# ICMI Cyanide Code Gold Mining Recertification Audit

## Summary Audit Report

## Newmont Corporation, Peñasquito Mine

## Zacatecas, Mexico

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

***2022 Audit Cycle***

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**Mining Operation**: Peñasquito Mine

**Mine Owner**: Newmont Corporation

**Mine Operator**: Minera Peñasquito S.A de C.V.

**Name of Responsible Manager**: Bernard Wessels, General Manager

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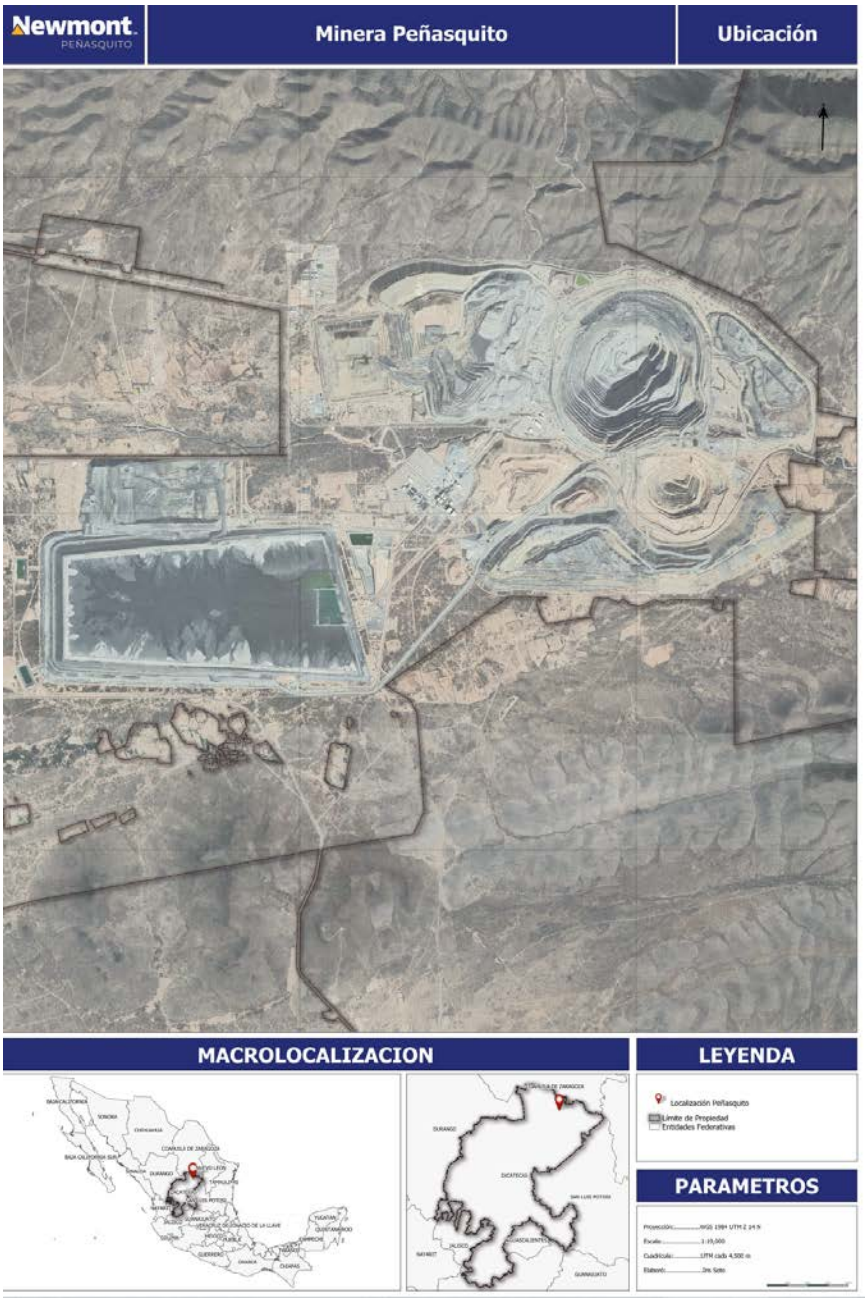
## Location and description of the operation

The Peñasquito mine location is presented in the picture below



The Peñasquito Mine (Peñasquito) is located in the northeastern part of the State of Zacatecas, in north-central Mexico. Newmont uses an indirectly 100% owned subsidiary, Minera Peñasquito SA de C.V. (Minera Peñasquito), as the operating entity for the mining operations. Open pit mining is conducted using conventional techniques and an Owner-operated conventional truck and shovel fleet. The Peñasco and Chile Colorado deposits are actively being mined.

Peñasquito processes the ore in two main areas (1) the Sulfide Plant and tailings impoundment and (2) the Pyrite Leach Plant (PLP). The PLP use Merrill-Crowe technology and a refinery for gold recovery. Cyanide is added at the leaching tanks to recover precious metals. The Sulfide Plant uses crushing, grinding, and flotation, with deposition of the tailings in the impoundment, cyanide is added to the ball mills and at the lead flotation circuit. The two plants have an area for unloading, mixing, and storing cyanide. Cyanide is transported to the site as solid briquettes in ISO tankers. The ISO tanker is connected to the cyanide mix tank where water is added and recirculated between the ISO tanker and the mix tank until the solid cyanide has been completely dissolved. After dissolution, the solution is transferred from the cyanide mix tank to the cyanide holding tank for dosification to various process points. The annual cyanide consumption for both plants is approximately 9.5 million kilograms.

In 2018, Peñasquito commissioned the PLP. The PLP Area consists of the following main units: pyrite flotation; concentrate regrind and cleaning; thickening; post-cleaner regrinding; agitated leaching; countercurrent decanting; cyanide detoxification; Merrill Crowe; refinery; and a tailings distribution system to the existing tailings distribution lines. The pyrite leach tailings is treated in the cyanide detoxification unit before being mixed with the flotation tailings from the existing Sulfide Plant at the existing tailings distribution lines, and then sent to the existing Tailing Storage Facility (TSF).

At the PLP, Peñasquito adds cyanide (i.e., poor solution with approximately 665 milligrams per liter (mg/L) Weak Acid Dissociable (WAD) cyanide and/or high strength cyanide solution with approximately 141,000 mg/L WAD cyanide) starting at the post-cleaner regrind feed tank onwards in the PLP units. No cyanide solution is expected to be added to the pyrite flotation, concentrate regrind and cleaning, and thickening units and therefore, these units are not cyanide facilities and are not included in this audit. The Code excludes refineries.

The scope of the recertification audit includes the following cyanide facilities: The Sulfide Plant, where cyanide is added to the Semi-Autogenous Grinding (SAG) mills and at the lead flotation circuit; and the Pyrite Leach Plant (PLP) consisting of the following main units: pyrite flotation; concentrate regrind and cleaning; thickening; post-cleaner regrinding; agitated leaching; countercurrent decanting; cyanide detoxification; and Merrill Crowe process. The two plants have an area for unloading, mixing, and storing cyanide. There are no treated water discharges cyanide at Peñasquito.

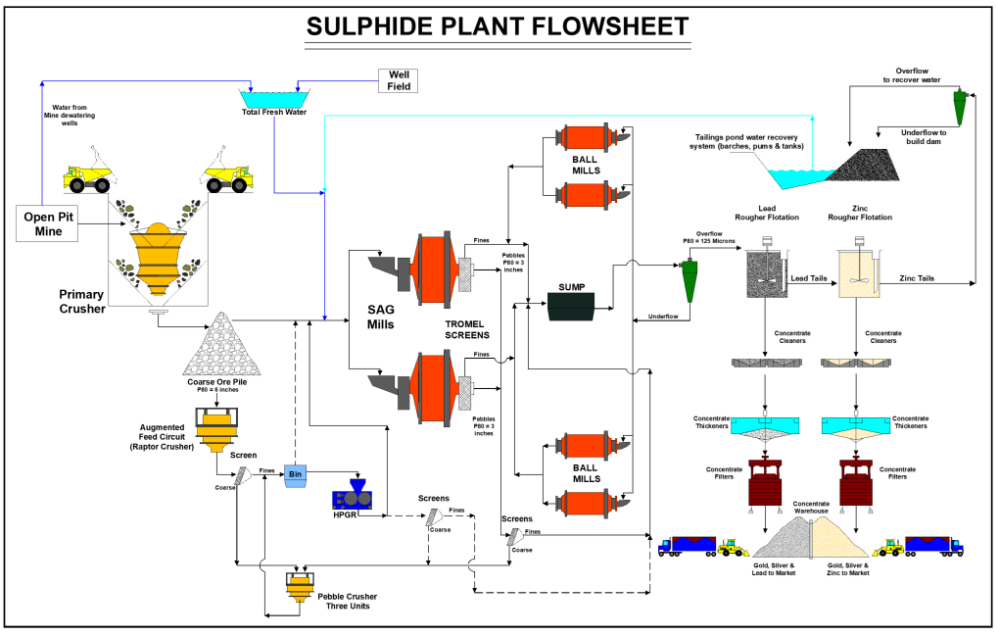
There are no new cyanide facilities constructed since the 2018 recertification audit.

Sodium cyanide is transported to Peñasquito in solid briquettes in an 18-ton isotainer truck. The isotainer is connected to the cyanide mixing tanks, freshwater is added, and recirculated between the isotainer and the tank until the solid cyanide is completely dissolved.

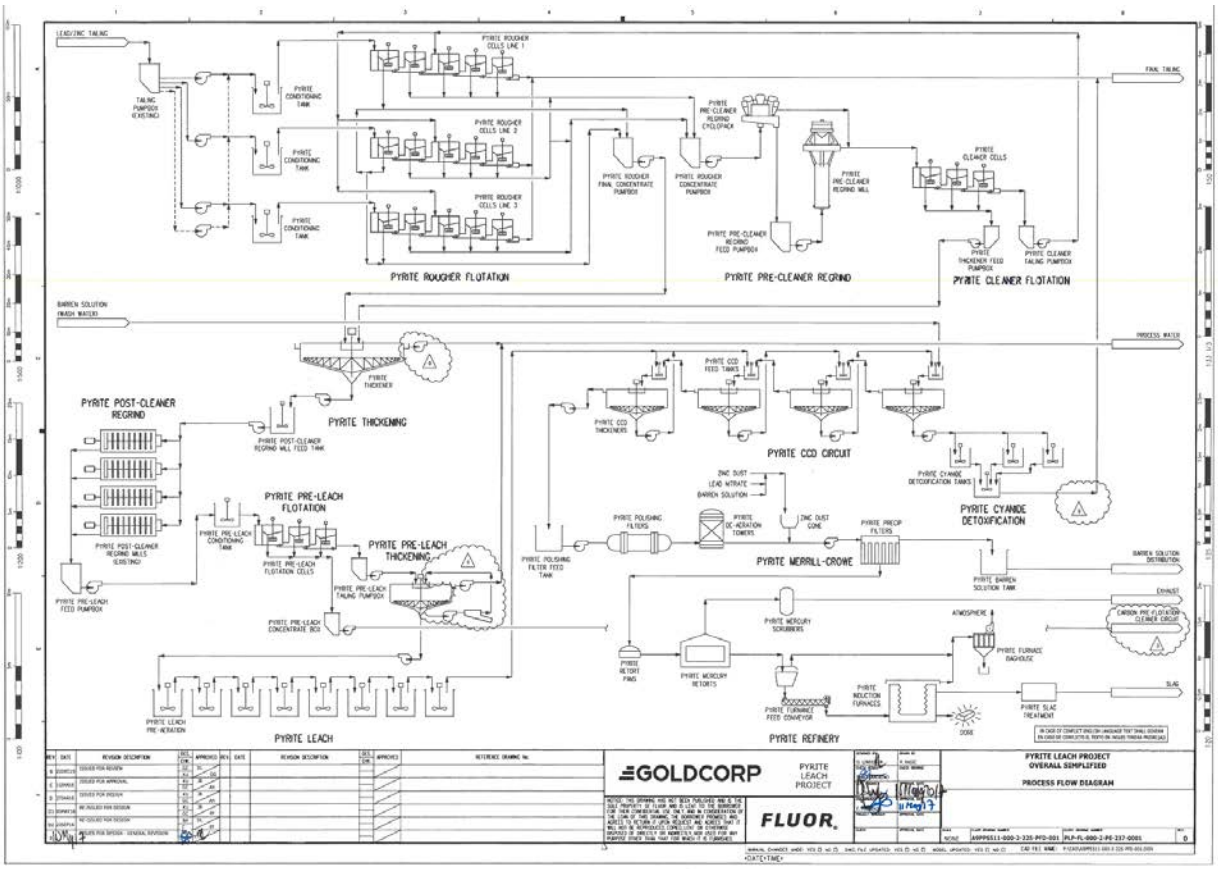
As in previous recertification audits, the existing Tailings Storage Facility (TSF) has been excluded from this recertification audit, because it is not a cyanide facility. The WAD cyanide concentrations at the discharge to the TSF is well below 0.5 mg/l. The same is applicable to the Carbon Pre-Flotation Process (CPP), which is located within the Sulfide plant and have not used cyanide for the recertification period.

The Oxides processing facilities, including Leach pads, process ponds and oxides processing plant have also been excluded from the scope of this recertification audit because they are not cyanide facilities. Peñasquito ceased adding cyanide to the process in August 2020 and, by November 2020, WAD cyanide concentrations in the solution coming out of the leach pads and in the process ponds were below 0.5 mg/l. Peñasquito ceased recirculating water to the leach pad in July 2021.

The Sulfide plant ore processing flowsheet is presented below:




The PLP plant ore processing flowsheet is presented below:


PYRITE ROUGHER FLOTATION
PYRITE PRE-CLEANER REGRIND
PYRITE CLEANER FLOTATION
PYRITE THICKENING
PYRITE CCD CIRCUIT
PYRITE CYANIDE DETOXIFICATION
PYRITE MERRILL-CROWE
PYRITE POST-CLEANER REGRIND
PYRITE PRE-LEACH FLOTATION
PYRITE PRE-LEACH THICKENING
PYRITE LEACH
PYRITE REFINERY
GOLDCORP
PYRITE LEACH PROJECT
OVERALL SIMPLIFIED
PROCESS FLOW DIAGRAM
FLUOR

# Auditor's Finding

The International Cyanide Management Institute (ICMI) approved Audit Team verified that the Peñasquito operation 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.**

**Peñasquito 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: | SmartAccEss Socio Environmental Consulting, LLC |
| Lead Auditor: | Luis (Tito) Campos<br>E-mail: titocampos@smartaccess.us |
| Mining Technical Auditor: | Bruno Pizzorni |
| Date(s) of Audit: | February 14th – 18th, 2022 |

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.

| Peñasquito Mine | | February 18th, 2022 |
|---|---|---|
| Name of Operations | Signature of Lead Auditor | Date |

# 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:*

Newmont purchases solid sodium cyanide for Peñasquito from the cyanide producer Draslovka Mining Solutions (former The Chemours Company). During this recertification period, Peñasquito only used sodium cyanide from this producer. The contract for the supply and transportation of cyanide is current and valid until December 31, 2022. In occasion of the site audit, the auditors checked in the International Cyanide Management Institute (ICMI) website that Draslovka Mining Solutions (Draslovka) Memphis Plant certification in the International Cyanide Management Code (Cyanide Code) was current until in January 20, 2023.

## *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:*

The operation maintains the chain of custody records identifying all transporters and supply chains responsible transporting cyanide from the producer to the operation. The contract, purchase orders and shipping records for this recertification period were reviewed. Draslovka is the only supplier to the mine which is produced at the Draslovka´ s Tennessee plant, and is then transported by rail and truck to Draslovka San Luis Potosi Bulk Transloading Facility, and then to Peñasquito.

All portions of the Draslovka Mexican Supply Chain are certified to the Cyanide Code. Certifications are current and were reviewed on the ICMI website. The master contracts confirm that both Newmont and Draslovka will remain Signatories to the Cyanide Code and shall achieve and maintain the ICMI certification. The Draslovka Mexico Supply Chain to Peñasquito includes, rail transport by Ferromex and Kansas City Southern de Mexico, truck transport by Transportes Especializados Segutal and warehouse in San Luis Potosi. Draslovka is contractually responsible for all transport and all in-transit spill response actions. All portions of the Draslovka production and Mexican Supply Chain are ICMI certified. Draslovka Mexico Supply Chain was last ICMI certified in February 18, 2022.

## *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:*

All unloading, mixing and storage facilities for reagent-strength cyanide at Peñasquito have been professionally designed and constructed. The evidence to demonstrate this requirement includes design specifications and as-built drawings stamped by certified professional engineers, as described in the previous ICMI audits reports, and found in compliance with the Code requirements, where the design and construction drawings were reviewed and provided adequate detail to demonstrate that the unloading, storage and mixing facilities at the Oxide, Sulfide and Pyrite Leach plants were designed and constructed in accordance with sound and accepted engineering practices for these types of facilities. In occasion of this recertification

audit, the auditors confirmed Peñasquito maintains all construction records at the mine site in the Document Control building, organized and filed in an exemplary manner for quick access and consultation. There have been no modifications to the cyanide installations since the previous certification audit.

Peñasquito is located in a valley with a low population and few villages. The nearest villages to the mine are Las Palmas and Las Mesas; both located approximately four kilometers from the site. The cyanide offload facilities at the Oxide, Sulfide and PLP Plants are located a safe distance from the public. The offload areas are not located in areas where workers may congregate. The climate at Peñasquito and the region is extremely arid. All surface water is ephemeral. There are no perennial surface water sources, such as springs, streams, rivers or lakes nearby.

Peñasquito does not receive liquid cyanide. However, the entire cyanide offload areas at the three plants are constructed of reinforced concrete slab-on-grade (i.e., pad, curbs, parapets, footings and tank foundations), which provides a competent barrier to seepage. The concrete areas were in good condition at the time of this onsite verification audit. The method to prevent the overfilling of cyanide storage tanks in the Oxide and Sulfide Plants has not changed since the initial or last recertification audit.

The Oxide Plant was not in use in occasion of this audit, as no more stockpile cyanide leaching activities are being performed at the mine since August 2020, date on when Peñasquito began to irrigate the heap leach pad only with water as a rinse. According to monitoring results reviewed, WAD cyanide values in water at the Oxide Plants ponds resulted below 0.5 mg/l from July 2021 onwards, so this Plant was not considered as a cyanide installation during this audit, according to the ICMI definition. Anyway, in the previous ICMI audit reports, this Plant was found in compliance with the Code requirements regarding systems in place to prevent overfilling of its cyanide storage tanks.

In the Sulfide Plant the mixing tank and the distribution tank have level sensors linked to the computer system in the control room. Both tanks have audible and visual alarms set at the 90% level. In the case of an alarm, these two tanks are shut off manually. The “day tank” at the Sulfide Plant (a separate distribution tank located on the upper level of the SAG Mill) also has a level sensor set at the 90% level with an automatic shutoff. The secondary containment for the day tank has a controlled discharge to the first level floor. The auditor observed screen shots in the control room that indicated the level controls were functioning on these tanks. The mixing tank must be no more than 70% full before receiving more cyanide. The day tank must be no more than 30% full before cyanide can be pumped from the distribution tank.

In the Pyrite Leach Plant (PLP) the mixing and distribution tanks have pressure transmitter level sensors linked to the PLP control room. Both tanks have audible and visual alarms set at the High and High/High levels. The tanks have a hard stop automatic shut off if the High/High level is reached. The auditor observed screen shots in the control room that indicated the level controls

were functioning on these tanks. The mixing tank must be no more than 74% full before receiving more cyanide. The level indicators in the mix tanks are continuously monitored to ensure it is operational. There have been no modifications to the cyanide mixing and storage tanks at the Plants since the last certification audit.

The cyanide mixing tank and the distribution tank at the Sulfide Plant are located on a single solid pedestal of reinforced concrete, which is part of the concrete floor of the entire offloading area. The “day tank” at the Sulfide Plant (a separate distribution tank located on the upper level of the SAG Mill) is constructed on a metal grate over the solid concrete floor of the secondary containment. The secondary containment for the day tank has a controlled discharge to the first level floor. The auditor observed that all of these concrete foundations and containments were in good condition. At the PLP, process tanks, including mixing and storage tanks, are secured to solid, reinforced concrete foundations, which prevents any seepage from the tank bottoms from entering the ground. Cyanide mixing and storage tanks are located inside a concrete secondary containment system. The auditors observed that all of these concrete foundations and containment systems were in good condition.

As stated in the last certification audit report, in the Sulfide Plant the mixing tank and the distribution tank are located within a single secondary containment area with reinforced concrete walls and floor and a sump pump. The “day tank” (a separate distribution tank located on the upper level of the SAG Mill) is located on a metal grate above a secondary containment with reinforced concrete walls and floor. The auditors observed that the concrete in all secondary containment areas was in good condition. In the PLP, the mixing tank and the distribution tank are located within a single secondary containment area with reinforced concrete walls and floor providing a competent barrier to seepage. The containment area has a sump pump to pump any solution back to the holding tank. The auditors observed that the concrete in all secondary containment areas was in good condition.

Peñasquito does not store solid sodium cyanide. Both the Sulfide Plant and the PLP receive cyanide in ISO tanks. The offload area and tanks are located outdoors preventing the build-up of HCN gas. The offloading areas are located within a fenced area (chain link) and locked gates. Signs prohibiting unauthorized entry are posted. The cyanide mixing and distribution tanks are located separately from incompatible materials. At the Sulfide Plant other materials are stored on a raised, roofed platform (open air warehouse) adjacent to the storage and distribution tanks. The platforms have concrete walls on the side that is adjacent to the cyanide offload area and does not drain towards the tanks. The auditors observed that all chemicals stored adjacent to the offload area were compatible with cyanide. At the PLP the cyanide mixing and distribution tanks are within a separate secondary containment separated from any other materials.

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

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

At both Plants, following a cyanide offload event, the truck carrying the ISO tank leaves the site immediately and returns to the San Luis Potosi Chemours warehouse. Peñasquito does not store or dispose of empty cyanide containers such as drums, boxes, or flobins on site. Each plant has an unloading procedure that requires the ISO tank to be inspected to ensure that there are no residues on the outside of the ISO tank at the end of unloading. Per procedure, the valves are closed to secure the ISO tank before it leaves the unloading area. The auditors reviewed a checklist that includes a step for inspecting ISO tank and a step for securing the valves at the end of offloading.

The auditors observed the initial portion of an offload events at the PLP during this re-certification audit. Pre-offload safety checks were observed and the hook-up of the hose from the ISO tank to the mixing tank was observed. Pre-offload levels of the tanks in the control rooms were observed. A copy of the completed checklist was obtained and reviewed following the offload to verify that the checklists were completed.

Peñasquito has developed and implemented plans/procedures to prevent exposures and releases during cyanide unloading and mixing activities. The procedures Pressurization, Dissolution, Unloading and Cyanide Distribution are similar for both Plants and provide instructions for conducting cyanide unloading and mixing activities. The procedures include safety aspects of managing the cyanide, the required pH values, ISO tank arrival to the plant, tank pressurization, cyanide dissolving in the ISO tank, emptying of the ISO tank, transfer of cyanide solution between tanks and distribution of solution to the process circuit. The procedures provide specific steps related to the activity, including sequential operation of valves, hose connections and pumps. Valves and pumps are numbered in the procedure and provided with corresponding labels at the facility. The Plants receive cyanide in ISO tanks, and the solid cyanide within the container is dissolved into solution during the offload process. Peñasquito does not handle cyanide containers, does not stack cyanide containers.

Procedures cover leaks and failure of offload, mixing and storage facilities. The procedures also provide contingency plans for responding to larger spills for both solid and liquid cyanide. Nonetheless, the concrete pads and secondary containment systems would contain all spills during unloading and mixing activities.

The procedure for the safe unloading of liquid cyanide requires the use of proper Personal Protection Equipment (PPE) and lists the specific equipment to be worn. Specified PPE includes rubber boots, hard hats, goggles or face mask, Tychem® suits, and neoprene gloves. The cyanide unloading procedure requires that the mill operator together with the cyanide driver must inspect the equipment prior to starting the cyanide unloading operation. The procedure requires that the driver, field operator, and control room operator monitor the unloading operation continuously during the entire process. The control room operator monitors the unloading process from a safe location, namely the control room via video camera feed. In the event that the video camera does not work, the procedure calls for two mine operators to be in attendance to the unloading operation and one of these operators must be in a safe location away from potential contact with cyanide. The auditors observed three offloads and determined that the proper PPE was worn, the correct pre-inspections were completed, the valves were operated properly and a dedicated observer watched the offload from a safe location.

Draslovka adds a red colorant dye to the solid cyanide prior to delivery to the Peñasquito plants at a concentration that provides for clear visual identification. The auditors inspected the offload area, the mixing and holding tanks for evidence of spillage and there was no evidence during the three offloads observed of dyed cyanide solution. Observation of the offloads demonstrated that Peñasquito has appropriate Standard Operating Procedures (SOPs) and practices to handle and prepare 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 includes the following cyanide facilities: The Sulfide Plant, where cyanide is added to the Semi-Autogenous Grinding (SAG) mills and at the lead flotation circuit; and the Pyrite Leach Plant (PLP) consisting of the following main units: pyrite flotation; concentrate regrind and cleaning; thickening; post-cleaner regrinding; agitated leaching; countercurrent decanting; cyanide detoxification; and Merrill Crowe process. The two plants have an area for unloading, mixing, and storing cyanide.

Peñasquito has developed written management and operating plans and procedures for the related to cyanide management at the Sulfide Plant and the PLP including the unloading, mixing and distribution tanks, and cyanide treatment designed to protect human health and the environment. The plans and procedures are maintained in a formal document control system on the Peñasquito intranet portal. Review of these plans and procedures and interviews with plant operators, maintenance and environmental personnel demonstrate that Peñasquito understands how to manage cyanide in a manner that prevents releases to the environment and exposures to workers and the community.

As described in the previous ICMI certification reports, procedures cover the cyanide operations at Sulfides Plant. Peñasquito has safety work procedures for the cyanide offload areas, Merrill-Crowe circuit, cyanide solution pipelines and the associated containment channels, ball mills, lead flotation cells, and Tailing Storage Facility (TSF) at the downstream end of the Sulfides Plant. These procedures include process tanks and vessels (mixing and distribution tanks, de-aeration tower, pre-coat tank, barren solution tank, and clarification filter), the associated piping, pumps, valves, and secondary containments. Peñasquito has developed procedures for the PLP cyanide operations including the agitated leaching, countercurrent decanting (CCD), cyanide detoxification, Merrill Crowe, refinery; and a tailings distribution system to the existing tailings distribution lines. The pyrite leach tailings are treated in the cyanide detoxification unit before being mixed with the flotation tailings from the existing Sulfide Plant at the existing tailings distribution lines, and then sent to the existing TSF. These procedures are adequate to provide measures to protect human health and the environment and include contingency planning, inspection, Preventive Maintenance (PM) programs and PPE requirements. Peñasquito has developed cyanide management contingency procedures for situations when there is an upset condition at the PLP, when inspections and monitoring identify a deviation from design or standard operating procedures, and/or when a temporary closure or cessation of the operation may be necessary.

Peñasquito has plans and procedures that form the basis of the facility design and operation. The mine has documentation for all aspects of the design and operation. The design parameters for both Plants were reviewed as part of the initial audit and were found to be in full compliance with the Code. No changes have been made to those parameters since the initial audit.

Peñasquito contracted M3 Engineering to prepare a design criteria document for the Sulfide Plant, which contains the assumptions and parameters for the cyanide offload area and target WAD cyanide concentrations for the tailings circuit. Operational requirements and control points from the detailed feasibility studies and project deliverables were incorporated into standard operating procedures (SOPs). Peñasquito developed new procedures and operating plans for the PLP that identify the assumptions and parameters on which the PLP facility design was based (Peñasquito Pyrite Leach Project Design Criteria by Fluor May 2017). The parameters include pH, NaCN addition to the leach feed (2.4 kg/t), operating pH of the leach circuit (10.5-

11.0), feed pH to the cyanide detoxification circuit (minimum of 8.5) and the WAD cyanide target in the detoxification circuit (<1.0 mg/l) prior to blending with the sulfide flotation tailings.

Peñasquito has developed and implemented SOPs for cyanide related tasks, which describe the standard practices necessary for the safe and environmentally sound operation of the cyanide facilities. These procedures are adequate to provide measures to protect human health and the environment and include contingency planning, inspection, PM programs and PPE requirements. The operation has identified equipment, personnel, and procedures for all associated tanks, pipelines, and pumps as having contact with cyanide; and the cyanide detoxification system. Equipment, personnel, procedures, and records from the two plants containing cyanide were the focus of the audit. Peñasquito has an online database of procedures that was available for review during the audit. Procedures adequately address all aspects of the facility, including operational control, environmental, health and safety topics, preventive maintenance, water balance, and inspection processes for equipment, secondary containments, environmental media, and wildlife protection. Procedures were available for normal and upset or emergency operating conditions.

Inspection programs are implemented throughout the two Plants including the various cyanide facilities that include all offload areas, process tanks, pipelines, valves, pumps and secondary containments. Peñasquito develops a weekly plan for preventive maintenance for critical equipment using the SAP Program. Preventive maintenance and calibration plans are generated automatically for each week. Work orders generated from inspection forms are entered in the system, including assigned priority.

Peñasquito has developed and implemented a management of change (MOC) process. Peñasquito's MOC procedure describes the different types of changes that may occur at the plant (equipment, process, maintenance, materials, personnel, software, etc.). The purpose of the procedure is to ensure that systematic processes are in place to evaluate any changes at the plant so that the risks of incurring negative impacts to people, environmental, property, or product quality are minimized. The MOC procedure requires sign-off by environmental and safety personnel, prior to implementation of proposed process and operational changes and modifications. Records were available to show that the necessary personnel have been trained on MOC. This process includes a specific format to evaluate proposed changes. The process starts with an initial questionnaire to identify the proposed changes and the areas (e.g. Health and Safety, Plant Operations, Environment, others) that will be involved in the evaluation of the change. The second step is to conduct a meeting to evaluate the changes and identify actions to control the risks associated with the change. Subsequently, an action plan is developed including expected completion dates and responsible individuals and is followed up in the Enablon system used by Peñasquito. Records of management of change examples completed since the last recertification audit were reviewed and found to meet the requirements of the Code.

Peñasquito has implemented contingency procedures for the Plants. The auditors reviewed contingency plans developed and implemented for the process Plants. Procedures are adequate

to respond to upsets in water balance, problems identified by inspections, and to address temporary closure of the operation. Procedures include step-by-step measures for stopping and starting the plant facilities, what to do in the event of a power outage, the response measures for emergencies related to failures of cyanide equipment, and response plans to address upsets in the process water balance. Peñasquito Mine Closure Plan provides the measures to take for an unplanned closure and during temporary closure. These plans include the requirement to continue ongoing maintenance and inspection of the entire facility to ensure adequate storm storage capacity in the process ponds and to ensure that the integrity of all pipelines, trenches, diversion structures, berms and embankments is maintained. In addition to contingency plans, the mine maintains a detailed emergency response plan that addresses different types of emergencies, including cyanide spills. The Control Room Operators at the Plants demonstrated knowledge of the emergency shutdown procedures for safely ceasing operations in the processing plant in the event that there is a threat of process water release.

Peñasquito personnel perform weekly visual inspections of the process facilities at the Plants, including the Detoxification Circuit, and inspect tanks for signs of corrosion and leakage. Inspections include the mixing, distribution, barren solution, pre-coat, de-aeration, leach, CCD and main zinc tanks and vessels, for signs of corrosion and other potential issues. These inspections are documented on the checklist Cyanide Tanks, which records observations regarding cracks, perforations, corrosion, filtration, presence of fluids, dents, connections, man entry, operating level sensor, paint and signage. Evidence was provided for the period of the re-certification audit. At both Plants personnel inspects weekly the secondary containments at the offload and day tank for cracks and the general condition of the concrete. Also, the operation routinely inspects the secondary containments provided for all process tanks and vessels. The presence of fluids is included in the tank inspections. The Plants supervisors review the inspection forms and uses discretion regarding the required action.

In occasion of the audit, the leach pad, the Oxides Plant ponds and the TSF showed WAD cyanide values below 0.5 mg/l, therefore, according to the ICMI´s definition, these were not considered cyanide installations and were not considered in the scope of this audit. Peñasquito performs weekly visual inspections of the process facilities and inspects pipelines, pumps and valves for signs of corrosion and leakage pipelines at the two Plants, including The Oxide Plant ponds and tailings dam. These inspections include pipes in the cyanide offload, mixing and distribution and process areas.

Personnel perform daily pump inspections for temperature, pressure, vibration and leaks on the night shift and make necessary repairs during the day shift. Valves are repaired or replaced on an as-needed basis. Peñasquito performs preventive maintenance inspections on pumps on a weekly, monthly and quarterly basis. Weekly maintenance includes lubrication, external cleaning, and repair of minor failures; monthly maintenance includes rinsing the pumps; quarterly maintenance requires the dismantling of pumps and a check of internal workings. Plants personnel inspect the high strength cyanide facilities: pipelines, pumps, and valves: salts at unions and valves, leaks, presence of valve locks, pump noise, and pump temperature.

Peñasquito operators perform weekly inspections of water levels in the process ponds. The storm water diversion channels at Heap Leach Facility (HLF) and the structures that divert the Arroyo Grande around the entire mine site are inspected on a regular basis by environmental personnel. The geomembrane-lined sediment pond at the HLF is cleaned out every year. Vacuum trucks remove sediment and haul it to heap. Records of the inspections were available for review during the audit and were found to be complete. The auditors conducted a field inspection during the site visit and verified the condition of tanks, secondary containments, pipelines, pumps, valves and water diversions channels. These inspections also included cyanide unloading, mixing and storage facilities. Records of the inspections conducted by Peñasquito to cyanide facilities were reviewed by the auditors and were found to be complete.

Peñasquito maintains an inspection program of cyanide facilities at a frequency that was found to be sufficient to assure that the facilities are safe and functioning within design parameters. At the time of the audit, inspections were being performed as planned and recorded. Peñasquito performs daily inspections at both Plants that include the ISO tanks every time an ISO tank is present, fixed HCN monitors, process tank levels, pH of process solution, tanks, valves, pumps, pipes, secondary containments, available freeboard in process ponds and the condition of their synthetic liner, and the processing plants. Environmental Department also conducts periodically wildlife inspections at the tailings dam and process ponds, although not considered as cyanide installations anymore. Weekly inspections are performed of safety equipment, cyanide antidote, process tanks, leak detection systems, pipes at the plants, concrete and geomembrane-lined secondary containments, emergency showers and eyewash stations, fire extinguishers, hydrants, and first aid equipment are performed. Monthly inspections of the tank level sensor and alarm instrumentation and tools are performed. Additionally, Peñasquito inspects pumps weekly, monthly and quarterly. Tank level instrumentation is calibrated/maintained every 30 days and also monthly at the mixing tanks and the holding tanks. Portable HCN monitors are calibrated before every use by means of the bump test. Fixed HCN monitors are maintained internally every 6 months and a certificated calibration performed by an external contractor annually. The inspection program of cyanide facilities including unloading, mixing and storage activities and frequency of inspections were found to be sufficient to assure that the operation is safe and functioning within design parameters. Records of inspections are retained and were reviewed by the auditor. The inspections are documented and include date of the inspection, the name of the inspector and observed deficiencies. The inspection programs include cyanide unloading and process circuits. Records were reviewed for all inspections performed at the Sulfide and PLP Plants for the time period of the last recertification to this audit. Records included the date of inspection, the name of the inspector, and any observed deficiencies. Corrective measures are noted directly on the hard-copy inspection records when deficiencies are noted. Operational inspections are documented on checklists. The auditors reviewed completed examples for the re-certification period that confirms the records are retained and found them to be acceptable. Peñasquito uses SAP to document, track and close corrective actions identified during inspections. The auditor verified that corrective actions related to cyanide facilities were prioritized for prompt implementation. The auditors tracked the corrective action in SAP.

Peñasquito has a documented preventive maintenance program to ensure that equipment and devices function as necessary for safe cyanide management. The preventive maintenance program is used to perform necessary maintenance and inspect the integrity of process equipment, piping and tanks. Schedules for daily, weekly, monthly, quarterly, and annual maintenance activities for cyanide facilities are maintained electronically. Work orders are generated and trained maintenance personnel perform the required tasks. Completed work orders and calibration records were sampled for the re-certification period and were found to be complete. Maintenance personnel, instrument technicians, and maintenance supervisors were interviewed during the audit. All personnel showed awareness of cyanide safety topics and the need for proper maintenance of the equipment used in the operation. Written procedures are used to ensure that any equipment that contains cyanide is properly decontaminated prior to performing maintenance and that maintenance personnel are wearing necessary personal protective equipment.

Peñasquito performs preventive maintenance on pumps, valves, flowmeters, gauges, level sensors, pH meters, sump pumps, filters, and HCN sensors. Workers are provided with relevant maintenance checklists (work orders). The mechanic completes the checklist form and returns it to the Maintenance Planner for input into the SAP© system, which retains a history of the work performed. Equipment is categorized as general and critical. Critical equipment is higher priority for maintenance (although not necessarily cyanide related). Peñasquito calibrates/maintains the tank level instrumentation monthly at the mixing tank and the distribution tank. This maintenance documents the calibration on the form “Verification of Sensors for Temperature, Level, Flow and pH.”

Peñasquito also performs annual ultrasonic thickness testing on mixing, distribution, barren and day tanks. Copies of the Thickness Measurement Reports (data only) for the distribution, barren and mixing tanks were reviewed and found to be acceptable. The auditors reviewed records for preventative maintenance from covering the certification audit. The auditor also reviewed hard copies of the planned inspections and maintenance activities such as the weekly summary report for preventative maintenance. Documents showed all pumps, tanks, cyclones, filters, agitators, air compressors, and valves in the PM program.

In the event of a power outage, the operation has four diesel-powered generators of 2,500 Kilowatts (kW) each. Two generators are located at Oxide Plant and two at the PLP. The power required to operate the PLP is 3,700 kW, 74% of both emergency generators, capacities. Peñasquito also has an uninterruptable power system (UPS) to the control room, main controller, and computer servers throughout the facility. The Sulfide Plant does not have backup generators for the reagent-grade cyanide circuit at the mill because it is a closed circuit designed to prevent backflow in the event of a power outage. In the event of a power outage, the ball mills would stop operating and the electronic controllers on the cyanide feed lines from the day tank would stop flow to the ball mills. The electronic controller on the feed lines to the lead cleaner tanks would also stop flow to these tanks from the day tank. All other process tanks and columns in the Sulfide Plant are equipped with check valves to ensure that all solution movement stops in the event of

a power outage. Backup power is not needed at the Sulfide Plant for managing cyanide solutions. Peñasquito has implemented a written procedure for two power outage scenarios (scheduled and non-scheduled stops). Scheduled stops are conducted once per year. During a non-scheduled stop, it takes approximately 10 minutes to reach full power (i.e., the required voltage). The preventive maintenance program for the generators includes weekly maintenance and complete overhauls every year by the Caterpillar dealer (Madisa). Additionally, the generators are run for 15 minutes every 15 days. Maintenance records from Madisa and weekly maintenance records were reviewed for the period of this recertification audit cycle and found to be acceptable.

### 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:*

As described in the previous ICMI certification audit reports, Peñasquito uses cyanide at the Sulfide Plant to depress pyrite rather than leach gold. Cyanide is added at two points in the Sulfide Plant: the ball mills and the lead flotation circuit, with the ball mills receiving a higher dosage than the lead flotation circuit. By interview with the Peñasquito metallurgist, the initial dosage of free cyanide in 2007 at the Sulfide Plant was approximately 35 grams per ton (g/t). This initial dosage was based on thousands of ore tests run at laboratories in the United States and Canada between 2004 and 2007. Peñasquito determined that there were different ore types at different levels in the pits. They conducted laboratory testing to determine how best to process these different types of ores and determined that the iron and pyrite concentrations drove the mineralogy. In an effort to maximize metal recovery and reduce cyanide consumption Peñasquito commissioned a carbon pre-flotation circuit (CPP) that reached commercial rates on Oct. 1, 2018. The CPP circuit treats 6 million tonnes of high carbon ore. It de-risks the tailings and gives the company the flexibility to sequence various ore types. It currently consists of three stages of floatation to remove organic carbon from the cyclone overflow to the lead flotation circuit. Cyanide addition is after the CPP circuit to avoid cyanide consumption. When the CPP is not in operation then cyanide is added in the mill.

The Pyrite Leach Plant (PLP) treats the sulfide tailings and then feeds into a flotation and leach circuit followed by a Merrill Crowe circuit. Initial stabilization point for cyanide addition in the PLP is between 600 – 800 ppm free cyanide. On-going testing at the PLP occur every six months to determine optimal stabilization point for the cyanide addition.

Interviews with process personnel indicated that the cyanide concentration is monitored to regulate the optimum cyanide addition rate at the Sulfide Plant and the PLP. The objective is to minimize the amount of cyanide used to reduce the cyanide addition at the Sulfide Plant's ball mills and the lead flotation circuit and the PLP. The graph provided by Peñasquito's metallurgist shows that cyanide consumption in the Sulfide Plant for this recertification period is approximately 13 - 15 g/t. This consumption rate represents a decrease from the initial rate of approximately 35 g/t in 2007. The operation measures residual WAD cyanide with an automated sampler at the tailings boxes (the exit from the Sulfide plant and the new exit point for the PLP at the start of the pipeline to the tailings impoundment) to confirm the cyanide addition rates result in low levels of cyanide leaving the plants.

Peñasquito commissioned the PLP in Q3 2018 and is still conducting testing to determine the optimum cyanide concentration for the circuit. Bottle roll tests are conducted to determine cyanide addition rate. The feed is sampled every 1 day of residence time and then one sample/day for assay. The first cyanide was delivered to the PLP on November 6, 2018 and first sent to the leach tanks on November 17, 2018. Peñasquito conducts cyanide consumption tests on the ore every week.

### 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:*

Peñasquito continues to use a comprehensive, probabilistic water balance using Goldsim software platform. An external consulting company (Golder Associates) updates and calibrates the model as needed. As explained in the previous audit reports, the operation has developed a water balance for the heap leach and process ponds at the Oxide Plant that is both probabilistic and comprehensive. The water balance is specifically intended for management of the process ponds to prevent overtopping. The Sulfide Plant and the PLP do not have process ponds associated with its operations and therefore do not require an operational water balance to meet Code compliance. The PLP has an Emergency Pond that is for storm water collection outside of bunded (secondary containment) areas. The return from the pond can be sent to the process or final tailings box depending on need for water at the PLP.

The water balance model uses a daily time step with a spreadsheet tab for each month of the year. The model can be used for actual conditions (i.e., data to date), as well as annual, seasonal, and daily extremes and power outages. The model specifically notes when the pregnant pond overflows to the contingency pond, as well as noting the pond depth and available freeboard in

the contingency pond. The model then uses a system to designate when water management measures are needed to reduce the potential for overtopping the contingency pond. These measures include use of forced evaporation and application of water to inactive (dry) areas of the heap leach pad.

With respect to the probabilistic requirement of the Code, the water balance considers the average precipitation year and the wettest precipitation year represented in the period of record at the nearest government station in Mazapil, Zacatecas. In addition, the model allows the superimposition of extreme events, such as the 100-year, 24-hour event, on any day in the average- year and wet-year scenarios. Therefore, the model does take into account the uncertainty and variability inherent in precipitation, but specifically the extremes and variations. Interviews were conducted with the Process Engineer and confirmed that the parameters used in the water balance modeling were being continually monitored and maintained as part of daily operations. Operating conditions of the plant were checked during the audit to confirm that the water balance modeling was probabilistic and comprehensive. The Process Engineer demonstrated to the auditors the GoldSim model. The fundamentals of the water balance has not changed since the initial audit in 2012 because the operating conditions have not changed. However, Peñasquito does update the model using on-site meteorological data.

No cyanide solution is applied to the leach pad anymore. Both the leach pad and the tailings facility were not considered as cyanide facilities during this recertification audit since they showed WAD cyanide values less than 0.5 mg/l. of the scope of this audit. The average application rate used in the model for the heap leach is 10.0 liters/hour/square meter (l/h/$m^2$). However, the application rate can be varied in the model if needed. The model also allows back calculation of the actual rates based on real pumping data. The 100-year, 24-hour design storm of 63 millimeters (mm) is used in the model. However, any precipitation depth can be entered if the effects of a larger or smaller event need to be evaluated in real time. Precipitation data from the station at the Peñasquito airstrip is used for the actual daily values in the model. This station has the most data for a station nearest the mine. The average year precipitation (407mm in 1972) and the wet-year precipitation (758mm in 1976) were derived from the government station in Mazapil, Zacatecas. The water balance model also considers the quality of evaporation data in representing site conditions, as appropriate. Records at that station cover a 37-year period (1961 to 1998).Run-on to the pad and ponds is not considered because all upgradient run-on is diverted. Effects of freezing or thawing are not considered because of the hot climate in the region, as supported by the climatic data for the site. Solution losses due to evaporation from the pad and ponds are not considered because Peñasquito intends the model to be conservative with respect to the potential for overtopping ponds. Losses to seepage are not considered because the pad and ponds are geomembrane- lined. Losses to surface water are not considered because there are no discharges to surface water. A 24-hour power outage model is used (even though there are backup generators). The volume of drain down water in the model is based on an actual 24-hour field test with all pumps turned off and measurement of the water reporting to the ponds. Treatment capacity is not considered because there is no discharge to

surface water. The impact from the phreatic surface is not considered because the groundwater table is at least 10 meters (m) below the geomembrane liner.

The Peñasquito process ponds (pregnant pond and barren pond) at the Oxide Plant, the major events pond at the Sulfide Plant and the tailings dam pond, are operated with the design parameter for each pond. Although these ponds were out of the scope of this audit, the auditor reviewed data for the last 3 years and verified that the freeboard for the process ponds was very low as they only receive rainwater which es very scarce in this arid area.

Peñasquito has developed a standard operating procedure (SOP) to inspect and monitor activities to implement the water balance and prevent overtopping to ponds and unplanned discharge of cyanide solution to the environment. The SOP is for upset conditions in the process ponds, with emphasis on the contingency pond and tailings mill pond. The auditors reviewed completed examples of inspection forms for the recertification period and found them to be acceptable. Regular inspections are performed to assess the amount of freeboard in the ponds, the condition of the perimeter fencing and access gates and the condition of the geomembrane liner of the ponds. Peñasquito has an annual inspection program for the surface water diversions around the open pit, oxide plant, and heap leach pad. The auditors reviewed completed inspection forms covering the audit re-certification period and found them to be acceptable.

Peñasquito updates the water balance model on an annual basis with meteorological data collected from regional weather monitoring stations. The water balance projections are revised as necessary based on actual data. Peñasquito regularly incorporates the precipitation and evaporation data from the Peñasquito airstrip station into the water balance model. The auditors reviewed water balance spread sheets based on the data available to date. The spreadsheets tracked the projected pond levels on a daily basis, thereby allowing operating practices to be revised as necessary in real time. The auditor reviewed on-site meteorological monitoring data. Peñasquito 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:*

Although Peñasquito pregnant and barren ponds are not in use and have WAD cyanide concentrations less of around 0.02 mg/l, are covered with bird balls. Peñasquito has installed a 3-strand barbed wire fence around the mine property to restrict access. The mine has also

installed a 3-strand barbed wire fence around the heap leach collection ditch and a berm around the rest of the heap leach. This combination of measures restricts access by cattle around the entire perimeter of the pad. Peñasquito has installed a 6-foot high chain link fence around all of the process ponds. In addition, a 3-foot high inner fence has been installed around the process ponds (except the contingency pond). This inner fence has a tight weave to limit access by small animals and is constructed on top of a concrete curb to restrict access by burrowing animals.

The Environmental Department conduct inspections weekly of the Oxide Plant and process ponds for integrity of the physical barriers at the process ponds weekly. The auditors reviewed completed inspection forms that included the fences, and other conditions related to restricting access by wildlife, cattle, and birds, covering the audit re- certification period and found them to be complete.

The Sulfide Plant and the PLP do not have open water associated with the cyanide distribution system. The Tailings Storage Facility (TSF) is not a cyanide facility because the WAD cyanide concentrations in the open water are below 0.5 mg/l. The auditor interviewed personnel from the water group and the environmental group. The auditors inspected the heap leach pad and process ponds to verify the restrictions in place for access of cattle, birds and other wildlife.

Monitoring results of the Sulfide Plant tailings box sampling point show that out of the 3-year period of monitoring for this recertification audit period that WAD cyanide concentrations were significantly below 0.5 mg/l WAD cyanide. The results support the conclusion that the TSF is not a cyanide facility. No open water with WAD cyanide concentration is above 50 mg/l at Peñasquito. During the time period for this recertification audit, Peñasquito has been successful at preventing wildlife mortalities related to cyanide facilities. Nevertheless Peñasquito inspects for wildlife mortalities. Peñasquito maintains a formally documented wildlife protection and monitoring program. Weekly inspections are performed to look for dead or otherwise impacted animals in the ponds area. Results from the monitoring program were reviewed during this recertification audit period. Personnel responsible for the program were interviewed. Records were found to be complete and process and environmental personnel demonstrated an understanding of the monitoring procedure and the importance of the monitoring. Peñasquito compiles wildlife mortalities in a database. The auditors reviewed the database covering the recertification audit period, showing no wildlife mortalities. The gate had been left open and the cow wandered into the pad area. The auditors concluded that the measures to restrict wildlife, cattle, and birds are effective in preventing mortalities. Peñasquito is not operating the heap leach pad, and will begin its closure activities.

### 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 because Peñasquito does not have any direct discharges or indirect to surface water. Peñasquito annually inspects the diversions through and around the site for the presence of seeps into these normally dry channels.

### 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:*

Peñasquito has implemented measures to manage seepage and protect groundwater at the Sulfide Plant. All solutions are contained in process tanks and columns within secondary containment provided by the concrete floor of the plant in order to prevent seepage to groundwater. The day tank (high-strength cyanide solution) on the upper floor of the plant has a separate secondary containment, in addition to the concrete floor of the plant to prevent seepage to groundwater. Peñasquito has implemented measures to manage seepage and protect groundwater at the PLP. All solutions are contained in process tanks within concrete secondary containment in order to prevent seepage to groundwater.

The Mexican government has established safe WAD cyanide concentration levels for protecting groundwater. Peñasquito has two groundwater monitoring wells downgradient of the heap leach pad, process ponds, and Oxide Plant and two groundwater monitoring wells downgradient of the Sulfide Plant but upgradient from the TSF. Peñasquito samples groundwater from these wells on a quarterly basis and analyzes the samples for WAD and total cyanide. Analytical results from samplings during the audit recertification period showed non-detect values for both WAD and total cyanide at monitoring wells. Peñasquito is not required by the Mexican government to monitor groundwater downgradient of the Sulfide Plant or the PLP because there are no process ponds associated with these plants. Given the arid conditions of the area, there are no beneficial uses of the groundwater beneath and/or immediately downgradient of the operation's cyanide facilities. As defined by the Code, beneficial use is considered to be a use designated by the applicable jurisdiction or an actual use, such as a source of drinking water for humans or livestock. Peñasquito does not use mill tailings as underground backfill.

## 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:*

Peñasquito provides spill prevention and containment measures for all cyanide unloading, storage, mixing and process solution tanks. Field inspections of the three plants and their unloading, storage, and process areas were conducted during the audit. No changes to the spill prevention or containment measures for cyanide offloading, storage, mixing and process of the process Plants occurred during the time period from the last recertification audit.

At the Sulfide Plant concrete secondary containments are provided for the unloading pad, mixing and distribution tanks, and the day tank. The mixing tank and distribution tank are located on a single, solid concrete foundation. The day tank is installed on a metal grate above a concrete secondary containment structure. The auditors observed that the concrete secondary containments for all three of these tanks were in good condition at the time of the site visit. Process tanks and columns containing low concentration cyanide solutions at the Sulfide Plant are installed on solid concrete foundations. A secondary containment area that consists of a concrete floor and perimeter concrete walls additionally surrounds them. The auditors observed that the concrete was in good condition at the time of the site visit. The secondary containment system is inspected daily as part of the process facilities inspection system. The auditor observed that the concrete containment systems were in good condition at the time of the audit.

At the PLP concrete secondary containments are provided for the entire process area (i.e. unloading pad, mixing and distribution tanks, leach tanks, CCD thickeners, detoxification plant). The mixing tank and distribution tank are located within a single, solid reinforced concrete foundation with stem walls and a sump pump. The auditors observed that the concrete secondary containments for all of these tanks were in good condition at the time of the site visit. The auditors reviewed the design drawings of the PLP unloading, mixing and process solution tanks. The secondary containment system is inspected daily as part of the process facilities inspection system.

At the Plants, the secondary containments for cyanide offloading, storage, mixing and process tanks are sized to hold a volume greater than that of the largest tank within the containment and any piping draining back to the tank and with additional capacity for the design storm event. The auditors confirmed during the audit that no additional infrastructure for cyanide was added during this audit recertification period. The auditors confirmed during the audit that no additional infrastructure for cyanide was added to the Sulfide Plant during this audit recertification period. As described in the previous audit reports and found to be in compliance, secondary containment areas for the cyanide tanks are linked to provide sufficient containment volume for the largest

tank within the linked secondary containment area, pipes that would drain back into that area, plus a significant storm event. Containment areas have sump pumps with dedicated pumps that return collected solutions back into the process circuit. The secondary containment areas are constructed of reinforced concrete.

Secondary containments for cyanide unloading, storage, mixing and process tanks at the PLP are sized to hold a volume greater than that 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 for each separate area in the process circuit and the tank sizes in each area were reviewed by the auditors and found to have adequate capacity to meet Code compliance. The entire process area is contained within a concrete pad surrounded by curbs and walls, providing a competent barrier to seepage. Secondary containment areas for the process tanks are linked to provide sufficient containment volume for the largest tank within the linked secondary containment area. Containment areas have sump pumps with dedicated pumps that return collected solutions back into the process circuit. The secondary containment areas are constructed of reinforced concrete. The auditors observed that the secondary containments were maintained empty, with no materials stored within them. In addition, design drawings and volume calculations of secondary containments for cyanide storage, mixing and process tanks were reviewed by the auditor and were determined to meet Code compliance requirements.

Peñasquito has procedures and plans and manuals in place for the Pants that are implemented to prevent discharge to the environment of any cyanide solution or cyanide-contaminated water that is collected in a secondary containment. There is no discharge of cyanide-containing water from the secondary containment areas. Peñasquito has dedicated pumps within secondary containment collection areas that remove solutions and return them into the process circuit. The automatic sump pumps are part of the defined preventive maintenance program. At the Sulfide Plant, solutions from the secondary containment for the mixing and distribution tanks drain by gravity to a sump. This sump is equipped to automatically pump solutions back to either tank. The control room monitors water levels in this sump. The secondary containment for the day tank drains by gravity via an overflow pipe to one of the ball mills. At the PLP, solutions from the secondary containment for the mixing and distribution tanks drain by gravity to a sump. This sump is equipped to automatically pump solutions back to either tank. The control room monitors water levels in this sump. Also, Shift inspections check the sump for solution. All cyanide process tanks at Peñasquito have concrete secondary containment. All cyanide process solution pipelines at Peñasquito have spill prevention or containment measure for cyanide solution pipelines to collect leaks and prevent release to the environment. There have been no pipeline containment changes at the Plants since the previous certification audit. All cyanide pipelines at the PLP have containment. There are no cyanide pipelines at Peñasquito that are located outside of containment.

The Plants are located within a concrete secondary containment provided for the process and cyanide offload areas. Containment of the cyanide pipeline that conveys cyanide solution from

the Sulfide Plant mixing and distribution tanks to the mill has been improved since the 2015 audit. Peñasquito installed metal trays under the pipelines to provide secondary containment where the pipeline crosses above the road. In the event of a pipeline leak the solution would drain back by gravity to secondary containment with a sump.

No pipelines associated with the Sulfide Plant or the PLP cross any washes. The tailings pipelines are not considered to be cyanide facilities. The arid climate results in only ephemeral washes without any perennial washes, ponds, or lakes.

Cyanide tanks and pipelines at the Peñasquito Plants are constructed of materials compatible with cyanide and high pH solutions. Material are carbon steel, stainless steel, fiberglass, high density polyethylene (HDPE) and polyvinyl chloride (PVC) or other materials compatible with cyanide. Material specifications and construction material testing records for all cyanide-containing equipment were found in compliance according to the previous certification audit reports. Minor changes in replacement of pipeline sectors have been done during the audit recertification period due to maintenance requirements and were replaced with materials compatible with cyanide and high pH conditions.

### 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:*

Peñasquito implemented Quality Assurance and Quality Control (QA/QC) programs during construction of cyanide facilities, as is described and found in compliance in the previous certification audit reports. All cyanide facilities at Peñasquito have been professionally designed and constructed. The evidence to demonstrate this requirement includes design specifications and as-built drawings stamped by certified professional engineers, as described in the previous ICMI audits reports, where the design and construction drawings were reviewed and provided adequate detail to demonstrate that these facilities were designed and constructed in accordance with sound and accepted engineering practices. In occasion of this recertification audit, the auditors confirmed Peñasquito maintains all construction records at the mine site in the Document Control building, organized and filed in an exemplary manner for quick access and consultation. There have been no modifications to the cyanide installations since the previous certification audit.

As stated in the Peñasquito initial previous certification reports, the QA/QC documentation for the Oxide Plant, HLF and Sulfide Plant includes appropriate testing concerning the suitability of

materials, welding, concrete, adequacy of earthworks and soil compaction, and installation of geomembrane liners. The program included the quality of metal fabrication at the tank vendor. The program included subgrade and concrete testing including suitability of materials, fabrication, electrical, mechanical, instrumentation, piping, concrete, and earthworks. The program included subgrade and concrete testing including suitability of materials, fabrication, electrical, mechanical, instrumentation, piping, concrete, and earthworks. Peñasquito retains construction QA/QC files in hard copy and electronically in the Document Control area. The auditors verified that the hardcopy of the QA/QC documents have been retained for the Oxide, HLP and the Sulfide Plants, including for the PLP which were not yet available during the last certification audit, as it was still under review by a Fluor auditor prior to final hand over to Peñasquito. The cyanide code auditors verified that the QA/QC for the PLP have been retained. As stated in the previous certification audit reports, qualified engineering companies performed the QA/QC inspections and reviews during construction and prepared the final construction reports certifying that the facilities were constructed in accordance with the design drawings and technical specifications.

This reports state that reputable companies had responsibility for implementation of the QA/QC program and commissioning of the Oxide Plant, HLF, Sulfides and PLP Plants. Qualified engineering companies performed the QA/QC inspections and reviews during construction of the cyanide installations and prepared the final construction reports certifying that the facilities were constructed in accordance with the design drawings and technical specifications. The auditors reviewed examples of records of construction reports filed in the Control Room area, including as-built drawings for the cyanide facilities. Peñasquito has as-built drawings/certification for all cyanide facilities which are properly stamped by a qualified engineer.

### 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:*

Peñasquito has written procedures for the monitoring activities used to evaluate the effects of cyanide use on wildlife, surface water and groundwater quality. The analytical laboratory that conducts the groundwater sampling has prepared a sampling plan specifically for Peñasquito. The wildlife monitoring is site-wide and the groundwater monitoring program is for the heap leach pad and process solution ponds. A groundwater monitoring program for the Sulfide Plant and the PLP is not required because there is no open water associated with these Plants. Also the potential for releases at the Sulfide Plant and PLP to groundwater is negligible because there adequate secondary containments for each operating area. The procedures and monitoring

records covering the re-certification audit period were reviewed during the audit to demonstrate that wildlife, surface water, and ground water are being regularly monitored and that proactive measures are taken to protect wildlife from potential cyanide exposure.

Wildlife monitoring and surface / groundwater sampling procedure and protocols were developed by appropriately qualified personnel. As stated in the initial certification audit report, the protocols for wildlife monitoring were developed by an Agronomic Engineer specialized in wildlife management and environmental education, the protocols for groundwater sampling were developed by Romelia Perez Gaytan, both worked in the Peñasquito Environment Department. ALS, the analytical laboratory in Monterrey, prepared the sampling plan. ALS is accredited by the Mexican Accreditation Entity (EMA). During the 2015 recertification audit, the surface / groundwater sampling procedure was reviewed by the Peñasquito environmental responsible and Goldcorp Environment Director and corrective actions were established for the procedure to address sampling values above the established parameters.

The procedure for surface and groundwater sampling describes field equipment calibration, where the samples should be collected, how to purge the wells to collect a representative groundwater sample, field parameters to be measured, how samples should be taken, sample preservation, sample handling, chain of custody procedure and shipping instructions. The procedure specifies analysis for total and WAD cyanide. ALS Monterrey collects groundwater samples with assistance from the Peñasquito Environmental Department. The auditors reviewed examples of completed chain-of-custody forms and field forms showing proper use of the forms for the period of this recertification audit. The auditors also reviewed a map showing the groundwater monitoring wells' locations around the heap leach pad and process solution ponds.

The procedure for surface and groundwater sampling instructs the sampler to record the field conditions during the sampling activities. Field conditions include the weather, livestock and wildlife activities and any anthropogenic influences (i.e. construction). The procedure also describes how samples should be taken, sample preservation, sample handling, chain of custody procedure and shipping instructions. The procedure specifies analysis for total and WAD cyanide. ALS Monterrey collects groundwater samples with assistance from the Peñasquito Environmental Department. The auditors reviewed examples of completed chain-of-custody forms showing proper use of the forms and a map showing the locations of the groundwater monitoring wells around the heap leach pad and process solution ponds. Completed monitoring field forms were reviewed by the auditor and verified that these conditions are being registered.

Peñasquito conducts monitoring of surface water / groundwater quarterly and wildlife weekly at frequencies adequate to characterize the groundwater quality and wildlife mortalities. The auditor reviewed water quality analysis and wildlife monitoring activities covering the audit recertification period and the frequencies of the monitoring activities were deemed to be appropriate by the auditors.

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

***Standards of Practice***

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 mine has the ”Newmont Peñasquito Mine Closure Plan”, an internal draft version dated September 2021 in process to be updated to adopt Newmont´s closure plans standards. The Plan includes all mine areas, including the cyanide facilities. Activities included in the plan are drain down of the heap where WAD cyanide concentrations are expected to decrease to less than 0.5 mg/L within the first or second year of drain down. All three plants have the same plan for removal of all residual cyanide reagents, including removal of residual cyanide reagents by use in the process circuits followed by triple rinsing of the reagent- grade system until WAD cyanide concentrations are less than 0.5 mg/l, decontamination of process equipment, structures, and concrete foundations by triple rinsing and management of the rinse solutions in the process circuits. Any scale or sludge will be placed in an approved containment area, such as the process ponds or heap leach pad. Dismantlement and demolition of equipment, structures, and foundations will occur after decontamination is complete.

The closure plan has an implementation schedule in Appendix 8 describing for the major decommissioning activities for the cyanide facilities at three Plants where cyanide is currently used. The sequence of decommissioning activities is shown with reference to years after closure. This schedule will be refined as Peñasquito approaches the closure period. Mine closure activities for the process plants is scheduled between years 2030 to 2036. Post closure activities to be performed for 50 years, from 2037 to 2071.

Peñasquito reviews and revises their decommissioning plan during the active life of the operation in order to keep the plans current and applicable to the actual ongoing operation as it changes with time. The Closure Plan includes a statement regarding review and revision of the Plan that Newmont requires all closure plans be reviewed and updated every 3 years or when a significant change in operations or expansion occurs. The estimated costs are updated yearly.

### 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:*

Peñasquito has developed a cost estimate model to fully fund third party implementation of the cyanide-related decontamination measures identified in its site's decommission plan. The cost estimate includes add-on percentages for third party engineering design and contract administration. The cost estimate is updated every year. Labor and equipment rates are based on updated quotes from contractors and vendors in Mexico. The estimate includes the applicable cyanide facilities, as well as other non-cyanide facilities.

Peñasquito reviews and updates the cost estimate yearly as part of its corporate financial accounting procedure. The auditors reviewed a 2021 draft version in review process of a mine-wide closure plan, supporting the mine's stated intent to regularly review and update the decommissioning costs.

The local government jurisdiction SERMANAT (Secretary of Environment and Natural Resources) requires that environmental bonds be in place for each stage of the project (including closure). These bonds are updated annually. For the mine decommissioning activities, a third-party financial auditing firm confirmed for stockholders that Newmont Corporation has the ability to fund all of its financial liabilities, including the closure of the Peñasquito Mine. The auditing firm audits Newmont annually. Peñasquito has an established self-guarantee as the mechanism to cover the estimated costs for closure and reclamation. The auditors reviewed documentation provided by Newmont from a Chartered Accountant verifying Newmont conformance with the financial tests for a self-guaranteed mechanism to cover the estimated costs for cyanide-related decommissioning activities.

## *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:*

Peñasquito has procedures that describe the management and operation of cyanide facilities to help minimize the possibility of worker exposure to cyanide. The procedures have been developed for the Sulfides plant and Pyrite Leach Project (PLP). They provide detailed information for the risks involved with each task (including off-loading, plants operations and equipment decontamination) and adequately describe safe work practices. The procedures detail task specific Personal Protective Equipment (PPE) requirements, associated health and safety risks, environmental aspects, safety measures when working with cyanide and procedures to follow in case of contingencies and emergencies. In addition, Sodium Cyanide Safety Data Sheet is attached to each procedure. Changes to the procedures are tracked at the end of each document. In some cases, procedures have checklists to support its implementation in the field. Verification of the written procedures included review of the specific task and worker interviews. The procedures are reviewed on an annual basis and changes are made as necessary. Work permit systems have been developed for more general activities which apply across various areas of the plants and/or the mine operation. These include, for example, lock out/ tag out/, hot works and confined space entry permits. Peñasquito has developed approximately 25 procedures related to cyanide management. Procedures were reviewed and found to be sufficiently detailed to enable safe operation and to minimize worker exposure.

Peñasquito procedures require the use of PPE and address pre-work inspections for cyanide related tasks. Procedures for pressurization, dilution, off-loading and distribution of cyanide at the two plants (Sulfide and PLP) include pre-work inspections requirements and a checklist to support its implementation. This checklist include pH verification, cyanide tank level, ensure that showers and eye wash stations are operational, first aid equipment, cyanide valves, tanks and pumps. In addition to the use of general PPE, such as hard-hat, steel toes shoes, hearing protection and safety glasses, areas and/or tasks where personnel may come into contact with cyanide have additional PPE requirements. Observations during the audit confirmed that hard hat, hearing protection, rubber boots, rubber gloves, chemical suits, face shields, approved respirator and HCN monitors were in use for tasks that were performed at the cyanide off-loading areas. Pre-work inspections are also addressed through the mine's pre-work risk assessment process (AST) performed in order to obtain a work permit. This AST process is applied for non–routine and/or high risk activities and requires that workers evaluate the job that is about to be performed for potential hazards and plan out the work to ensure that the hazards are appropriately managed. AST are usually completed for cyanide offloading activities. For routine activities, workers complete a 5 points card to identify possible risks. Maintenance personnel

need to obtain a work permit prior to any activities in the process areas. The work permit includes an analysis of the risks associated with the work to be conducted. Examples of work permits were reviewed and found to be acceptable.

Peñasquito considers worker input into the development of operational procedures (including health and safety aspects) through various mechanisms, including daily safety meetings, training sessions called "communication of procedures", and annual cyanide refresher training. During the daily safety meetings for each shift (20 minutes approximately) there is direct communication between supervisors and operators where worker input is considered to improve existing procedures. There is no evidence available for these meetings as they are operational meetings in nature and any actions to be taken are written down in a whiteboard and deleted when completed. Procedures related to cyanide management are reviewed every year and updated as necessary with the participation of process operators. Training sessions are conducted to communicate the updated procedures and feedback is provided back by the workforce during those sessions. The training sessions include written evaluations to verify understanding by the workers. Procedures were updated in 2021 and 2022, some of them as a result of a cyanide incident that occurred in September 2021 in the cyanide offloading area. Records of these communication of procedures sessions were reviewed by the auditor for the recertification period. In addition, workers have an opportunity to provide feedback during annual cyanide refresher training sessions of Modules A (induction training) and B (specific training for people who work directly with cyanide).

### 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:*

Peñasquito has determined the appropriate pH for limiting the generation of HCN gas during cyanide mixing and production activities. Procedure MP-SOP-OPP-PR-02 "Pressurization, dilution, off-loading and distribution of cyanide" at the Sulfide plant requires a pH greater than 11.5 at the mixing tank prior to starting the mixing process. For the PLP, procedure MP-SOP-PLP-RC-59 "Reception, off-loading, storage and distribution of cyanide" requires a pH greater than 10.5 at the mixing tank. Observations of cyanide off-loading at the PLP plant and review of the offloading checklists confirmed that the mixing tank pH was checked prior to initiating the mixing process.

At the Sulfides and PLP plants, pH levels are maintained through the addition of lime or caustic soda. For the operation of the Sulfides plant, there is no defined minimum pH, as cyanide addition at this plant is to depress pyrite and zinc and not to maintain it in solution. For the operation of

the PLP plant, pH level is maintained at a range between 10.5 and 11 to avoid generation of HCN. Peñasquito has online pH probes in their cyanide tanks and process circuits. pH meters are maintained on a monthly basis as part of the preventive maintenance program. pH values are displayed on monitors in the control rooms and were verified during the field audit. In addition, Peñasquito samples the pH several times during each shift to ensure that it is being maintained at a high enough level to prevent the generation of HCN. HCN concentrations are monitored daily at different locations throughout the process plants using portable and fixed HCN monitors. Daily pH log records were reviewed to verify that the pH was maintained as recommended and found to be acceptable.

Peñasquito has identified areas where workers may be exposed to cyanide through a cyanide risk analysis conducted at the Sulfide and PLP plants. This risk analysis include the activities and tasks where HCN could be generated (e.g. cyanide preparation, clean up on cyanide tank, maintenance, cyanide addition points, others); employee variables (e.g. work area, frequency, duration in hours); workplace/process variables (e.g. number of workers, use of PPE, video monitoring); hazard variables (e.g. solid cyanide, liquid cyanide, HCN gas); exposure risk rank (e.g. inhalation of HCN and solid cyanide, skin/splash of liquid and solid cyanide) and the controls in place. Working and operational areas where there is potential for worker exposure to cyanide are identified and monitored with fixed HCN gas monitoring units. Portable HCN monitors are provided to workers and made available for use in areas where there is a potential for HCN exposure. Fixed HCN monitors are located at different location at both the Sulfides and PLP plants.

Peñasquito has also implemented a checklist for daily inspection of areas at the Sulfide and PLP plants where HCN gases can be generated. At the Sulfide plant, daily HCN measurements are conducted at the cyanide mixing and storage tanks, daily cyanide tank, cyanide addition points at the SAG mills and at the conditioner tank. At the PLP plant, daily HCN measurements are conducted at the cyanide mixing and storage tanks, cyanide addition points at leach tanks #8, #9, #10 and #12, cyanide addition at Merrill Crowe, press filters, CCD tanks and detox tanks. HCN measurements are conducted with portable HCN monitors. Procedures have been developed for all activities in which cyanide management is involved. These procedures include a section where the PPE requirements are listed. Signage listing the PPE requirements to enter a cyanide facility has been installed at appropriate locations.

Peñasquito uses fixed and portable monitoring devices to confirm that controls are adequate to limit worker exposure to hydrogen cyanide (HCN). According to Newmont internal requirements, HCN alarms of both portable and fixed monitoring devices are set to visually and audibly alert operators at 4.7 ppm (preventive) and 10.0 ppm (evacuation), which is in alignment with the values recommended by the Code. These two HCN values are also specified in the procedures related to cyanide management. At HCN values of 4.7, the procedures indicate that operators should evacuate the area.

A total of fourteen (14) fixed HCN monitors are located throughout the different process facilities. At the Sulfides Plant, fixed HCN monitors are located at the cyanide mixing area and cyanide day tank. At the PLP plant, fixed HCN monitors are located in three locations at the cyanide addition points on top of the leach tanks. The fixed HCN monitors are calibrated annually as recommended by the manufacturer, using a third party contractor. Internal calibrations are also conducted every 6 months. Calibration records were reviewed and found to be complete. Operators use portable HCN monitors to conduct maintenance work, confined space related work and other cyanide tasks. A total of 180 HCN portable monitors are on site. Workers at the Sulfides Plant utilize portable HCN monitors to access the cyanide addition areas as there are no fixed HCN monitors at the cyanide addition points located by the SAG mills. There is a maintenance schedule for HCN monitors and two procedures for calibration of both fixed and portable monitors. Personal protection equipment (PPE) requirements defined in cyanide related procedures call for the use of a portable HCN monitor during specific tasks where there is a potential for exposure to HCN gas. Process operators and maintenance personnel were observed using these monitors throughout the field audit.

The fourteen fixed HCN monitors located throughout the different process facilities are calibrated annually as recommended by the manufacturer, using a third party contractor. Internal calibrations are also conducted every 6 months. Calibration certificates and records for the recertification period were reviewed and found to be complete. Calibration of the portable HCN monitors is conducted every 90 days as required by the manufacturer. Once this defined time elapses, the HCN monitor turns off automatically and cannot be used until it is calibrated again. There is a maintenance schedule for portable HCN monitors and a procedure for their calibration (MP-MPL-IC-01 “Maintenance and calibration of portable HCN monitors”). Calibration records for the recertification period were reviewed and found to be complete. Peñasquito has also acquired a different model of portable HCN monitors that do not require a calibration timeframe as it is verified and calibrated automatically through the bump test in the docking station of the monitor.

Warning signs are posted in all areas where cyanide is present advising workers that cyanide is in use, indicating that smoking, open flames and eating and drinking are not allowed, and that, if required, suitable personal protective equipment must be worn. The signs are in Spanish, which is the language of the workforce. The PPE requirements are also posted in each area. Verification was through visual inspection of the signs located in areas where cyanide solution is mixed and used. These areas include cyanide off-loading and the process plants.

High strength cyanide solution is dyed in red color for clear identification. Peñasquito uses sodium cyanide from Chemours (now Draslovka). Draslovka sends the dye mix inside the isotainers together with the cyanide briquettes so that during the mixing operation, the high strength (>20%) cyanide solution turn into a red color solution.

Peñasquito has installed showers, eye wash stations and non-acidic 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 week and prior to beginning a task that has the potential for cyanide exposure (for example during cyanide mixing, opening a pipeline for maintenance, others). The auditors randomly checked showers and eye wash stations during the site visit to verify functionality. Fire extinguishers are inspected and tested monthly. During the sodium cyanide mixing process, operators were observed checking the condition and operation of safety showers and eye wash stations prior to commencing a cyanide mix. 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 Peñasquito inspection records for showers, eye wash stations and fire extinguishers. In addition, maintenance and recharge of the fire extinguishers is conducted annually or as needed.

Peñasquito 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 mixing, storage and other process tanks are marked as containing cyanide. Signage of confined spaces are also placed on cyanide tanks. Labeling is typically located at places of frequent access by personnel, reasonable distance to be able to track the lines and identity contents. For pipelines, flow direction arrows are used to allow personnel to identify the flow and possible exposures and/or response requirements for leaks and/or maintenance work. Verification was by visual inspection. The auditors followed the cyanide solution circuit from the cyanide off-loading areas to each of the different process facilities.

Peñasquito has available Safety Data Sheets (SDS) and first aid procedures in areas where cyanide is managed, including off-loading and mixing areas, control rooms and in areas at the plants where cyanide is used. Sodium Cyanide Safety Data Sheet are attached to each procedure for the Sulfides and PLP plants; are also available in medical first aid kits and at the medical clinic. First aid procedures for cyanide are available in each cyanide first aid kit and on signs located in areas where reagent grade cyanide is in use. Verification was through visual inspection of the first aid procedures and SDSs. AII information relating to cyanide management including SDS information, procedures and emergency response plans are provided in Spanish, the workforce language at the site, and in their most updated versions.

Peñasquito has implemented a procedure to investigate and evaluate all accidents and incidents, including cyanide exposure incidents, to determine the need for changes to a process or procedure. The procedure was reviewed by the auditors and was found to be adequate and comprehensive. Peñasquito has developed two report templates to be used for incident reporting and investigation. Both templates are managed in the Enablon software. One is the Flash Report which is to be completed within 24 hours of the incident. This report includes incident location, incident description, incident nature, and immediate measures taken. The other report is the Incident Investigation Report to be used to conduct a detailed investigation of the incident. This report includes an incident description, personnel involved and injured, physical damages, incident causes, and preventive and corrective actions.

Since the last recertification audit, Peñasquito had two incidents related to cyanide management. One of them occurred in January 2020 at the PLP plant where 120 liters of process solution with 830 mg/l WAD Cyanide leaked through a crack in the concrete of the plant containment area. The second one occurred in September 2021 at the cyanide mixing area in the PLP plant where 300 liters of concentrated cyanide spilled outside of the cyanide mixing platform due to an error in the operation of the valves after the cyanide mixing event was completed. Both incidents were thoroughly investigated and action plans were developed. The auditors reviewed the flash reports and the investigation reports. The auditors also verified that all actions identified in the action plan of the first event have been closed out, while some actions of the second event were still in progress. None of these events meet the criteria specified by the Code to be considered as "significant" cyanide incidents.

### 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:*

Peñasquito has made available necessary safety equipment including antidote kits, fresh water, oxygen, resuscitators, radios, telephones, and alarm systems at the cyanide off-loading areas, process plant areas and at the clinic. Cyanide antidote kits consisting of amyl nitrite ampoules with expiry date information are located within small refrigerators fitted with thermometers to ensure that the ampoules are stored within a regulated temperature range between 36° and 46°F. Antidote kits are stored at four key locations: At the metallurgical lab, Sulfide Plant control room, PLP control room, and reagents storage area at the Sulfides area. The kits consist of amyl nitrite, activated carbon, water and oxygen. Backpacks including oxygen, ambu bags, masks, and gausses are available where amyl nitrite is stored. Thirteen emergency stations with trauma kits are located throughout the different process plants including stretchers, splint, and cervical collars. There are 6 resuscitators (Automated External Defibrillators - AEDs) throughout the process plants in areas where cyanide is used. Amyl nitrite, AED resuscitators, ambu bags, sodium thiosulfate / sodium nitrate, and hydroxicobalamin (cyanokit) are also available at the clinic. An ambulance is also located in the clinic and another ambulance located at the Sulfides plant area that can also be used for evacuation, if needed.

Emergency response equipment is regularly checked by both Process personnel and Emergency Response personnel. This includes inspections of cyanide antidote kits (amyl nitrite), first aid stations and kits, eye wash stations and emergency showers. Inspections include checks of expiration dates of cyanide antidote kits. Process areas are in charge of replacing cyanide

antidotes when required. Medical personnel periodically inspect the sodium thiosulfate / sodium nitrate and cyanokit antidotes.

Amyl nitrite ampoules are stored according to manufacturer specifications in refrigerators at strategic locations throughout the operation to ensure that areas where cyanide exposure may occur have immediate access to the antidote. Oxygen tank pressure and amyl nitrite expiration dates were checked during the audit. Oxygen tanks were fully pressurized. It was observed that the amyl nitrite ampoules at all locations were expired since November 2021 due to difficulties to procure new antidotes. In view of this, the operation indicated that a decision was made to change the first aid procedures by removing the amyl nitrite antidote and use only oxygen as the first response measure. Peñasquito sent evidence of a Management of Change process that included this change in different documents related to cyanide management such as the Cyanide Emergency Response Plan, cyanide exposure procedures, first aid procedures, and training materials, among others. Evidence included also records of training provided to workers in the new procedure and the application of oxygen as first response measure.

Cyanide first aid equipment (cyanide antidotes and oxygen) in the process areas is inspected prior to cyanide off-loading events. Cyanide antidote kits, oxygen bottles and emergency kits are inspected on a weekly basis to verify that they are in good condition. The paramedics inspect ambulances every week. Inspection records were available for review during the audit and were found to be complete.

Peñasquito has a first aid procedure MP-SOP-OPP-PR-07 “Use of amyl nitrate in cyanide related emergencies”, a General Emergency Response Plan (General ERP) and one specific plan for cyanide related emergencies (Cyanide ERP) that describes what needs to be done in the event of a cyanide exposure. The primary emergency procedure is the first aid procedure for cyanide exposure that is available at all cyanide emergency kits, control rooms and process areas where cyanide is present. Specific instructions are provided for treating victims who are exposed to sodium cyanide via inhalation, ingestion, and dermal routes. Instructions detail the steps to be taken for conscious versus unconscious victims. As mentioned above, Peñasquito is implementing a Management of Change process to modify the first aid procedure and related documents by removing the amyl nitrite antidote and use only oxygen as the first response measure. The General ERP and the Cyanide Emergency Response Plan (Cyanide ERP) include response procedures for cyanide exposures and releases. The plan addresses several cyanide exposure scenarios such as cyanide transportation incidents, spills and cyanide exposure (through inhalation, absorption, skin contact and ingestion). In addition, the plan describes decontamination procedures, evacuation, emergency contact information, cleanup measures, reporting requirements and others. These ERP plans are updated every year including the directory of internal and external emergency contacts and any other relevant changes.

Peñasquito has its own onsite capability to provide first aid and medical assistance to workers exposed to cyanide including 4 ambulances (2 basic and 2 intermediate), defibrillators, oxygen, stretchers and splint, among other medical devices. There is an ambulance in the medical clinic

that will be the first choice for transporting a patient to an off-site medical facility, if required. There is an onsite clinic with 6 doctors in total that are available in shifts, 4 nurses, 4 paramedics and 45 active emergency brigade members distributed in 3 shifts, which names and contact information are included as an appendix in the Cyanide ERP directory. The emergency brigade members receive internal training every week and external training on hazardous materials (including cyanide) once a year. The auditors observed training records during the field visit. Regular frequency of training of the brigade members was affected for the recertification period due to intermittent community roadblocks and COVID-19 pandemic restrictions. The medical clinic has a doctor, a nurse and a paramedic that are available every shift. The nurses and the paramedic are qualified to provide medical/emergency assistance. Every shift has brigade members that have been trained to administer amyl nitrite and oxygen. The onsite doctors, nurses and paramedics have been trained by Chemours (now Draslovka) in first aid related to cyanide exposure. The medical clinic is equipped with cyanide antidotes (including amyl nitrite, sodium thiosulfate/sodium nitrate and hydroxicobalamin), oxygen, first aid kit, and resuscitators.

Peñasquito has developed and implemented two procedures to transport workers to off-site medical facilities for further treatment, if required: 1) Procedure of medical assistance and transport to the clinic (includes patients intoxicated with cyanide), and 2) Procedure for transfer of patient on critical condition (not only related to cyanide). The victims would be transported via ambulance directly to the local hospitals located in Concepcion del Oro or, depending on the medical condition of the victim, to the local hospital in Saltillo. Aerial medical evacuation is also available if required, however, transportation by ambulance is the preferred option. One of the doctors and the nurse would go along with the victim with cyanide antidotes, as needed. In the event that a cyanide exposure victim requires medical attention beyond the capabilities of the on-site medical clinic, an ambulance is maintained at the clinic to be used for bringing victims to hospitals in the area. The Cyanide Emergency Response Plan (Cyanide ERP) provides details on how to respond in case of cyanide emergencies and includes contact information for local hospitals.

Cyanide treatment is provided on-site by Peñasquito medical staff in the clinic. Peñasquito would manage any cyanide exposures as the first response without involving other local clinics. It is expected that any victim will be treated for cyanide on-site, and once it has been stabilized, the doctor will decide if transfer to other local hospitals is required to provide additional medical care. Medical personnel at Peñasquito received training from Chemours (now Draslovka) in October 2021 on “Medical Treatment for Cyanide Intoxication”. Peñasquito has formalized arrangements with local hospitals at Concepcion del Oro and Saltillo to provide assistance to workers exposed to cyanide. The closest hospital is located 45 minutes from the site in Concepcion del Oro. Local hospitals staff are trained periodically in medical treatment for cyanide intoxication. Penasquito medical personnel visit the local hospitals on a periodic basis to provide training to any new hospital staff. Peñasquito indicated that for this recertification period no training was provided to local hospitals as there were no changes in local hospitals staff. Auditors reviewed copies of letters sent by Peñasquito in 2018 to these 2 hospitals. The purpose of the letters was to alert

the hospitals of the use of cyanide at Peñasquito, verify that the hospital staff is qualified to treat a cyanide exposure patient and ask them to maintain cyanide antidotes (Cyanokits) that have been provided by Peñasquito. The 2 hospitals have signed and returned the letters to Peñasquito. Peñasquito has determined that the hospitals are adequate and have qualified medical physicians and cyanide antidotes (cyanokit) to respond to cyanide exposures.

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

***Standards of Practice***

### 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:*

Peñasquito has a General Emergency Response Plan (General ERP) and one specific plan for cyanide related emergencies (Cyanide ERP) that describe what needs to be done in the event of cyanide releases and cyanide exposure incidents. The General ERP and the Cyanide ERP include response procedures for cyanide exposures and releases. The plan addresses several cyanide exposure scenarios such as cyanide transportation incidents, spills and cyanide exposure (through inhalation, absorption, skin contact and ingestion). In addition, the plan describes decontamination procedures, evacuation, emergency contact information, cleanup measures, reporting requirements and others. In addition, the Sulfide Plant and the PLP plant have developed response plans for operational contingencies related to cyanide management that provides details on how to identify and correct different cyanide upset scenarios at each plant. These ERPs are updated every year including the directory of internal and external emergency contacts, location of emergency response stations, references to operational contingencies response plans and any other relevant changes. During the field visit, the auditors reviewed the latest version of the General ERP, which is dated December 2021 and has been approved internally, and was ready to be submitted for approval by relevant Mexican authorities. The Cyanide ERP, which is an appendix of the General ERP, was currently under review to include changes related to the use of the cyanide antidotes and is pending to be approved internally.

The General ERP, Cyanide ERP and the operational contingencies response plans for cyanide management provides response procedures for all potential cyanide failure scenarios required by the International Cyanide Management Code (ICMC) verification protocol for mining operations. These include: catastrophic release of hydrogen cyanide; transportation accidents; releases

during unloading and mixing; releases during fires and explosions; valve, pipe or tank ruptures; power outages and pump failures; and failure of the cyanide destruction process at the PLP plant. Scenarios such as overtopping of ponds and impoundments, uncontrolled seepages and failure of heap leach facilities are not applicable to the current scope of the recertification audit. Specific operational contingency scenarios considered include blockage of isotank discharge line, release from the isotank, leakage from cyanide distribution lines and pumps, failure on calibration of pH probes, mechanical failures, and overflow of cyanide daily tank at the Sulfides plant, among others. Specific emergency response scenarios considered include medical emergencies, exposure to cyanide, evacuation of victims, cyanide releases (solid, liquid, gases), cyanides releases to surface water, among others

Peñasquito works together with its ICMC certified cyanide supplier Draslovka Mining Solutions (Draslovka) to ensure that all transportation related emergencies are considered and that emergency response plans for such incidents are on file and up-to-date. In addition to Peñasquito emergency brigades, Draslovka provides emergency response assistance for all of its shipments. The Draslovka cyanide supply chain was recently recertified in February 2022. Peñasquito takes title and responsibility for the cyanide upon delivery by Draslovka at the flange at the two cyanide mixing tanks. The transporter and ultimately Draslovka have responsibility for addressing any off-site incident. Incidents involving off-site and/or transportation of cyanide to Peñasquito would be called into the Draslovka Cyanide Hotline. Draslovka would then send a team of specialists and/or responders to the scene, as necessary. In addition, section 6J of the Cyanide ERP considers that in case of cyanide emergencies during transportation that are within 75 km from the mine (Camino Pardita), the transporter will communicate to Peñasquito to help in the initial emergency response until Draslovka responders arrive to the scene.

The General ERP, Cyanide ERP and operational procedures describe specific response actions in the event of an emergency involving cyanide. Peñasquito is located in an isolated area far from communities, therefore the Cyanide ERP does not consider an evacuation scenario but it does include in section 6H a section on Communications that describes how to communicate with communities in case of a cyanide incident and provides their contact information. The Cyanide ERP defines team member responsibilities, communication procedures for notifying outside emergency response resources, government agencies, the neighboring community, other stakeholders and the media. Section 6C of the Cyanide ERP (First Aid in case of cyanide exposure) describes the use of antidotes and first aid measures. Peñasquito has sodium thiosulfate / sodium nitrate and Cyanokits as cyanide antidotes, as amyl nitrate will no longer be used on site. Control and mitigation measures of a cyanide related incidents is covered under section 6F of the Cyanide ERP. Containment measures are covered under operational procedures for the Sulfide and PLP plants. The assessment, investigation and prevention of future releases is covered under the Peñasquito Incident Reporting and Investigation procedure.

### 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:*

Peñasquito involves its workforce in cyanide emergency response planning. During training of the emergency brigade team members and after emergency mock drills, the workforce has opportunity to provide feedback. Brigade members also participate in the annual review and update of the General ERP and Cyanide ERP. The auditors verified that Peñasquito maintains sufficient medical resources, infrastructure and equipment that would not require to treat exposed patients to cyanide in off-site medical facilities. It is expected that any victim will be treated for cyanide on-site, and once it has been stabilized, the doctor will decide if transfer to one of the local hospitals is required to provide additional medical care.

The General ERP and Cyanide ERP does not provide specific functions to outside responders and communities as Peñasquito has the resources, equipment and first response capabilities to deal with cyanide related releases and exposures within the mine facility. External stakeholders such as Police, Civil Protection, Municipalities, Federal Environmental Protection authority PROFEPA (Environmental agency) are not included in emergency response planning but are maintained updated by Peñasquito through regular stakeholder engagement activities and are made aware of the nature and risk associated with accidental cyanide releases. External stakeholder also participate once a year in mock emergency drills related to cyanide release/exposure that are conducted by Peñasquito and organized as a requirement by PROFEPA. In addition, communities are invited to these drills as observers. External stakeholders have the opportunity to provide feedback to Peñasquito during the lesson learned debrief after the drills and their input is considered during evaluation and update of the ERPs. The schedule and execution of mock drills for this recertification period were seriously impacted by different factors, including intermittent community road blocks for 4 months in 2019 and the COVID-19 pandemic restrictions in 2020 and the first half of 2021. A desktop mock drill of a cyanide incident was conducted in May 2021 and a field internal mock drill in January 2022. Even the annual mock drills required by Mexican environmental agency PROFEPA were not conducted due to the scenarios mentioned above. Peñasquito plans to resume external mock drill in the second half of 2022.

Peñasquito has continued with the implementation of a program with the communities along the cyanide transportation route called “Cyanide Route”. The purpose of the program is to provide information on cyanide management procedures related to the environment and safety. The execution of this program was also seriously impacted by the community road blocks in 2019 and the COVID-19 pandemic restrictions in 2020 and the first half of 2021. Peñasquito resumed the Cyanide Route program in January 2022. The Cyanide Route workshop presentation includes topics such as introduction to the Cyanide Code, cyanide characteristics, safety practices, uses of cyanide, transportation practices, cyanide transportation route and what communities should

do in case of an emergency. In addition, the communities receive a brochure in hardcopy that includes relevant information related to proper cyanide management.

The General ERP and Cyanide ERP does not provide specific functions to outside responders and communities as Peñasquito has the resources, equipment and first response capabilities to deal with cyanide related releases and exposures within the mine facility. Although Peñasquito General ERP and Cyanide ERP does not consider the active participation of outside responders or communities in case of on-site cyanide-related emergencies, external stakeholders including Civil Protection, local fire departments, police, PROFEPA (Environmental agency) and communities were engaged and maintained updated by Peñasquito through regular stakeholder engagement activities and are made aware of the nature and risk associated with accidental cyanide releases. Section 6J of the Cyanide ERP includes the participation of Civil Protection agency to support communication efforts in emergency situations with cyanide.

Peñasquito has formalized arrangements with local hospitals at Concepcion del Oro and Saltillo to provide assistance to workers exposed to cyanide. The closest hospital is located 45 minutes from the site in Concepcion del Oro. Local hospitals staff are trained periodically in medical treatment for cyanide intoxication. Penasquito medical personnel visit the local hospitals on a periodic basis to provide training to any new hospital staff. Peñasquito indicated that for this recertification period no training was provided to local hospitals as there were no changes in local hospitals staff. Auditors reviewed copies of letters sent by Peñasquito in 2018 to these 2 hospitals. The purpose of the letters was to alert the hospitals of the use of cyanide at Peñasquito, verify that the hospital staff is qualified to treat a cyanide exposure patient and ask them to maintain cyanide antidotes (Cyanokits) that have been provided by Peñasquito. The 2 hospitals have signed and returned the letters to Peñasquito.

Peñasquito General ERP and Cyanide ERP do not designate any specific responsibilities to outside responders and communities. Regardless of that, external stakeholders including Civil Protection, local fire departments, police, PROFEPA (Environmental agency) and communities were engaged and maintained updated by Peñasquito through regular stakeholder engagement activities and are made aware of the nature and risk associated with accidental cyanide releases. Another mechanism used by Peñasquito to engage external stakeholders is the execution of mock emergency drills; however, as mentioned above, the schedule and execution of mock drills for this recertification period were seriously impacted by different factors, including intermittent community road blocks for 4 months in 2019 and the COVID-19 pandemic restrictions in 2020 and the first half of 2021. Even the annual external mock drills required by Mexican environmental agency PROFEPA were not conducted for this recertification period.

Peñasquito doctors are in frequent communication with the medical staff of local hospitals. The operation keeps a stakeholder contact information list in its ERPs including cyanide supplier (Draslovka), Civil Protection, regulatory agencies, outside medical facilities and leaders of the surrounding communities. Peñasquito also communicates with its workforce to keep the emergency response procedures current. As stated in the Cyanide ERP, the plan is reviewed

and updated once a year. The revision process involves individuals from Health and Safety, Medical services, Emergency Response and Cyanide Code champion(s). The most recent update was in December 2021 and it is currently under review to include changes related to the use of cyanide antidotes

### 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 General ERP describes the responsibilities and level of authority of the emergency response coordinators for different site emergency scenarios, including responsibilities of the General Manager and/or Leader, Incident Commander, Health and Safety, Environmental, Maintenance, Logistics, Emergency Response Team (ERT), Medical personnel, Civil Protection and others. The plan also includes procedures for alternate emergency response leader. The Emergency Response Team is identified in the General ERP and the Cyanide ERP and has an updated list of the team members (brigade members, doctors, nurses and paramedics) including their names, shift and the areas where they work. The contact information of process senior personnel is also included in the plan.

Peñasquito continued implementing a training plan for their emergency responders. The plan includes the training required by level of response including first aid, fires, rescue and hazmat. It also includes requirement for annual training on cyanide awareness and cyanide intoxication. The auditors reviewed records and certificates of training on Response to Cyanide Emergencies provided by Chemours (now Draslovka) in August 2021. The General ERP includes call-out procedures and updated 24-hour contact information for their emergency response coordinators. The plan identifies the ERT and has an updated list of the team members (brigades, doctors, nurses and paramedics) including their name, shift and area where they work. Appendix 3 of the Cyanide ERP includes the list of ERT members. In case of an emergency, communication will primarily be done by radio. The General ERP describes the responsibilities and level of authority of the emergency response coordinators for different site emergency scenarios, including responsibilities of the General Manager and/or Leader, Incident Commander, Health and Safety, Environmental, Maintenance, Logistics, Emergency Response Team (ERT), Medical personnel, and others.

The Cyanide ERP in Section 1.3 details a list of the emergency response equipment located at the process areas, the medical clinic and the ambulances (e.g., cyanide antidote kits, HCN monitors, shower and eyewash stations, Self-Contained Breathing Apparatus - SCBA

equipment, ambulance, chemical protective suits, spill recovery equipment, extinguishers, etc.). All emergency equipment and supplies are inspected weekly by process people, brigade members and paramedics. Inspection records of cyanide antidotes, oxygen tanks, ambulances in the medical clinic and at the Sulfide area, fire extinguishers, emergency stations, spill response equipment, rescue equipment, and SCBAs were reviewed. Verification was by interview with safety personnel and review of inspection records. Peñasquito General ERP and Cyanide ERP does not consider the active participation of outside responders or communities in case of on-site cyanide-related emergencies. Regardless of that, the ERP includes contact information of outside responders (local hospitals, fire departments and communities) and specifies the participation of Civil Protection agency to support communication efforts in emergency situations with cyanide.

Peñasquito General ERP and Cyanide ERP do not designate any responsibilities to outside responders and communities. Regardless of that, external stakeholders including Civil Protection, local fire departments, police, PROFEPA (Environmental agency) and communities were engaged and maintained updated by Peñasquito through regular stakeholder engagement activities and are made aware of the nature and risk associated with accidental cyanide releases. Another mechanism used by Peñasquito to engage external stakeholders is the execution of mock emergency drills; however, as mentioned in 7.2 above, the schedule and execution of mock drills for this recertification period were seriously impacted by different factors, including intermittent community road blocks for 4 months in 2019 and the COVID-19 pandemic restrictions in 2020 and the first half of 2021. Peñasquito has continued with the implementation of a program with the communities along the cyanide transportation route called “Cyanide Route”. The purpose of the program is to provide information on cyanide management procedures related to the environment and safety and includes details on what communities should do in case of an emergency, which is basically to report the emergency and stay away from the incident area. In addition, the communities receive a brochure in hardcopy that includes relevant information related to proper cyanide management. As mentioned in 7.2 above, the execution of this program was also seriously impacted by the community road blocks in 2019 and the COVID-19 pandemic restrictions in 2020 and the first half of 2021. Peñasquito resumed the Cyanide Route program in January 2022.

### 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 General ERP and section 3 of the Cyanide ERP provide on-site emergency response contact procedures including names, shift and area where the ERT members work. Contact information is provided for both internal and external responders and stakeholders including

regulatory agencies, outside responders, and local medical facilities. Section 6J of the Cyanide ERP also outlines the process to communicate with regulatory agencies.

The General ERP and section 6H of the Cyanide ERP contain procedures for communication with potentially affected communities. Contact information of these communities are included in the plans. The Cyanide ERP also includes in section 6G procedures and contact information for communication with the media.

Peñasquito has established a requirement to notify the ICMI (International Cyanide Management Institute) in case of a significant cyanide incident. Section 6F of the Cyanide ERP includes the ICMI definition of a "significant cyanide incident" and states that communication to ICMI should occur within 24 hours of occurrence. The Environmental department would be in charge of such communication to ICMI. Peñasquito has not had any significant cyanide related incident during this recertification period.

### 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 Cyanide ERP includes actions to recover and neutralize liquid and solid cyanide spills. The procedure requires the use of lime, if necessary, to maintain the pH in the spilled solution. Sodium cyanide spills will then be shoveled into a suitable container. Spilled material will be kept dry. Spilled cyanide solutions within the process plant will be returned to the process circuit. Emergency containment structures would be constructed, if necessary and possible, to minimize the extent of the release. Spilled cyanide solutions are to be decontaminated as necessary with calcium hypochlorite solution as described in the procedure for MP-SOP-OPP-PR-05 "Remediation of Cyanide Contaminated Soils". The Cyanide ERP does not specifically indicate where calcium hypochlorite is stored onsite, but process personnel indicated that it is stored in the reagents area at the Sulfides and PLP plants.

The procedure for Remediation of Cyanide Contaminated Soils includes procedures to neutralize contaminated soils as necessary with hypochlorite solution. The procedure describes how the chemical solution is to be prepared to the appropriate concentration and indicates what final cyanide concentration will be allowed in residual soil as evidence that the release has been completely cleaned up. The procedure Remediation of Cyanide Contaminated Soils indicate that spill clean-up materials are to be disposed of on the heap leach pad.

Although there are communities located close to the mine site like Cedros and Palmas Grandes, their groundwater supply source is either located further away from cyanide facilities (> 60 km away) or at a higher altitude than the mine. In addition, there are four potable water treatment plants that provide drinking water to these two communities and others located in the area. As such, it is unlikely that the operation can adversely impact drinking water supplies for these communities. This information was verified through discussions with Environmental personnel. As far as drinking water supply for consumption by employees, the Cyanide ERP indicates that Peñasquito will continue providing drinking bottled water through external vendors, regardless if there is contamination of one or more groundwater wells.

The Cyanide ERP clearly states that use of chemicals such as sodium or calcium hypochlorite, ferrous sulfate and hydrogen peroxide are prohibited in case of cyanide releases to surface waters, as they can severely impact aquatic life. It is important to note that the climate at Peñasquito and the region is extremely arid, and all surface water is ephemeral. Verification was by review of the Cyanide ERP and interviews with the Emergency Response Lead.

The Cyanide ERP requires that contaminated water and/or soils are monitored as necessary after a cyanide spill. The procedure “Characterization of Cyanide Contaminated Soils” describes the requirements for soil sampling. It includes methodologies, parameters, possible sampling locations (based on the extent of the release), and the final cyanide concentration limits for a spill to be considered completely remediated. In addition, the procedure “Water Monitoring” includes sampling requirements and specifications for groundwater sampling.

### 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 General ERP and the Cyanide ERP are reviewed annually to ensure that information is kept up-to-date and that the plan remains appropriate for the process facilities. The Cyanide ERP includes in section 5D titled “Administration of the ERP” the requirement to review and update the plan every year. The plan will also be reviewed following a mock drill or incident, as needed. Auditors reviewed previous versions of the General ERP Plan. The plan was updated in 2019 and 2021. It was not updated in 2020 due to COVID-19 pandemic restrictions which affected the human resources available on site. The auditors also reviewed the current Cyanide ERP document MP-MG.01 “Cyanide Emergency Response Plan” released on December 2021. The Cyanide ERP, which is an appendix of the General ERP, is currently under review to include changes related to the use of cyanide antidotes and is pending to be approved internally.

Peñasquito conducts mock emergency drills based on likely cyanide release/exposure scenarios to test the response procedure, and incorporates lessons learned from the drills into its response planning. At least two mock up drills are planned to be held every year as indicated in section 5F of the Cyanide ERP. The schedule and execution of mock drills for this recertification period were seriously impacted by different factors, including intermittent community road blocks for 4 months in 2019 and the COVID-19 pandemic restrictions in 2020 and the first half of 2021. Even the annual mock drills required by Mexican environmental agency PROFEPA were not conducted due to the scenarios mentioned above. Peñasquito plans to resume external mock drill in the second half of 2022. A desktop mock drill of a cyanide incident was conducted in May 2021. The scenario was a cyanide splash to a worker due to a leak from the hose during a cyanide offload. A field internal mock drill of a cyanide incident was also conducted in February 2022. The scenario was the same as the desktop drill of May 2021. Peñasquito evaluated the mock drills and identified corrective actions. A debrief is conducted after each drill to identify lessons learned from the drills and corrective actions to be taken. Auditors reviewed the mock drill reports and supporting documentation to verify that action items identified from the mock drills have been closed. The lessons learned and action plan of the February 2022 drill was still under implementation during the audit.

The schedule and execution of mock drills for this recertification period were seriously impacted by different factors, including community road blocks for 4 months in 2019 and the COVID-19 pandemic restrictions in 2020 and the first half of 2021. Even the annual mock drills required by Mexican environmental agency PROFEPA were not conducted due to the scenarios mentioned above. Only two mock drills were held during the recertification period. The Cyanide ERP requires that each drill is critiqued for deficiencies and corrective action is taken. The Plan is updated as necessary after emergency response incidents or emergency drills. The auditors verified that both the General ERP and the Cyanide ERP documents have been updated and/or revised. Although there were two cyanide incidents during the recertification period, they did not trigger a review or update of the Cyanide ERP as a result of those events considering that the emergency response provided by the operation to respond to these events were conducted according to the Cyanide ERP.

## *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:*

Personnel who may work with cyanide receive training in cyanide-related hazard topics. Training is conducted by internal and external personnel on an annual basis. Peñasquito has developed and implemented three modules for personnel that may work with cyanide: Module A: Is a general induction training for all workers, contractors and visitors that includes topics such as what is cyanide, cyanide exposure symptoms, how to report cyanide incidents, and the Cyanide Code. This module is provided to new hires (including contractors) and to all existing employees as part of the biannual refresher training. This module is part of the general induction provided by Peñasquito to all new hires. Module B: Is the specific training for people who work directly with cyanide operations. It covers cyanide awareness, first aid initial response, how to respond to cyanide spills and the Cyanide Code. This training is provided generally to process, maintenance and contractors that will work in areas where cyanide is present. A card with key information related to cyanide is provided to all personnel trained in this module. This module B is provided as a refresher on annual basis, in conjunction with Module A. Module C: Is the training for emergency response personnel (doctors, paramedics and brigade members). This training is provided by external specialists such as Chemours (now Draslovka) on an annual basis. In addition to the cyanide modules mentioned above, all employees working in process areas are required to undergo task specific training. Task specific training includes the procedures mentioned in Section 6.1. The Training department also has an annual training plan to schedule and track training on cyanide standards that are requirements that each operator need to achieve for safe cyanide management at both the Sulfides and PLP Plant. Written testing is performed and confirmation of skills is done via on-the-job observation. Training records were reviewed for the recertification period and were found to be complete. Records for training provided online such as inductions and other training are managed through the Mobileseme software, while records of in-person training are managed using Excel spreadsheets. In 2021, Penasquito conducted general and specific re-induction, including cyanide management re-induction, to personnel of all areas that were outside of the operation for a long period of time due to the COVID-19 pandemic restrictions.

Peñasquito requires all employees to have biannual refresher trainings in Module A (Cyanide Module of the general induction program); Modules A and B (Cyanide Management) for personnel working with cyanide on an annual basis; and Module C (Emergency Response) on an annual basis for emergency response personnel. In addition, personnel working in process areas receive periodic refreshers on the procedures mentioned in Section 6.1 when there have been changes to the procedures.

Training records, including refreshers and cyanide hazard training for process plant operators and contractors are retained in the form of hard copies and also on electronic version. The auditors verified that the site has maintained training records for the last three years. Training records identify the trainer, trainee, topics covered, date and sign off sheet. This requirement

was verified through review of a sample of records for process, maintenance and contractors workers that were interviewed in the field during the visit to the Sulfide and PLP plants.

### 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

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

Formal procedures were reviewed for all cyanide-related tasks including cyanide offloading, mixing, production and maintenance. Individual training is provided for each specific cyanide management related task an operator will perform and includes cyanide task procedures mentioned in Section 6.1 as needed. This training takes place when there are changes to the procedures related to cyanide management. Procedures related to cyanide management are reviewed and/or updated periodically with the participation of process operators and training sessions are conducted to communicate the updated procedures. These training sessions include written evaluations to verify understanding by the workers. Records of this "communication of procedures" sessions were reviewed by the auditor for the last three years and were found to be complete. Peñasquito has developed a list of training needs related to cyanide management for each job position according to their responsibilities. Auditors reviewed examples of training records covering the re-certification audit period related to procedures related to cyanide management

Peñasquito conducts training sessions on cyanide related procedures called "communication of procedures". These procedures define the steps required to complete a task and the procedure itself is used as training material. These work procedures include the objective of the procedures, responsibilities, photos of the task/activity to be conducted, required PPE, decontamination requirements, risks associated with the cyanide task, contingency plans and the individual task specific steps. The training sessions include written evaluations to verify understanding by the workers and define if they are qualified to conduct the task. Presentations, training materials, tests and records of these communication of procedures sessions were reviewed by the auditors for the last three years and were found to be complete.

Task specific training to operators is provided by various process operators, supervisors and process chiefs who have more than 10 years of experience in the different process areas. These personnel are considered qualified to provide training based on their experience. In addition, process operators, supervisors and chiefs receive "Train-the-Trainer" training sessions provided by external contractors, and training courses on safe cyanide management provided by Chemours (now Draslovka).

All personnel in job positions that involve the use of cyanide and cyanide management receive training on how to perform their assigned tasks with minimum risk to them and their colleagues. Employees that will be working with cyanide receive a classroom training session (Module A and B) that covers cyanide awareness, first aid initial response, how to respond to cyanide spills and the Cyanide Code. A senior/junior on-the-job training approach is used to further train personnel on job activities and cyanide safety. This whole process can take up to 4 months until an operator is skilled enough to conduct cyanide related tasks in a safe manner. Task specific training is provided prior to working with cyanide independently. Individual training is provided for each specific cyanide related task that an operator will perform and includes cyanide task procedures described in Section 6.1, as needed. In addition, new hires, including contractors, are trained on Module A which is a general induction training for all workers, contractors and visitors that includes topics such as what is cyanide, cyanide exposure symptoms, how to report cyanide incidents, and the Cyanide Code. This module is provided to new hires (including contractors) and to all existing employees as part of the biannual refresher training. This module is part of the general induction provided by Peñasquito to all new hires.

Peñasquito requires all employees to have biannual refresher trainings in Module A (Cyanide Module of the general induction program); annual refreshers in Module A and B (Cyanide Management) for personnel working with cyanide; and annual refreshers in Module C (Emergency Response) provided by Chemours (now Draslovka) for emergency response personnel. In addition, personnel working in process areas also receive periodic refreshers on the procedures mentioned in Section 6.1 or when there have been changes to the procedures.

Peñasquito evaluates the effectiveness of cyanide training by written testing and on-the-job observation. Peñasquito requires written tests to evaluate the effectiveness of cyanide training. Following classroom training, an employee is first supervised in all activities. The supervisor will determine when that individual is then able to perform the task on his/her own. Records of written tests and the employees' understanding of cyanide are retained. Training records are retained throughout employment history. The records identify the trainer, trainee, topics covered, date and sign off sheet. The result of the testing are also maintained as part of the files. Written 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:*

Cyanide offloading, mixing, production and maintenance personnel are trained in response procedures if cyanide is released including decontamination of cyanide exposure victims. The requirements of operational procedures including emergency response procedures are covered in the cyanide standards training. Peñasquito provides training to emergency response personnel, brigade members and paramedics on a weekly basis, where some of the topics covered include decontamination of cyanide exposure victims, decontamination equipment and soil, and cyanide spill response. In addition, external training (Module C) is also provided by Chemours (now Draslovka) personnel on an annual basis. Employees working with cyanide and the brigade members receive specific training in the Cyanide Emergency Response Plan (Cyanide ERP), and response to spills including neutralization, decontamination, first aid and oxygen administration. The Cyanide ERP addresses several cyanide exposure scenarios such as cyanide transportation incidents, spills and cyanide exposure (through inhalation, absorption, skin contact and ingestion). In addition, the plan describes decontamination procedures, evacuation, emergency contact information, cleanup measures, reporting requirements and others. Process personnel also receive training in contingency procedures as part of the "communication of procedures" sessions, which takes place when there are changes to the procedures. Specific operational contingency scenarios considered in the procedures include blockage of isotank discharge line, release from the isotank, leakage from cyanide distribution lines and pumps, failure on calibration of pH probes, mechanical failures, and overflow of cyanide daily tank at the Sulfides plant, among others.

Personnel who work in areas where cyanide is present receive training in decontamination and first aid procedures. These personnel include unloading, mixing, and production operators, as well as maintenance workers. Module B training include details on how to respond to cyanide related emergency in case of inhalation, ingestion or skin contact with cyanide. Responses varies depending if the victim is conscious vs. unconscious. The mine also has a full medical clinic located close to the areas in which cyanide is present. Several physicians are on staff, and at least one is on-duty at all times. On their off-hours, the physicians sleep at the mine to ensure that medical assistance is available at the mine at all times. Emergency brigade members receive internal continuous training once a week including the use of necessary response equipment. The execution of this weekly training was also impacted by the intermittent community roadblocks in 2019 and by the COVID-19 pandemic restrictions in 2020 and 2021. The auditors reviewed weekly training records for 8 months in 2019 and 5 months in 2020. Regular weekly training was resumed in April 2021, and then ceased in January 2022 due to high level of COVID-19 infections in the workforce. The weekly training sessions were resumed again in February 2022. Emergency brigade members also receive one training sessions per year provided by Chemours (now Draslovka) related to emergency response with sodium cyanide (Module C). The auditors reviewed records of training sessions provided by Chemours (now Draslovka) for 2021 and 2020. There was no training in 2019 due to the intermittent community roadblocks.

The onsite doctors, nurses and paramedics have been trained by Chemours (now Draslovka) in first aid related to cyanide exposure. Medical personnel at Peñasquito received training from Chemours (now Draslovka) in October 2021 on "Medical Treatment for Cyanide Intoxication".

Training records were reviewed by the auditors. Equipment and facilities are washed down before and after any contact with potentially contaminated equipment or materials. PPE is used at all times. All decontamination occurs within secondary containment to ensure that contaminated water flows into water drainage systems that feed back into the process. Brigade members, operators and maintenance personnel demonstrated a good level of awareness regarding decontamination and first aid topics.

Mock emergency drills related to cyanide incidents are planned to be conducted twice a year with participation of the doctors, paramedics and emergency brigade members who include personnel from process and maintenance areas. As mentioned in 7.6, the schedule and execution of mock drills for this recertification period were seriously impacted by different factors, including intermittent community road blocks for 4 months in 2019 and the COVID-19 pandemic restrictions in 2020 and the first half of 2021. Peñasquito plans to resume external mock drill in the second half of 2022.

Peñasquito ERPs do not provide specific functions to outside responders and communities as Peñasquito has the resources, equipment and first response capabilities to deal with cyanide related releases and exposures within the mine facility. External stakeholders such as Police, Civil Protection, Municipalities, PROFEPA (Environmental agency) are not included in emergency response planning but are maintained updated by Peñasquito through regular stakeholder engagement activities and are made aware of the nature and risk associated with accidental cyanide releases. External stakeholder also participate once a year in mock emergency drills related to cyanide release/exposure that are conducted by Peñasquito and organized as a requirement by PROFEPA. In addition, communities are invited to these drills as observers. External stakeholders have the opportunity to provide feedback to Peñasquito during the lesson learned debrief after the drills and their input is considered during evaluation and update of the ERPs.

The schedule and execution of mock drills for this recertification period were seriously impacted by different factors, including intermittent community road blocks for 4 months in 2019 and the COVID-19 pandemic restrictions in 2020 and the first half of 2021. A desktop mock drill of a cyanide incident was conducted in May 2021 and a field internal mock drill in January 2022. Even the annual mock drills required by Mexican environmental agency PROFEPA were not conducted due to the scenarios mentioned above. Peñasquito plans to resume external mock drill in the second half of 2022. Peñasquito doctors are in periodic communication with the medical staff of local hospitals. Peñasquito has formalized arrangements with two local hospitals at Concepcion del Oro and Saltillo to provide assistance to workers exposed to cyanide. Records were available from the local authorities and external responders to show their acknowledgement of receipt of the information.

Peñasquito requires all employees to have biannual refresher trainings in Module A (Cyanide Module of the general induction program); Modules A and B (Cyanide Management) for personnel working with cyanide on an annual basis; and Module C (Emergency Response) on

an annual basis for emergency response personnel. In addition, personnel working in process areas receive periodic refreshers on the procedures mentioned in Section 6.1 when there have been changes to the procedures. Written testing is performed and confirmation of skill is done via on-the-job observation. Personnel interviewed showed a good level of awareness of emergency response procedures in the event of a cyanide exposure or release.

Training records are retained throughout employment history. The records identify the trainer, trainee, topics covered, date and sign off sheet. The result of the testing are also maintained as part of the files. Written tests are completed to demonstrate the employees understanding of the training materials.

## *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:*

Peñasquito provides the opportunity for stakeholders to communicate issues of concerns through frequent dialogue and engagement with communities of the influence area. Peñasquito has a complaint and grievance mechanism where communities can raise concerns related to mining activities, including issues related to cyanide management in the operations. The complaints and grievance register in Enablon was reviewed by the auditors. No concerns related to cyanide management were received during this recertification period. Peñasquito Community Relations department maintains a community engagement plan, including meetings with communities and families, which represents an opportunity to raise questions about any subject, including cyanide management.

Peñasquito has continued with the implementation of a program with 9 communities that are located along the cyanide transportation route called “Cyanide Route”. The workshop presentation includes topics like introduction to the Cyanide Code, cyanide characteristics, safety practices, uses of cyanide, transportation practices, cyanide transportation route and what communities should do in case of an emergency, which is basically to report the emergency and stay away from the incident area. At the end of the sessions the communities have the

opportunity to raise questions or concerns related to cyanide management. In addition, the communities receive a brochure in hardcopy that includes relevant information related to proper cyanide management. The execution of this program was also seriously impacted by the intermittent community road blocks in 2019 and the COVID-19 pandemic restrictions in 2020 and the first half of 2021. Peñasquito resumed the Cyanide Route program in January 2022. The auditors reviewed training materials and records for the Cyanide Route training sessions conducted in January 2022.

The following community engagement opportunities were suspended or affected in its regular execution due to community road blocks in 2019 and COVID-19 pandemic restrictions in 2020 and 2021: participation of communities as observers in mock emergency drills; the open doors program that includes tours to mining facilities for schools and adults of surrounding communities; and water participatory monitoring program with communities.

Additionally, Peñasquito (Newmont) maintains a website that allows stakeholders to contact the company regarding any concerns or issues https://www.newmont.com/operations-and-projects/global-presence/north-america/penasquito-mexico/default.aspx.This site is provided at the bottom of the page with a "Contact" tab that allows an individual to contact the company via a Mexico Office telephone number (+52 55 5201-9600).

A cyanide brochure is provided to communities that includes relevant information related to proper cyanide management. The Peñasquito (Newmont) website also provides information related to the Cyanide Code and requirements for the safe management of cyanide. Peñasquito also provide cyanide information during flash induction courses (with a duration of 30 minutes) which are received by all visitors.

### 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:*

Peñasquito has developed a presentation that is used for the "Cyanide Route program" that is presented to communities along the transportation route. The purpose of the program is to provide information on cyanide management procedures related to the environment and safety. The workshop presentation includes topics like introduction to the Cyanide Code, cyanide characteristics, safety practices, uses of cyanide, transportation practices, cyanide transportation route and what communities should do in case of an emergency. In addition, the communities receive a brochure in hardcopy that includes relevant information related to proper cyanide

management. This brochure also includes emergency numbers in case of cyanide incidents. These brochures are also provided to communities during the participatory monitoring program. Newmont also publishes an annual Corporate Social Responsibility Report. Other information specifically regarding the Peñasquito Mine operation is also posted on the internet on the Newmont website.

Information is disseminated in verbal form during Peñasquito regular community engagement meetings and Cyanide Route meetings. Most of the people from the communities located around the mine speak and write in Spanish. Peñasquito provides information on cyanide in written format (brochure) and oral form (i.e. presentations provided to communities during meetings). Records and material of the workshops were reviewed.

No cyanide exposures resulting in hospitalization or fatality have occurred at the Peñasquito Mine since the start of operations. As described in the General Emergency Response Plan (ERP), Peñasquito will immediately report any cyanide exposure resulting in hospitalization or fatality to the Work and Social Prevention Secretary and the Public Ministry. No off-site cyanide releases have occurred at the Peñasquito since the start of operations. The mine will report any cyanide releases off the mine requiring response or remediation to the corresponding regulatory agencies and communities as described in the General ERP. In addition, this information would be reported in the Newmont annual Corporate Sustainability Report, which is publicly available. No on or off-site cyanide releases have occurred at the Peñasquito Mine that would result in significant adverse effects to health or the environmental since the start of operations. Information regarding cyanide exposures and/or releases would be made available to authorities, according to the General ERP. No on or off-site cyanide releases have occurred at the Peñasquito Mine that would require reporting under applicable regulations for the recertification period. Information regarding cyanide exposures and/or releases would be reported to PROFEPA (Environmental agency) following the established protocols, timeframes and reporting forms. The two cyanide related incidents that occurred on January 2020 and September 2021 did not trigger PROFEPA reporting requirements. Details of the January 2020 spill at the PLP plant was included in page 126 of the Newmont 2020 Corporate Sustainability Report. This report can be publicly found in the following link.
https://s24.q4cdn.com/382246808/files/doc_downloads/sustainability/2020-report/Newmont-2020-sustainability-report.pdf It is expected that the September 2021 incident will also be reported in the upcoming Corporate Sustainability Report. No significant cyanide releases that caused applicable limits for cyanide to be exceeded have occurred at the Peñasquito Mine since the last ICMC audit in 2018. Information regarding cyanide exposures and/or releases would be made available to authorities, according to the General ERP. Information on cyanide releases and exposures would also be made publicly available by the regulatory agencies.