating procedures. Training for general procedures applicable to all site areas are generally covered by supervisors or the process trainer. The SOPs and STPs are used as a record of training and are signed by both the trainer and the trainee. Operators are also instructed in conducting job task analysis, field level risk assessments, and area inspections, which are carried out within work areas. Training records are retained in a training file for each employee by the process trainer.

Supervisors coordinate with the training department to aid in operator training and advancement. Specific SOPs and STPs associated with each area are utilized to aid in the training. Operators are observed to ensure understanding of the process or task and demonstrate competency to the trainer or supervisor, as well as pass a written test before receiving sign off on a given task. Once all tasks for a circuit are completed, an operator may be considered for advancement or transfer to another circuit.

Standard operating and task procedures define the steps required to complete a task and the SOP or STP itself is provided as training material with sign-off required from both the trainer (supervisor or process trainer) and the trainee. The process trainer maintains a record of the training requirements for each circuit and retains signed training records and SOPs for each employee.

Training in specific tasks is generally provided by another qualified operator under the supervision of a supervisor or process trainer; however, a lead or competent person may also provide the training. Supervisors are considered qualified to provide training based on experience. The process trainers receive instruction on "train the trainer". MSHA New Miner and Annual Refresher Training require training be provided by an approved MSHA instructor. Changes in procedures are communicated via crew meetings and with sign off from operators at the conclusion of the meeting.

All new employees are trained to receive a minimum specified level of site orientation, as required by MSHA, before being allowed to operate onsite. Training includes cyanide awareness training and, for those that will be working within the Mill, specific training on relevant SOPs and STPs for the job duties that they will perform. In addition, employees must complete general and specific task training before being allowed to work alone.

Annual refresher training is provided as required by MSHA and includes a specific module on cyanide management covering physical and chemical characteristics of cyanide, cyanide handling, monitoring, control of pH levels, exposure limits, exposure symptoms, PPE, treatment,

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rescue equipment, safety showers, emergency warning systems, evacuation, disposal and spill procedures.

Following new hire orientation and cyanide refresher training, employees complete a written test to demonstrate understanding of the material. Verbal and written tests to demonstrate understanding are taken for task training with sign off by both the trainer and trainee. Employees must also demonstrate competence in completing the task through observation by the trainer.

Employee activities and task competence are monitored by supervisors, or a lead person, conducting safety interactions with employees and ensuring task checklists and procedures are followed. Task observations are utilized at both the mill and tailings facilities.

Training records are retained throughout employment history. MSHA training records are retained by the process trainer and retained electronically on the site data server. Employees are also responsible for retaining a copy of their most recent MSHA training certificate. Training records for each employee, covering all training they receive, contain the date, subject covered and are signed by both the trainer and trainee. Written and practical tests are completed to demonstrate the employees understanding of the training materials.

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

- The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 8.3

*Describe the basis for the Finding/Deficiencies Identified:*

The auditor verified that plant operators and maintenance personnel responsible for cyanide unloading, processing, and maintenance are trained in emergency procedures including scene size up, control of the scene and release (if safe), initiating the emergency response plan, and evacuating the area if necessary. Works are also trained to identify the signs and symptoms of cyanide poisoning. Annual refresher training contains the steps to take for personnel to begin decontamination of a cyanide exposure victim which includes ensuring that they are taken to a safety shower and rinsed. The ERP contains additional measures taken by the ERT to ensure decontamination of a cyanide exposure victim. Operators were interviewed and demonstrated good awareness of what actions are to be taken in the event of cyanide release.

The Emergency Response Chief, emergency response team (ERT) members are all trained in the Emergency Response Plan according to the ERT training program which includes cyanide related emergency response and hazardous material training. The auditor verified the latest training records.

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All the Emergency Response Team members are all made up of employees who have voluntarily committed to the program and trained in the use of necessary response equipment.

Annual refresher training is provided as required by MSHA to employees and includes response to cyanide exposures and response to releases. The ERT completes monthly training sessions including recognition of cyanide exposure, treatment and first aid. Mock drills are also conducted at least once per year and involve operations and maintenance personnel, management, and the ERT.

The Phoenix Mine has communicated the Emergency Response Plan with the Battle Mountain General Hospital, the Lander County Emergency Planning Commission (LEPC) and the Northeastern Nevada Regional Hospital in Elko. Regular communications are held with the hospital facilities, during which cyanide emergency and response arrangements are discussed, including decontamination and transport procedures, the treatment protocol for cyanide exposure, and the onsite cyanide antidote kits. In addition, the mine has a Mutual Aid Agreement with LEPC which provides emergency response services from the county, if required. In the event of a medical evacuation from site, ground response is by Lander County Ambulance and air response is coordinated and executed by MedX AirOne.

The auditor verified training of ERT members conducted during the audit period, with topics including cyanide response management, first aid, use of portable HCN monitors, equipment decontamination, spill remediation, and others. In all cases, records have names of the employee, the date of training, the topics covered. Refresher training for cyanide events is conducted as part of the site training and emergency drills program. Training requirements from the training matrix are routinely monitored and refresher training is scheduled as required.

## 9. DIALOGUE AND DISCLOSURE: Engage in public consultation and disclosure.

### **Standards of Practice**

9.1 Promote dialogue with stakeholders regarding cyanide management and responsibly address identified concerns.

The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 9.1

*Describe the basis for the Finding/Deficiencies Identified:*

Phoenix Mine uses a variety of mechanisms to provide information to stakeholders related to

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cyanide management, including reports, meetings, and tours to the mine site. In addition, there is an open-door policy that allows stakeholders to engage with the site and voice any concerns.

Phoenix hosts quarterly community meetings, inviting interested parties to attend and receive information. Phoenix regularly invites representatives from Cyanco to present at these meetings on general cyanide awareness and safety. The external relations group organizes tours for stakeholders to visit the mine, including schools, universities, state officials, communities, family members, and tourists. Public tours represent an opportunity for stakeholders to raise questions or concerns related to cyanide management. Permits (both new permits and renewals) are open to public comment. The auditors reviewed evidence of the reports and the quarterly meetings during the recertification period. Phoenix personnel also regularly participate in the local Chamber of Commerce and the Mining Foundation.

NGM operates social media pages that provide a means of stakeholder communication. Though the pages are not specific to Phoenix, the administrators monitor the comments and would contact each site with specific issues, as necessary. The Barrick website also has contact information and provides means of engaging the community.

Many of the site personnel also participate in local committees, such as LEPC, the Chamber of Commerce, local fire and ambulance services, among others. These interactions also provide opportunities for stakeholder engagement regarding cyanide.

There is a grievance mechanism in place to receive, process, manage and resolve written or verbal complaints and grievances in a timely and consistent manner. The social responsibility team maintains a complaints and grievance register. A form is completed when the complaint is received including the interaction with the complainant, name, and contact information. A dedicated email address, [community@nevadagoldmines.com](mailto:community@nevadagoldmines.com) is also available for contacting the sites. Any grievances received are compiled into a monthly report. The grievance register is presented to the community annually. Grievances are entered into an online tracking program to ensure that they are followed up on and closed. There have been no cyanide related complaints or requests for information during the recertification period.

9.2 Make appropriate operational and environmental information regarding cyanide available to stakeholders.

- The operation is: ☒ in full compliance  
☐ in substantial compliance  
☐ not in compliance with Standard of Practice 9.2

*Describe the basis for the Finding/Deficiencies Identified:*

The Phoenix Mine has developed and updated written and visual descriptions of how their

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activities are conducted and how cyanide is managed and has made them available to communities and other stakeholders. These include: Phoenix Mine safety training for all visitors, Environmental fact sheets, Sodium Cyanide safety data sheets (SDS), and the Annual Report.

The information mentioned above can be made available and distributed in different engagement opportunities including special meetings, presentations, quarterly community meetings, and job fairs, among others. Social media and the website offer additional sources of information for stakeholders. Information is disseminated in both written form and through verbal communication as appropriate.

During the recertification period, the site has had no major cyanide exposures resulting in injury, no releases off the mine site, no major releases on the mine site, and no releases which have had adverse effects on the environment. If an event were to occur, communication to the public would be made per the Crisis Management plan. Other forms of public communications may include press releases, interviews, regulatory reporting, and including events in the Annual Report for the company, which would identify events at each site under Nevada Gold Mine's Jurisdiction.

Cyanide releases on or off the mine site that require reporting to regulating authorities are reported via the Environmental department. The site's operating permits state specifically when reports need to be filed based on the quantity of specific substances that were released. Phoenix reports all spills and releases (including those that may contain cyanide) to environmental regulators quarterly as required in their operating permits. Reports to the regulators are available publicly either on the regulatory agency website or via request. No cyanide releases over applicable limits for cyanide occurred during the recertification period.

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