ICMI Cyanide Code Mining Recertification Audit

Summary Audit Report

Goldcorp Inc,
Mina Peñasquito Operation
Zacatecas, Mexico

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

2018 Audit Cycle

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Location and description of the operation

The Peñasquito Mine (Peñasquito) is located in the northeastern part of the State of Zacatecas, in north-central Mexico.

Minera Peñasquito S.A. de C.V. is 100% owned by Goldcorp Inc. It is Mexico's largest gold producer and consists of two open pits - Peñasco and Chile Colorado containing gold, silver, lead and zinc. In December 2009, proven and probable gold reserves totaled 17.8 million ounces. Silver reserves totaled 1,070.1 million ounces while proven and probable lead and zinc reserves total 7,211 million pounds and 15,930 million pounds respectively. Measured and indicated gold resources were 4.45 million ounces and measured and indicated silver resources were 391.0 million ounces. In October 2009, the first lead and zinc concentrates were produced and concentrate shipment to smelters commenced with first sales recorded in November 2009. Annual production over the life of mine (estimated 22 years) is expected to ramp up to approximately 500,000 ounces of gold, 28 million ounces of silver and over 450 million pounds of zinc.

Peñasquito processes the ore in three main areas (1) the heap leach pad, solution ponds, and Oxide Plant, (2) the Sulfide Plant and tailings impoundment and (3) a newly commissioned Pyrite Leach Plant (PLP). The Oxide Plant and PLP use Merrill-Crowe technology and a refinery for gold recovery. Cyanide is added to the at the zinc cone in the Oxide Plant and to the barren solution before application to the heap leach pad. The Sulfide Plant uses crushing, grinding, and flotation, with deposition of the tailings in the impoundment. Cyanide is added to the Semi-Autogenous Grinding (SAG) mills and at the lead flotation circuit. The three 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 newly commissioned Carbon Pre-Flotation Process (CPP) is located within the Sulfide plant and currently does not use cyanide. The annual cyanide consumption for both plants is approximately 7.5 million kilograms. The CPP has cyanide addition points if based on metallurgy Peñasquito chooses to add cyanide in the future. At the newly commissioned PLP, cyanide is added at the pyrite pre-leach thickener tank and at the pyrite leach tank #1. Cyanide has only been delivered to the PLP since November 6, 2018 therefore no annual consumption rate is available.

In 2018, Peñasquito commissioned a CPP in the Sulfide Plant that treats the milled feed (cyclone overflow) to the flotation circuit to remove liberated total carbonaceous material (TCM) ahead of the existing lead and zinc flotation circuits. If not removed, the TCM destabilizes the downstream flotation process by adsorbing reagents and weakening the froth, leading to poor recovery and higher reagent use and operating costs.

In 2018, Peñasquito commissioned a 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). The PLP Area also has 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 first cyanide was delivered to the PLP on November 6, 2018. Cyanide was first sent to the leach tanks on November 17, 2018. As of the time of this audit there had been no gold produced from the PLP circuit.

At the PLP, Peñasquito adds cyanide (i.e., barren 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 existing TSF, which will receive the detoxified pyrite leach tailings stream, has also been excluded from this review because it is not a cyanide facility. The cyanide destruction unit at the PLP is designed to meet a cyanide detoxification target below 1.0 mg/L WAD cyanide, which is slightly greater that the Code threshold for a cyanide facility (which is <0.5 mg/L WAD cyanide). However, the pyrite leach tailings stream represents a small percentage of the total tailings stream discharged into the existing TSF and, therefore, the contribution of the pyrite leach tailings stream does not change the overall concentrations of WAD cyanide at the final discharge lines. The Sulfide Plant flotation tailings and the PLP detoxified tailings will be blended prior to deposition in the existing TSF. The WAD cyanide concentration target for the flotation tailings at the discharge to the TSF is below 0.5 mg/L WAD cyanide.

All of these operations were reviewed during the re-certification auditing process. The ICMI-approved Audit Team verified that the operation is in FULL COMPLIANCE with ICMI Cyanide Code requirements for Mining operations.

Auditor's Finding

The ICMI-approved Audit Team verified that the Peñasquito mining operation is in FULL COMPLIANCE with ICMI Cyanide Code requirements for Gold Mining operations.

Peñasquito has experienced zero 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
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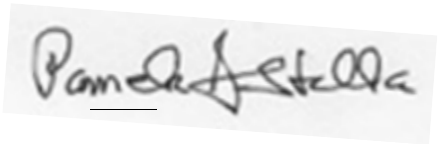
Date(s) of Audit:	November 26 – 29, 2018

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.



Mina Peñasquito
Name of Operations

Signature of Lead Auditor

February 26th, 2019
Date

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

Standard of Practice

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

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:

Peñasquito Mine is in FULL COMPLIANCE with Standard Practice 1.1 requiring the purchase of cyanide from manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide and to prevent releases of cyanide to the environment. Peñasquito purchases solid sodium cyanide exclusively from The Chemours Company (formerly E.I. DuPont de Nemours and Company). The master purchasing agreement between the mine and Chemours is valid and confirmation was made during the audit that this certified supplier is the only supplier to the mine.

Cyanide that is delivered to the mine is produced at the Chemours Memphis, Tennessee plant in the United States, and is then transported by rail and truck to the mine. All portions of the Chemours production, U.S., and Mexican Supply Chains are certified by the ICMI. Confirmation was made during the audit that all relevant International Cyanide Management Code (ICMC) certifications are current and that the manufacturer's chain of custody letter matches the scope of the current certifications. The master contracts confirm that both Goldcorp and Chemours will remain Signatories to the ICMI Cyanide Code and shall achieve and maintain ICMC certification.

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

Standards of Practice

2.1 Establish clear lines of responsibility for safety, security, release prevention, training and emergency response in written agreements with producers, distributors and transporters.

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:

Peñasquito is in FULL COMPLIANCE with Standard 2.1, requiring that the operation establish clear lines of responsibility for safety, security, release prevention, training and emergency response in written agreements with producers, distributors and transporters.

The contract between Chemours and Peñasquito specifically states that Chemours shall, with respect to the cyanide delivered to Peñasquito, be responsible for packaging, labeling, storage prior to shipment, evaluation and selection of routes, storage and security at ports of entry, interim loading, storage and unloading during shipment, transportation to the delivery locations, unloading at the delivery locations, safety and maintenance of the means of transportation throughout transport, task and safety training for transporters and handlers throughout transport, security throughout transport and emergency response throughout transport, all in accordance with the applicable ICMC Principles and Standards of Practice, performance and certification requirements of the Code.

Cyanide that is delivered to the mine is produced at the Chemours Memphis, Tennessee plant, and is then transported by rail and truck to the mine. All portions of the Chemours production, U.S., and Mexican Supply Chain have been ICMI Cyanide Code (ICMC) compliant since 2007. The transporter is Transportes Especializados Segutal (Segutal) trucking company and is a part of the certified Chemours Mexico Supply Chain. There are no sub-contractors used by the producer, distributor, transporter, or other operation for transportation-related activities. All entities involved in this supply chain from the production, to the packaging, to the transportation, to the unloading are under the direct control of either Chemours or Peñasquito and have been audited and are currently certified to the ICMI Cyanide Code.

2.2 Require that cyanide transporters implement appropriate emergency response plans and capabilities, and employ adequate measures for cyanide management.

The operation is: ■ in full compliance
□ in substantial compliance
□ not in compliance with Standard of Practice 2.2

Discuss the basis for the Finding/Deficiencies Identified:

The contract between Chemours and Peñasquito states that Chemours is responsible for all aspects of transportation of cyanide to Peñasquito, as well as cyanide production. The contract commits that Chemours is to maintain ICMC certification and signatory status.

All cyanide transporters to Peñasquito are certified under the Code.

Cyanide that is delivered to the Peñasquito is produced at the Chemours Memphis, Tennessee plant. The cyanide is transported by rail and truck to the San Luis Potosi Transloading Facility

and then to Peñasquito by truck. All portions of the Chemours production, U.S., and Mexican Supply Chain are ICMI certified. Chemour's Mexican Supply Chain includes rail transport by Ferromex and Kansas City Southern de Mexico, Truck transport by Segutal, and the warehouse in San Luis Potosi and was recertified on August 18, 2017

The operation has chain of custody shipping records identifying all elements of the supply chain: producer, transporters and storage facilities that handle cyanide brought to the site, all certified in compliance with the Code. Review of sample shipping papers to Peñasquito for the recertification period September 2015 to November 2018 indicates that this practice has remained constant since the date of the last recertification audit.

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 and quality control and 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:

Peñasquito is in FULL COMPLIANCE with Standard Practice 3.1 requiring the design and construction of unloading, storage and mixing facilities consistent with sound, accepted engineering practices and quality control and quality assurance procedures, spill prevention and spill containment measures.

Peñasquito facilities for unloading, storing and mixing cyanide at the Oxide and Sulfide plants have not been modified since the initial certification audit in 2012, which at that time were found to be in compliance with the Code requirements. M3 Engineering & Technology Corp. (M3) designed both plants and a subcontractor under M3 (Sempenta) constructed the plants. The unloading and mixing facilities at the PLP are in compliance with the Code requirements. They were designed in accordance with sound engineering practices by Fluor, constructed by ICA Fluor (Fluor's Mexican industrial engineering and construction joint venture with Empresas ICA, S.A.B. de C.V.) and tested and approved by Chemours to accept cyanide shipments in 2018.

The cyanide offload facilities at the three plants are located away from other work areas and from locations where workers may congregate. These facilities are also located at a safe distance from the public. There is no surface water near the cyanide offload facilities, the climate at Peñasquito and the region is extremely arid, and all surface water is ephemeral.

Peñasquito does not receive liquid cyanide. However, the entire cyanide offload areas in the three plants are constructed in reinforced structural concrete that provides a competent barrier to seepage. The concrete areas were in good condition at the time of this onsite verification audit.

At all three plants the trucks carrying the ISO tanks are situated entirely on a reinforced concrete pad with concrete perimeter curbing. The ISO tanks are unloaded on a concrete pad that drains to a sump for recovery of solutions. Spills collected in the sumps can be pumped to the mixing tanks.

To prevent the overfilling of cyanide storage tanks Peñasquito has level sensors installed on the cyanide mixing and distribution tanks at the offload in each of the plants and the day tank at the Sulfide Plant. The secondary containment for the day tank has a controlled discharge to the first level floor. The level sensors are monitored from the plants' control rooms. The sensor instrumentation is equipped with an audible/visual alarm system. The auditor observed screen shots in the control room that indicated the level controls were functioning on these tanks.

Cyanide mixing and storage tanks are located on a concrete slab at the three plants. The containment floor and tanks foundations are monolithic and the floor is thickened beneath the foundation plinths. 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 auditors observed that all of the concrete foundations were in good condition.

All secondary containments for cyanide storage and mixing tanks area constructed of materials that provide a competent barrier to leakage. In the Oxide Plant the entire process area, including the cyanide offload area, is contained within a reinforced concrete pad that drains to a large concrete solids pond or to a geomembrane-lined contingency pond. In the Sulfide Plant the mixing, distribution and day tanks are located within a single secondary containment with reinforced concrete walls and floor. The secondary containment for the day tank has a controlled discharge to the first level floor. 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 concrete containments at both plants were in good condition at the time of this onsite verification audit.

Peñasquito does not store solid cyanide; all plants receive cyanide in ISO tanks. The process circuits are located outside in an open-air environment providing adequate ventilation. The offloading areas are located within fenced areas and locked gates, all entry points are inaccessible to unauthorized people. Peñasquito does not store incompatible materials, such as acids or strong oxidizers and explosives, in areas where they could comingle with cyanide.

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:

Peñasquito is in FULL COMPLIANCE with Standard Practice 3.2 requiring that unloading, storage and mixing facilities use inspections, preventive maintenance and contingency plans to prevent or contain releases and control and respond to worker exposures.

Peñasquito does not store or dispose of empty cyanide containers. All cyanide is delivered in ISO tanks. In the three Plants, following cyanide offload events, the truck carrying the ISO tank leaves the site immediately and returns to the Chemours (DuPont) facility. The unloading procedure requires that the ISO tank 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 entire area is covered in concrete with sufficient secondary containment to prevent spills to an area outside the containment area.

The operation has developed and implemented work procedures to prevent exposures and releases during cyanide unloading and mixing activities. Procedures for each of the plants provide instructions for conducting cyanide unloading and mixing activities covering safety aspects of managing the cyanide. The procedures provide specific steps related to the activity, including sequential operation of valves, hose connections, and cover leaks and failure of offload, mixing and storage facilities. The procedures provide contingency plans for responding to larger spills for both solid and liquid cyanide, require the use of proper PPE and list the specific equipment to be worn. The cyanide unloading procedure also requires that the cyanide driver and two mine operators monitor the cyanide unloading process at all times. The procedure calls for the second operator to monitor the unloading process from a safe location either in the field or remotely via video camera from the control room. Chemours 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. During interviews with operators they demonstrated excellent knowledge and awareness of risks associated with the operation and control measures that must be taken.

Three cyanide mixing events were observed during the audit. The review indicated 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:

Peñasquito is in FULL COMPLIANCE with Standard Practice 4.1 requiring the implementation of management and operating systems designed to protect human health and the environment including contingency planning, inspection and preventive maintenance procedures.

The operation has developed written management and operating plans and procedures for cyanide facilities. The plans and procedures are maintained in a formal document control system on the Peñasquito intranet portal. Procedures cover the cyanide operations at the Oxide Plant, Heap Leach Facilities, the Sulfide Plant and the Pyrite Leach Plant (PLP). Peñasquito has safety work procedures for the cyanide offload areas, Merrill-Crowe Plant, leach pad, process ponds, cyanide solution pipelines and the associated containment channels, ball mills, lead flotation cells, and PLP's agitated leaching, countercurrent decanting (CCD), cyanide detoxification, Merrill Crowe, refinery; and a new tailings distribution system to the existing tailings distribution lines, and the tailings. Procedures were reviewed and were found to be sufficiently detailed to enable safe operation.

Peñasquito has plans and procedures that form the basis of the facility design and operation. The operation has documentation for all aspects of the design and operation. The design parameters for the Oxide and Sulfide 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 developed new procedures and operating plans for the PLP that identify the assumptions and parameters on which the PLP facility design was based. The parameters include cyanide addition to the leach feed, operating pH of the leach circuit, feed pH to the cyanide detoxification circuit and the WAD cyanide target in the detoxification circuit prior to blending with the sulfide flotation tailings.

Peñasquito has developed and implemented work procedure (SOPs) for cyanide related tasks, which describe the standard practices necessary for the safe and environmentally sound operation of the cyanide facilities. The operation has identified equipment, personnel, and procedures for the Oxides Plant, ponds, HLF, the Sulfide Plant and the PLP areas and all associated piping and pumps as having contact with cyanide and the cyanide detoxification plant. Procedures were reviewed and were found to be appropriate for the operation and to be fully implemented.

Peñasquito's Management of Change (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, the environment, 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 the MOC process. Records of management of change examples completed since the last recertification audit were reviewed and found to meet the requirements of the Code.

As described in the certification detailed audit report (DAR) from September 2012, Peñasquito has implemented contingency procedures for the Oxide Plant, HLF and the Sulfide Plant. For this recertification audit, the auditors reviewed new contingency plans developed and implemented for the PLP. Procedures for all three plants 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. In addition to the water balance contingency plans, the mine maintains a detailed Emergency Response Plan that addresses different types of emergencies, including cyanide spills.

Peñasquito maintains a program to inspect cyanide facilities at a frequency that was found to be sufficient to assure that the operation is safe and functioning within design parameters. Records were available for all preventive maintenance and inspections that had been done. Records included the date of inspection, the name of the inspector, any observed deficiencies and corresponding corrective actions.

The operation cyanide related infrastructure inspections include evaluating the condition of tanks, valves, pumps, pipes, and the available freeboard in the ponds, the condition of the synthetic liner and the processing plants. Peñasquito personnel perform weekly visual inspections of the process facilities and inspect tanks for signs of corrosion and leakage, the concrete containments and geomembrane channel and ponds at the plants, and the Leak Collection and Recovery Systems (LCRS) at the double-lined process ponds. Personnel perform weekly inspections of pipelines, pumps and valves for signs of corrosion and leakage pipelines at the three plants and HLF. Peñasquito performs weekly inspections of water levels in the process ponds, storm water diversion channels at HLF and the structures that divert the Arroyo Grande around the entire mine site are inspected on a regular basis by environmental personnel. The auditors conducted a field inspection during the site visit and verified the condition of tanks, secondary containments, pipelines, pumps, valves, water diversions, and heap leach facilities.

Records were available for all inspections performed. Records included the date of inspection, the name of the inspector, and any observed deficiencies. Corrective measures were noted directly on the hard-copy inspection records in the situations where deficiencies were noted.

The auditors reviewed completed examples for the re-certification period that confirms the records are retained and found them to be acceptable.

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 maintenance activities for cyanide facilities are maintained electronically. Work orders are generated and trained maintenance personnel perform the required tasks. 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.

In the event of a power outage, the operation has four diesel-powered generators (2,500 kW each). Two are located at the Oxide Plant and two at the PLP. The power required to operate the Oxide Plant is 2,200 kW for 100% capacity. The power required to operate the Oxide Plant is 2,200 kW for 100% capacity of one generator. The power required to operate the PLP is 3,700 kW, 74% of both emergency generators, capacities. The Sulfide Plant does not have backup generators for the reagent-grade cyanide circuit at the mill as this is a closed circuit designed to prevent backflow in the event of a power outage. The preventive maintenance program for the generators includes weekly maintenance and complete overhauls every year by the dealer. Maintenance records from dealer 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:

Peñasquito is in FULL COMPLIANCE with Standard Practice 4.2 requiring management and operating systems that minimize cyanide use, thereby limiting concentrations of cyanide in mill tailings.

Most cyanide use at Peñasquito is at the Oxide Plant and HLF. Peñasquito uses cyanide at the Sulfide Plant to depress pyrite rather than leach gold, where cyanide is added at the mills and the lead flotation circuit. Cyanide is also used at the newly commissioned PLP. The 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 will occur in 2019 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. The objective is to minimize the amount of cyanide to reduce the cyanide addition at the ball mills, the lead flotation circuit and the PLP.

Peñasquito monitors the cyanide concentration continuously as its strategy to control cyanide addition at the Sulfide Plant and records these concentration levels in the laboratory chemical database. Peñasquito measures the head grade for gold and selected metals at the onsite laboratory for each 12-hour shift at the Sulfide Plant, which represent the ore to be delivered to the mill. These measurements are then used to adjust the cyanide addition rate at the ball mills and the lead flotation circuit. 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. Peñasquito conducts cyanide consumption tests on the ore every week.

Peñasquito has implemented a strategy to control its cyanide addition at the Sulfide Plant by monitoring concentration levels. The levels are recorded in the laboratory chemical database. Peñasquito measures the head grade for gold and selected metals at the onsite laboratory for each 12-hour shift at the Sulfide Mill. This data, which represents the ore to be delivered to the mill, is then used to adjust the cyanide addition rate at the ball mills and the lead flotation circuit. Cyanide addition rates are monitored and controlled at the PLP. There is on-going test work at the PLP during the initial phase of the plant start-up.

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 is in FULL COMPLIANCE with Standard Practice 4.3 requiring a comprehensive water management program to protect against unintentional releases.

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 Peñasquito initial certification DAR from 2012 and the re-certification audit DAR from 2015 both described the water balance and the ICMI found the water balance to be in full compliance. The water balance is 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. Peñasquito continues to use a comprehensive, probabilistic water balance using Goldsim software platform.

As described in the 2012 certification detailed audit report (DAR), the concentrations of WAD cyanide in the tailings facility are below 0.5 mg/l and the tailings pond was not considered to be a cyanide facility. Confirmation was made during this audit that the WAD cyanide concentrations in the TSF continue to remain below 0.5 mg/l, which supports the conclusion that this part of the operation is not a cyanide facility.

The water balance considers, in a reasonable manner, and as appropriate for the facilities and environment, an average application rate of cyanide solution in the HLF, the application rate can be varied in the model if needed. The process considers the design storm return, interval duration, amount of rain, and storm duration that provides a sufficient degree of probability that overtopping of the pond can be prevented during the operational life of the facility. Precipitation data from the station at the Peñasquito airstrip, the nearest to the mine, is used when making calculations. Run-on to the pad and ponds is not considered because all run-on is diverted. Effects of freezing and thawing are not considered because of the hot climate in the region. Neither area considers solution losses due to evaporation from the pad and ponds 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. Power outage is considered (even though there are backup generators); 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 below the geomembrane liner.

Peñasquito has developed a standard operating procedure for upset conditions in the process ponds, and a procedure for weekly inspections of ponds and the heap leach pad. Regular inspections are performed. Peñasquito also developed a weekly inspection program for the process water ditches around the heap leach pad itself. The auditors reviewed completed inspection forms.

The auditors observed that the process ponds were being operated with the adequate freeboard and reviewed inspection forms for the contingency pond. Review of the inspection forms confirmed that freeboard was being monitored and operated in accordance with the standard operating procedure during the audit re-certification period.

Peñasquito updates the water balance model on an annual basis with meteorological data collected from regional weather monitoring stations. The auditors reviewed water balance spreadsheets tracking the projected pond levels on a daily basis, thereby allowing operating practices to be revised as necessary in real time.

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:

Peñasquito is in FULL COMPLIANCE with Standard Practice 4.4 requiring measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions.

Peñasquito pregnant and barren ponds with WAD cyanide concentrations above 50 mg/l, are covered with bird balls as well as netting on the solids pond and sedimentation sump, to control access by birds. Peñasquito has 3-strand barbed wire fences around the mine property, around the heap leach collection ditch and a berm around the rest of the heap leach which restricts access by cattle. Propane cannons and other deterrents are used at the active leach cells and along the collection ditch. Peñasquito has installed a 6-foot high chain link fence around all of the process ponds. In addition, a 3-foot high tight weave inner fence has been installed around the process ponds (except the contingency pond) to limit access by small animals and is constructed on top of a concrete curb to restrict access by burrowing animals.

Peñasquito WAD cyanide concentrations greater than 50 mg/l are needed because of the silver content of the ore. Given the need for the high cyanide concentrations, Peñasquito has deployed a wide range of measures to limit access by cattle, wildlife and birds as explained in the above paragraph.

The tailings pond monitoring reports show that the WAD cyanide concentrations in open pond water during the re-certification period were below 0.5 mg/l thereby supporting the conclusion that the TSF is not a cyanide facility.

The operation has been successful at preventing significant wildlife mortality. Peñasquito maintains a formally documented wildlife protection and monitoring program. Documentation for wildlife mortalities was reviewed for the time period of this recertification audit. Personnel responsible for the program were interviewed. Daily inspections are performed to look for dead or otherwise impacted animals in the ponds area.

Peñasquito has a procedure to avoid ponding on top of the HLF that contains preventive measures (e.g., cleaning sprayer heads) and corrective actions (e.g., break up encrusted layers, reduce application rate); a daily inspection form is included. The auditors did not observe any significant ponding on the cells under active leaching at the time of the site visit.

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:

Peñasquito is in FULL COMPLIANCE with Standard Practice 4.5 requiring measures to protect fish and wildlife from direct and indirect discharges of cyanide process solutions to surface water.

Surface water in the vicinity of Peñasquito is ephemeral, flowing only in response to rainfall; there are no perennial surface water features such as springs, rivers, or lakes. Peñasquito does not discharge to any of the dry washes in the vicinity of the mine.

Peñasquito does not indirectly discharge to surface water as there are no rivers or lakes due to the extreme aridity in the region. Nonetheless, 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 ground water.

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 is in FULL COMPLIANCE with Standard Practice 4.6 requiring measures to manage seepage from cyanide facilities to protect the beneficial uses of ground water.

The Oxide Plant is designed and operated to manage seepage and protect groundwater quality. The entire process area, including the cyanide offload area, is contained within a reinforced concrete floor sloped to drain to a large concrete solids pond or to a geomembrane-lined contingency pond. Process tanks are secured to solid, reinforced concrete plinth (pedestal-type) foundations. The leach pad is constructed with a composite liner system low-density polyethylene geomembrane overlying a soil liner. The overflow collection channel along the perimeter of the pad and the contingency pond has a single lined HDPE geomembrane. The pregnant solution, barren solution, and solids pond are double lined with a HDPE geomembrane. At the Sulfide Plant and PLP all solutions are contained in process tanks and columns with secondary containment provided by the concrete floor of the plant in order to prevent seepage to groundwater.

Peñasquito has two groundwater monitoring wells downgradient of the heap leach pad, process ponds, and Oxide Plant to sample the groundwater on a quarterly basis and analyzes the samples for WAD and total cyanide. Analytical results from samplings during the audit re-certification period showed non-detect values for both WAD and total cyanide at the two downgradient 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.

Peñasquito does not use mill tailings as underground backfill.

Peñasquito does not have seepage that has not caused cyanide concentrations in groundwater to rise above levels protective of beneficial use and no remedial activity is currently required.

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 is in FULL COMPLIANCE with Standard Practice 4.7 in providing spill prevention or containment measures for process tanks and pipelines.

Peñasquito provides spill prevention and containment measures for all cyanide unloading, storage, mixing and process solution tanks. Field inspections at 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 Oxide and Sulfide Plants occurred during the time period from the last recertification audit. All areas are built on concrete and secondary containment in place for all production areas, as well as all cyanide unloading areas. Review of the deign drawings for the Oxide and Sulfide Plants was completed during the initial 2012 and 2015 recertification audits and were found to be in full compliance. There have been no cyanide-related changes to these two plants since the initial audit. The design drawings for the PLP were reviewed and found to be in full compliance with the Code.

At each of the plants, the 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 the area, plus a significant storm event. The auditor observed that the secondary containments at each plant were in good condition and maintained empty, with no materials stored within them.

There is no discharge of cyanide-containing water from the secondary containment areas. Peñasquito has written procedures in place to prevent discharge to the environment of any cyanide solution or cyanide-contaminated water collected in a secondary containment. Peñasquito has dedicated pumps within secondary containment collection areas that remove solutions and return them into the process circuit.

All cyanide process tanks at Peñasquito have concrete secondary containment. All cyanide process solution pipelines at the three Plants are located within a concrete secondary containment area provided for the process and cyanide offload areas or with geomembrane-lined channels. No pipelines associated with the Oxides Plant and HLF, the Sulfide Plant or the PLP cross any ephemeral washes. The tailings pipelines are not considered to be cyanide facilities because the WAD cyanide concentrations are below 0.5 mg/l.

Material specifications and construction material testing records for all cyanide-containing equipment at the Oxide Plant, HLF and the Sulfide Plant were found in compliance according to the certification audit DAR in 2012. Cyanide tanks and pipelines at both plants are constructed of carbon steel, stainless steel, fiberglass, 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 to be complete. Design specifications and as-built drawings for the PLP were reviewed. The cyanide tanks and

pipelines at the PLP are constructed of carbon steel and stainless steel, materials compatible with cyanide and high pH solutions.

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 is in FULL COMPLIANCE with Standard Practice 4.8 requiring quality control/quality assurance procedures to confirm that cyanide facilities are constructed according to accepted engineering standards and specifications.

Peñasquito implemented Quality Assurance and Quality Control (QA/QC) programs during construction of cyanide facilities at the Oxide Plant, HLF and Sulfides Plant, as is described and found in compliance in the initial certification DAR in 2012. M3 designed the Oxide and Sulfide Plants and Golder designed the HLF. Sempenta constructed the facilities and Dadilac conducted construction testing. Peñasquito implemented QA/QC programs during construction of cyanide facilities at the PLP. Fluor designed the PLP. ICA Fluor constructed the facilities and was responsible for its QA/QC program. ProMetal conducted construction testing of the on-site fabricated cyanide mixing and holding tanks, leach tanks and the detoxification tanks.

As stated in the Peñasquito initial certification DAR in 2012, 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. Peñasquito's QA/QC documentation for the PLP was reviewed. 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 room. The auditors verified that the hardcopy of the QA/QC documents have been retained for the Oxide, Heap Leach Facility (HLP) and the Sulfide Plants. The QA/QC documents for the PLP were 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.

The initial certification audit DAR 2012 stated that 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. M3 Engineering and Technology Corporation, was the general contractor with primary responsibility for implementation of the QA/QC program and

commissioning of the Oxide Plant, HLF and Sulfide Plant. M3 used qualified subcontractors to provide construction and testing services. These include Dadilac, Sempenta, and Estructuras Diva.

Fluor designed the PLP. ICA Fluor constructed the facilities and was responsible for the QA/QC program. ProMetal conducted construction testing of the on-site fabricated cyanide mixing and holding tanks, leach tanks and the detoxification tanks. Qualified engineering companies performed the QA/QC inspections and reviews during construction of the cyanide installations at the PLP and prepared the final construction reports certifying that the facilities were constructed in accordance with the design drawings and technical specifications.

The auditor reviewed records of construction reports, including as-built drawings for the new PLP cyanide facilities. A qualified engineer stamped as-built drawings. QA/QC reports are signed by qualified personnel from reputable engineering companies and provided documentation that the facilities were built as designed.

4.9 Implement monitoring programs to evaluate the effects of cyanide use on wildlife, surface and ground water 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 is in FULL COMPLIANCE with Standard Practice 4.9 requiring implementation of monitoring programs to evaluate the effects of cyanide use on wildlife, surface and ground water quality.

Peñasquito has prepared and implemented written standard procedures for the monitoring activities used to evaluate the effects of cyanide use on wildlife, surface water and groundwater quality.

Appropriately qualified personnel developed the wildlife monitoring and surface/groundwater sampling procedures and protocols. 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 the Peñasquito Environment Department.

ALS, an analytical laboratory in Monterrey, prepared the sampling plan. ALS is accredited by the Mexican Accreditation Entity. The procedure for groundwater sampling describes how samples should be taken, sample preservation, sample handling, chain of custody procedures and shipping instructions. The procedure specifies analysis for total and WAD cyanide.

The procedure for 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. Water sampling reports and chain of custody forms were reviewed to verify this.

Peñasquito is a zero discharge facility and does not discharge process water to any location other than the TSF, which because of its WAD cyanide concentrations below 0.5 ml/l is not considered to be a cyanide facility. The facility monitors groundwater quality downgradient of the heap leach pad, process solution ponds, and one well up gradient of the facilities, to ensure that indirect discharges are not occurring. There is no surface water near the site due to the aridity of the region.

Wildlife mortality monitoring and completion of a field form is part of the daily inspection procedure. Completed forms were reviewed covering the audit re-certification period. Records showed that paper forms are filled out every day by the inspectors. The inspection records include the name of the inspector, the date and results of the inspection.

Peñasquito conducts monitoring of groundwater quarterly and wildlife daily at frequencies adequate to characterize the surface water and groundwater quality and wildlife mortalities. Records were reviewed for all sampling and 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 and livestock.

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:

Peñasquito is in FULL COMPLIANCE with Standard Practice 5.1 requiring implementation of a plan and procedure for effective decommissioning of cyanide facilities to protect human health, wildlife and livestock.

Goldcorp and supported by Knight Piesold developed a conceptual Cyanide Facilities Decommissioning Plan in 2010, updated it in 2015 again in November 2018, to decommission the cyanide facilities for the Oxide, Sulfide and Pyrite-Leach Plants at the end of their

operations. The most recent update to the plan was in November 2018 to include the PLP. The plan includes activities such as decontamination of equipment, removal of residual cyanide reagents, rinsing of heap leach pad and treatment systems. The plan includes decommissioning strategies for facilities and treatment systems which may be cyanide-bearing: the cyanide unloading and mixing facilities, process tanks, process piping and pumps, concrete foundations, at all three plants and the heap leach pad and the process ponds at the Oxide Plant.

The Decommissioning Plan has an implementation schedule for the major decommissioning activities for the cyanide facilities at three Plants. The sequence of decommissioning activities is shown with reference to years after closure, rather than calendar years. This schedule will be refined as Peñasquito approaches the closure period.

The Decommissioning Plan includes a statement regarding review and revision of the Plan that Goldcorp requires all closure plans and estimated costs be reviewed and updated at least every five years or when a significant change in operations or expansion occurs.

5.2 Establish an 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 is in FULL COMPLIANCE with Standard Practice 5.2 requiring establishment of an assurance mechanism capable of fully funding cyanide-related decommissioning activities.

Goldcorp has developed a cost estimate model, the Standardized Reclamation Cost Estimator (SRCE), to fully fund third party implantation 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 was updated in 2018 to include the PLP and is based on rates for third party contractors and consultants. Labor and equipment rates are based on updated quotes from contractors and vendors in Mexico. The estimate includes the applicable cyanide facilities for heap leach, process ponds, Oxide Plant, Sulfide Plant and the PLP, as well as other non-cyanide facilities.

Peñasquito reviews and updates the cost estimate yearly as part of its Asset Retirement Obligation Policy, the corporate financial accounting procedure.

The local government does not require financial guarantees; however Goldcorp is audited annually by a third-party financial auditing firm to confirm for stockholders that Goldcorp has the ability to fund all of its financial liabilities, including the closure of the Peñasquito Mine. The auditors reviewed documentation provided by Goldcorp from a Chartered Accountant verifying Goldcorp Inc.'s conformance with the financial tests for a self-guarantee mechanism to cover

the estimated costs for cyanide-related decommissioning activities. A 2016 Deloitte & Touche letter was reviewed to confirm that Goldcorp meets the criteria for self-guarantee.

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 is in FULL COMPLIANCE with Standard Practice 6.1 requiring identification of potential cyanide exposure scenarios and implementation of necessary measures to eliminate, reduce and control them.

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 Oxides plant, 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, safety measures when working with cyanide and procedures to follow in case of an emergenyc. In addition, Sodium Cyanide Safety Data Sheet is attached to each procedure. Changes to the procedures are tracked at the end of each document. 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 have been updated on a regular basis. Peñasquito has developed approximately 38 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 three plants (Oxide, 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 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.

Pre-work inspections are also addressed through the mine's pre-work risk assessment process (AST) performed in order to obtain a work permit. 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. As the PLP plant was under commissioning during the field audit, the auditor only reviewed the records of pre-work inspections that were available for the last month.

Peñasquito has developed and implemented a management of change (MOC) process, which is aligned with Goldcorp Corporate requirements, to ensure that a systematic process is followed to evaluate changes at process facilities so that potential negative impacts to health and safety of employees and the environment are minimized. 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 considers worker input into the development of health and safety procedures through various mechanisms, including daily safety meetings and training sessions called "dissemination of procedures". During the daily safety meetings there is direct communication between supervisors and operators where worker input is considered to improve existing procedures. Procedures related to cyanide management are reviewed and/or updated periodically with the participation of process operators. Records of daily safety meetings conducted in the last three years including discussion of safety issues related to cyanide were reviewed by the auditors.

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 is in FULL COMPLIANCE with Standard Practice 6.2 requiring that cyanide facilities are operated and monitored to protect worker health and safety and periodically evaluate the effectiveness of health and safety measures.

Peñasquito has determined the appropriate pH for limiting the generation of HCN gas during cyanide mixing and production activities. Procedure MP-PL-PR-01 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 Oxide plant, pH values for cyanide

mixing can vary between 11 and 12. For the PLP, pH values for cyanide mixing can vary between 10.5 and 11. Observations of cyanide off-loading at the three process areas (Oxide, Sulfide and PLP) confirmed that the mix tank pH was checked prior to initiating the mixing process. Peñasquito has online pH probes in their cyanide tanks and process circuits. pH meters are maintained on a monthly basis and replaced every 6 months as part of the preventive maintenance program.

Peñasquito uses fixed and personal (handheld) monitoring devices to confirm that controls are adequate to limit worker exposure to hydrogen cyanide (HCN). According to Goldcorp internal requirements, HCN alarms of both handheld and fixed monitoring devices are set to visually alert operators at 2.3 ppm (preventive) and 3.7 ppm (evacuation), which is more stringent than the values recommended by the Code. These two HCN values are also specified in the procedures related to cyanide management. A total of nineteen (19) fixed HCN monitors are located throughout the different process facilities.

Peñasquito has identified areas where workers may be exposed to cyanide through a cyanide risk analysis conducted at the Oxide and Sulfide Plants and the PLP. This risk analysis include the activities and tasks where HCN could be generated (e.g. cyanide preparation, clean up on cyanide tank, maintenance, 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. 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.

The nineteen HCN fixed 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 2017 and 2018 were reviewed and found to be complete. Calibration of the HCN handheld monitors is conducted every 90 days as required by the manufacturer and Peñasquito is in the process of changing the frequency to 30 days. Calibration records for 2017 and 2018 were reviewed and found to be complete.

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, process plants and the leach pad area.

Peñasquito is already using a red colorant dye on high strength cyanide solutions and is currently meeting this new requirement of the Code.

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 shift and prior to beginning a task that has the potential for cyanide exposure (examples: cyanide mixing, opening a pipeline for maintenance, others). The auditors randomly checked showers and eyewashes during the site tour to verify functionality. Fire extinguishers are inspected and tested monthly. During the sodium cyanide mixing process, operators were observed to check the condition and operation of safety showers and eye was stations prior to commencing with a cyanide mix.

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 storage and process tanks are marked as containing cyanide. Signage of confined spaces are also placed on cyanide tanks. 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 aids 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 Oxides, Sulfides and PLP plants; are also available in medical first aid kits and at the medical clinic; and has been included in the Cyanide Emergency Response Plan (ERP). 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. All information relating to cyanide management including SDS information, procedures and emergency response plans are provided in Spanish, the workforce language at the site.

Peñasquito has implemented a procedure MP-P-SEMS-01 Incident Investigation 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.

Since the last recertification audit, Peñasquito had one incident related to cyanide management. The incident was thoroughly investigated and an action plan was developed. The auditors reviewed a flash report and the investigation report. The auditors also verified that all actions identified in the action plan have been closed out.

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 is in FULL COMPLIANCE with Standard Practice 6.3 requiring development and implementation of emergency response plans and procedures to respond to worker exposure to cyanide.

Peñasquito has made available necessary safety equipment including antidote kits, fresh water, oxygen, resuscitators, radios, telephones, and alarm systems in the cyanide off-loading areas, process plant areas and at the clinic. The kits consist of amyl nitrate, activated carbon, water and oxygen. Backpacks including oxygen, masks, and gausses are available where amyl nitrate is stored. Amyl nitrate, resuscitators, sodium thiosulfate and hydroxicobalamin are also available at the clinic.

Emergency response equipment is regularly checked by Health & Safety 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 antidote when required. Medical personnel periodically inspect the sodium thiosulfate and hydroxicobalamin antidotes. Cyanide antidotes 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. Antidote expiration dates and oxygen tank pressure were checked during the audit. All antidotes were within expiration date and oxygen tanks were fully pressurized.

Peñasquito has a general Emergency Response Plan (ERP) and one specific plan for cyanide related emergencies that describes what needs to be done in the event of a cyanide exposure. 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, there is a specific response plan for cyanide operational contingencies at the new PLP plant.

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 paramedics and 38 emergency brigade members distributed in 3 shifts, which names and contact information are listed in the ERP directory.

Peñasquito has developed and implemented procedures to transport workers to off-site medical facilities for further treatment, if required. The victims would be transported via ambulance directly to the local hospitals located in Concepcion del Oro and, depending on the medical condition of the victim, to the local hospitals in Saltillo or, eventually, Monterrey. 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.

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 every year in "Medical Treatment for Cyanide Intoxication" by Chemours. Peñasquito has determined that the hospitals are adequate and have qualified medical physicians and cyanide antidotes (sodium thiosulfate and sodium nitrite) to respond to cyanide exposures.

Peñasquito conducts mock emergency drills based on likely cyanide release/exposure scenarios to test the response procedures, and incorporate lessons learned from the drills into its response planning. At least two mock drills are held every year. Peñasquito evaluates the mock drills and identifies corrective actions. A debrief is conducted after each drill to identify lessons learned from the drills and corrective actions to be taken.

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 is in FULL COMPLIANCE with Standard Practice 7.1 requiring preparation of detailed emergency response plans for potential cyanide releases.

Peñasquito has a general Emergency Response Plan (ERP) and one specific plan for cyanide related emergencies (Cyanide ERP) that describe what needs to be done in the event of a cyanide exposure. The general ERP and the Cyanide ERP include response procedures for cyanide exposures and releases, decontamination procedures, evacuation, emergency contact information, cleanup measures, reporting requirements and others. In addition, the Oxide Plant, Sulfide Plant and the PLP have developed a response plan for operational contingencies related to cyanide management that provides details on how to identify and correct different cyanide management scenarios at each plant.

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 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, overtopping of ponds at the Oxides plant, power outages, uncontrolled seepage, failure of the cyanide destruction process at the new PLP plant and failure of heap leach facilities.

Specific operational contingency scenarios considered include blockage of ISO tank discharge line, release form the ISO tank, leakage from cyanide distribution lines and pumps, failure on calibration of pH probes, mechanical failures, overflow of cyanide daily tank at the Sulfides plant, among others.

Goldcorp works together with its ICMC-certified cyanide supplier Chemours 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, Chemours provides emergency response assistance for all of its shipments. The transporter and ultimately Chemours have responsibility for addressing any off-site incident. Incidents involving off-site and/or transportation of cyanide to Peñasquito would be called into the Chemours Cyanide Hotline. Chemours would then send a team of specialists and/or responders to the scene, as necessary.

The general ERP and the Cyanide ERP describe specific response actions. In the event of an emergency involving cyanide release, both plans provide for specific actions to be undertaken including treatment procedures for personnel who may have been exposed to cyanide, procedures for evacuation of the mine. The plan defines team member responsibilities, communication procedures for notifying outside emergency response resources, government agencies, the neighboring community, other stakeholders and the media.

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 is in FULL COMPLIANCE with Standard Practice 7.2 that requires to involve site personnel and stakeholders in the emergency response planning process.

Peñasquito involves its workforce and stakeholders from communities along the cyanide transportation route 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. In the case of other stakeholders (e.g. Police, Civil Protection, Municipality, Procuraduría Federal de Protección al Ambiente (Environmental Protection Agency - PROFEPA) they participate once a year in the mock emergency drills related to cyanide release/exposure that is conducted by Peñasquito. In addition, communities are invited to these drills as observers and provide feedback during the lesson learned debrief after the drills.

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 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.

Peñasquito involved its stakeholders and communities along the transportation route in cyanide emergency response planning and provided training related to cyanide management during the recertification period. 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.

Peñasquito general ERP and Cyanide ERP do not designate any specific responsibilities to outside responders and communities. Regardless of that, Peñasquito has continued involving external stakeholders in mock emergency drills that are conducted annually with external participation. Peñasquito doctors are in frequent communication with the medical staff of local hospitals. Peñasquito also communicates with its workforce to keep the emergency response procedures current.

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

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Describe the basis for the Finding/Deficiencies Identified:

Peñasquito is in FULL COMPLIANCE with Standard Practice 7.3 requiring designation of appropriate personnel and commit necessary equipment and resources for emergency response.

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 has an updated list of the team members (brigade members, doctors, nurses and paramedics) including their names, shift and the areas where they work. Peñasquito continued implementing a training plan for their emergency responders. The plan includes the training required by level of response including first aid, rescue and hazmat.

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 process area where they work.

The Cyanide ERP 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, SCBAs, ambulance, chemical protective suits, spill recovery equipment, extinguishers, etc.). All emergency equipment and supplies are inspected weekly by process people, brigade members, paramedics or the Safety Department.

Peñasquito general ERP and Cyanide ERP do not designate any responsibilities to outside responders and communities, Regardless of that, Peñasquito has continued involving external stakeholders in mock emergency drills that are conducted annually with external participation. Stakeholders provide feedback during debriefs conducted after each drill to identify lessons learned.

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:

Peñasquito is in FULL COMPLIANCE with Standard Practice 7.4 requiring development of procedures for internal and external emergency notification and reporting.

The general ERP and Cyanide ERP provide on-site emergency response contact procedures including names, shift and process 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. Both plans also contain procedures for communication with potentially affected communities. Contact information of these communities are included in the plans. The ERPs also includes procedures and contact information for communication with the media.

7.5 Incorporate into response plans monitoring elements and remediation measures that 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:

Peñasquito is in FULL COMPLIANCE with Standard Practice 7.5 requiring incorporation into response plans monitoring elements and remediation measures that account for the additional hazards of using cyanide treatment chemicals.

Peñasquito has a procedure to recover and neutralize liquid and solid cyanide spills. The procedures require 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 cyanide solutions within the process plant will be returned to the process circuit. Spilled cyanide solutions are to be decontaminated as necessary with sodium hypochlorite solution as described in the Cyanide Emergency Response Plan and the procedure for Remediation of Cyanide Contaminated Soils. The Cyanide ERT does not specifically indicate where sodium hypochlorite is stored onsite.

The procedure for Remediation of Cyanide Contaminated Soils includes procedures to neutralize contaminated soils as necessary with hypochlorite solution and indicate that spill clean-up materials are to be disposed of on the heap leach pad.

It is unlikely that Peñasquito operations can adversely impact drinking water supplies for Cedros and Palmas Grandes communities, as their groundwater supply source is either located further away from cyanide facilities (> 60 km away) or at a higher altitude that the mine. 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 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.

The Cyanide Emergency Response Plan requires that contaminated water and/or soils are monitored as necessary after a cyanide spill. There is a procedure that describes the requirements for soil sampling, including 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, there is a procedure that 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:

Peñasquito is in FULL COMPLIANCE with Standard Practice 7.6 requiring periodic evaluation of response procedures and capabilities and revise them as needed

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 a section entitled “Annual ERP Review”. It states that the plan will be reviewed annually. The plan will also be reviewed following a mock drill or incident, as needed.

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 held every year. One of them is required by Mexican authority PROFEPA and includes participation of external entities like Police, Civil Protection, Municipality, PROFEPA and communities of the influence area, among others. The other one is conducted internally as specified in the Cyanide ERP.

Drills are developed to include a variety of locations and scenarios including environmental release and exposure responses. 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.

Mock drills were held in 2016, 2017, and 2018. The 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.

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:

Peñasquito is in FULL COMPLIANCE with Standard Practice 8.1 requiring training workers to understand the hazards associated with cyanide use.

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 including induction training for all workers, specific training for people who work directly with cyanide operations, and training for emergency response personnel. In addition to the general training, all employees working in process areas are required to undergo task specific training.

There is an annual training plan to schedule and track training activities that includes training to be conducted for safe cyanide management at the new PLP plant.

Cyanide hazard recognition refresher training is conducted annually. Peñasquito requires all employees to have annual refresher trainings in Module A (Cyanide Module of the general induction program); Module B (Cyanide Management) for personnel working with cyanide; and Module C (Emergency Response) for emergency response personnel.

The auditors reviewed training records for workers interviewed during the field audit. The records identify the trainer, trainee, topics covered, date and sign off sheet.

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:

Peñasquito is in FULL COMPLIANCE with Standard Practice 8.2 requiring training appropriate personnel to operate cyanide facilities according to systems and procedures that protect human health, the community and the environment.

Formal procedures were reviewed for all cyanide-related tasks including cyanide unloading, mixing, production and maintenance. Individual training is provided for each specific cyanide management related task an operator will perform and includes cyanide task procedures. This training takes place every year or 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 disseminate the updated procedures.

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 including: stop for maintenance; cyanide pressurization, unloading, transfer and distribution; rinsing cyanide piping and equipment, sampling of cyanide solution, among others.

Peñasquito conducts training sessions on cyanide related procedures called dissemination 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.

Task specific training to operators is provided by various process supervisors and process chiefs who have several years of experience in the different process areas. Supervisors are considered qualified to provide training based on their experience. In addition, process supervisors and chiefs receive “Cyanide Management Train-the-Trainer” training provided by Chemours.

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 B) that covers cyanide awareness, first aid, the proper use of PPE and the Cyanide Code requirements. A senior/junior on-the-job training approach is used to further train personnel on job activities and cyanide safety.

Peñasquito requires all employees to have annual refresher trainings in Module A (Cyanide Module of the general induction program); Module B (Cyanide Management) for personnel working with cyanide; and Module C (Emergency Response) for emergency response personnel. In addition, personnel working in process areas also receive annual refreshers on the cyanide procedures. External training is also provided by Chemours personnel on an annual basis.

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.

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:

Peñasquito is in FULL COMPLIANCE with Standard Practice 8.3 requiring training appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide.

Cyanide unloading, mixing, production and maintenance personnel are trained in the procedures to be followed if cyanide is released. The requirements of operational procedures including emergency response procedures are covered in Module B training. Peñasquito

provides training to emergency response personnel, brigade members and medical personnel on a weekly basis, where some of the topics covered include decontamination of equipment and soil and cyanide spill response. In addition, external training is also provided by Chemours personnel on an annual basis.

Employees working with cyanide receive specific training in the Cyanide Emergency Response Plan (Cyanide ERP), and response to spills including neutralization, decontamination, first aid, amyl nitrite and oxygen administration.

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. Emergency brigade members receive internal training once a week and also two training sessions per year provided by Chemours related to emergency response with sodium cyanide.

Mock emergency drills related to cyanide incidents are conducted twice a year with participation of the doctors, paramedics and emergency brigade members who include personnel from process and maintenance areas. Scenarios considered in these drills include events with cyanide intoxication as well as cyanide releases.

Emergency response team members are trained through participation in mock emergency drills as well as internal and external training programs. Formal brigades are in place for fire, first aid, spill, and evacuation. Emergency responders (brigade personnel) are available on all shifts. Emergency response team members are also trained in the use of the response equipment.

Peñasquito involved its stakeholders and communities along the transportation route in cyanide emergency response planning. 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 are engaged and receive training related to cyanide management during the recertification period.

Peñasquito requires all employees to have annual refresher trainings in Module A (Cyanide Module of the general induction program); Module B (Cyanide Management) for personnel working with cyanide; and Module C (Emergency Response) for emergency response personnel. Written testing is performed and confirmation of skill is done via on-the-job observation.

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 drills are held every year. A debrief is conducted after each drill to identify lessons learned from the drills and corrective actions to be taken.

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: Engage in public consultation and disclosure.

Standards of Practice

9.1 Provide stakeholders the opportunity to communicate issues of concern.

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 is in FULL COMPLIANCE with Standard Practice 9.1 that requires providing stakeholders the opportunity to communicate issues of concern.

Peñasquito provides the opportunity for stakeholders to communicate issues of concern 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. No concerns related to cyanide management were received during this recertification period.

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 program continues to be implemented through workshops with the communities located along the cyanide transportation route. At the end of the sessions the communities have the opportunity to raise questions or concerns related to cyanide management.

Communities also participate in mock emergency drills that are conducted by Peñasquito. Communities are invited as observers and have the opportunity to provide comments and feedback after the drills and raise questions about cyanide management.

Peñasquito continued with the implementation of the Open Doors (Puertas Abiertas) program. This program includes tours to mining facilities for schools and adults of surrounding communities. The tours include information related to cyanide management and provide an opportunity for visitors to ask questions and raise concerns.

9.2 Initiate dialogue describing cyanide management procedures and responsively address identified concerns.

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 is in FULL COMPLIANCE with Standard Practice 9.2 that requires initiation of dialogue describing cyanide management procedures and responsively address identified concerns.

Peñasquito utilizes the same mechanisms described in 9.1 as opportunities to interact with stakeholders and provide them with information regarding cyanide management practices and procedures. These opportunities include mine tours, the Cyanide route annual presentations, water participatory monitoring program with communities, emergency drills and direct interaction and engagement with community members.

A cyanide brochure is provided to communities that includes relevant information related to proper cyanide management. The Peñasquito (Goldcorp) 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.

9.3 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 9.3

Describe the basis for the Finding/Deficiencies Identified:

Peñasquito is in FULL COMPLIANCE with Standard Practice 9.3 that requires making available to stakeholders appropriate operational and environmental information regarding cyanide

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.

Information is disseminated in verbal form during Peñasquito community meetings, and during mine tours that are open to the public upon request. Most of the people from the communities located around the mine speak and write in Spanish.

There has been no cyanide exposures or incidents resulting in hospitalization or fatality have occurred since the start mine was first certified. As described in the 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.

In the last 3 years there has been no cyanide releases on or off the mine site resulting in significant adverse effects to the environment; no cyanide releases off the mine site requiring response or remediation, no cyanide releases that are or that cause applicable limits for cyanide to be exceeded and no on or off-site cyanide releases that would require reporting under applicable regulations since the start of operations. Information regarding cyanide exposures and/or releases would be reported to PROFEPA (Environmental agency) following the established protocols, timeframes and reporting forms.