REPORT

ICMC RECERTIFICATION SUMMARY AUDIT REPORT

Pinos Altos Mine, Chihuahua, Mexico

Submitted to:

International Cyanide Management Institute (ICMI)
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Washington, DC 20005
United States of America

Submitted by:

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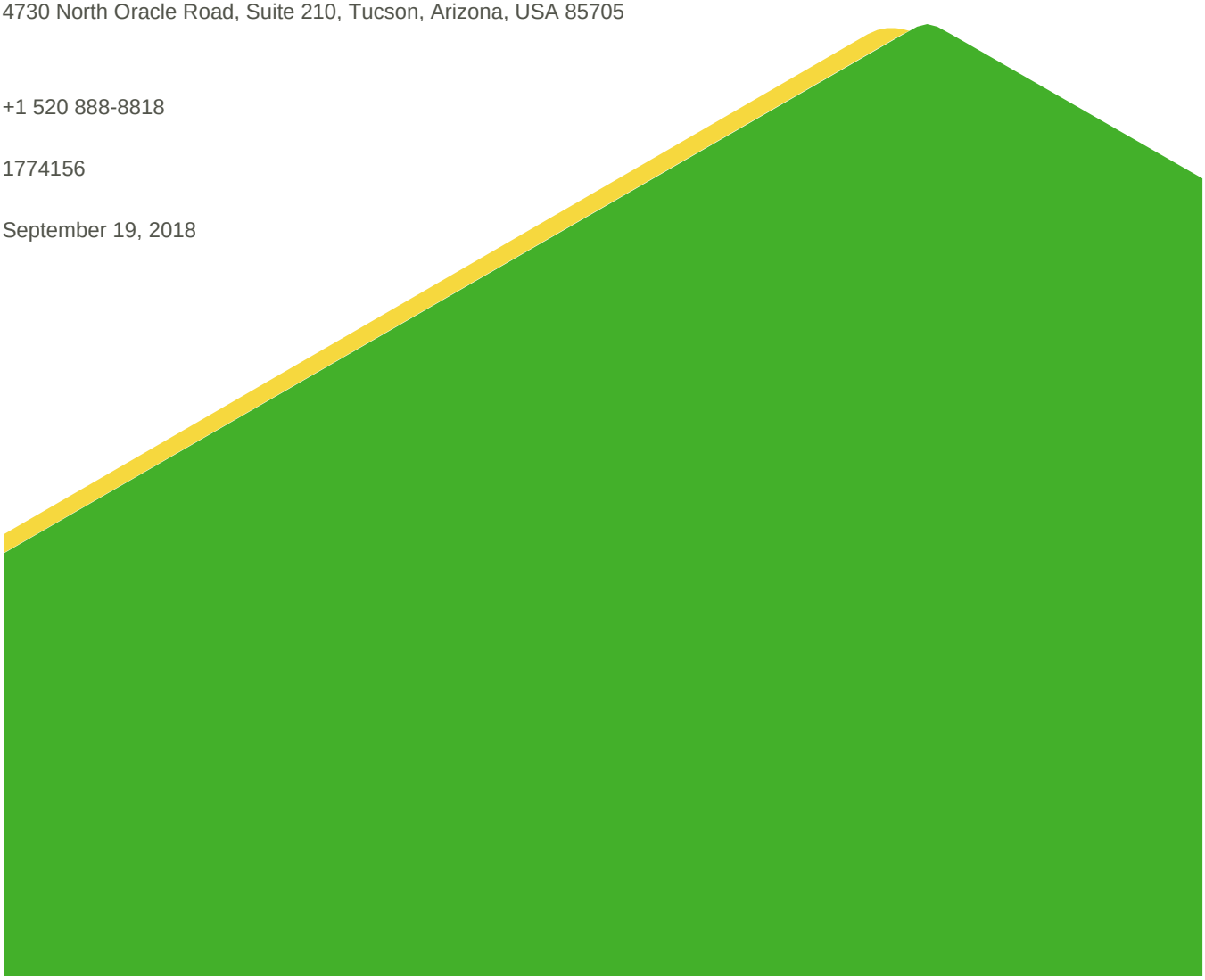
September 19, 2018



Distribution List

1 copy (pdf) - Pinos Altos Mine

1 copy (pdf) - ICMI

Table of Contents

1.0 SUMMARY AUDIT REPORT FOR GOLD MINING OPERATIONS

Name of Mine:	Pinos Altos Mine
Name of Mine Owner:	Agnico Eagle Mines Limited
Name of Mine Operator:	Agnico Eagle Mexico, SA de CV
Name of Responsible Manager:	Marco Antonio Perea Gallegos
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2.0 LOCATION DETAIL AND DESCRIPTION OF OPERATION

2.1 Mine Location

The Pinos Altos Mine (Pinos Altos) is in the mountainous region of northern Mexico, approximately 220 kilometers (km) west of Chihuahua. Figure 1 presents the site location map.

2.2 Background

Pinos Altos is 100 percent owned by Agnico Eagle Mines Limited (Agnico Eagle) and operated by Agnico Eagle Mexico (AEM), a subsidiary of Agnico Eagle. Pinos Altos has proven and probable reserves containing 2.3 million ounces of gold and 59.4 million ounces of silver (29 million tonnes grading 2.5 grams per tonne (g/t) gold and 64.3 g/t silver). Pinos Altos poured its first gold in July 2009 and achieved commercial production in November of that year, while underground mining began in the late spring of 2010.

Pinos Altos is a series of open pits and an underground mine along the Santo Niño Fault. Surface mining at Pinos Altos is carried out at the Santo Niño, Oberon de Weber and San Eligio pits, and, in future, the El Apache pit. Mining is by conventional open pit methods, using shovels and trucks to remove about 12 million tonnes of ore and waste material each year. The underground mining method is sub-level stoping (paste backfill) to extract ore from the Santo Niño, Cerro Colorado, Oberon de Weber and San Eligio deposits. Ore is trucked to surface via a ramp system. At current maximum production, the underground mine can provide 3,000 tonnes of ore per day. Shaft-sinking began in 2012 to increase the underground production capacity to 4,500 tonnes per day. The new shaft allows better matching of the mine capacity to the mill, which is operating at more than the design of 4,000 tonnes per day.

Most of the Pinos Altos ore is treated in a process plant with the lower grade ore heap-leached. The conventional, 5,000-tonne/day process plant includes crushing, grinding, gravity concentration and agitated leaching followed by counter-current decantation (CCD). Tailings from the Process Plant are detoxified using an INCO treatment with sodium metabisulfite and then filtered and placed on as a dry stack in a Tailings Storage Facility (TSF) or mixed with cement at a paste backfill plant for use as underground backfill. Gold and silver are recovered using the Merrill Crowe method and the flotation method. A refinery produces gold/silver doré bars on site. The lower grade Pinos Altos ore is treated in a Heap Leach Facility (HLF) designed to accommodate 5 million tonnes of material over the life of the mine, contributing about 5 percent of the total metal production. The process diagrams are presented in Figures 2 and 3.

Figure 1: Site Location Plan

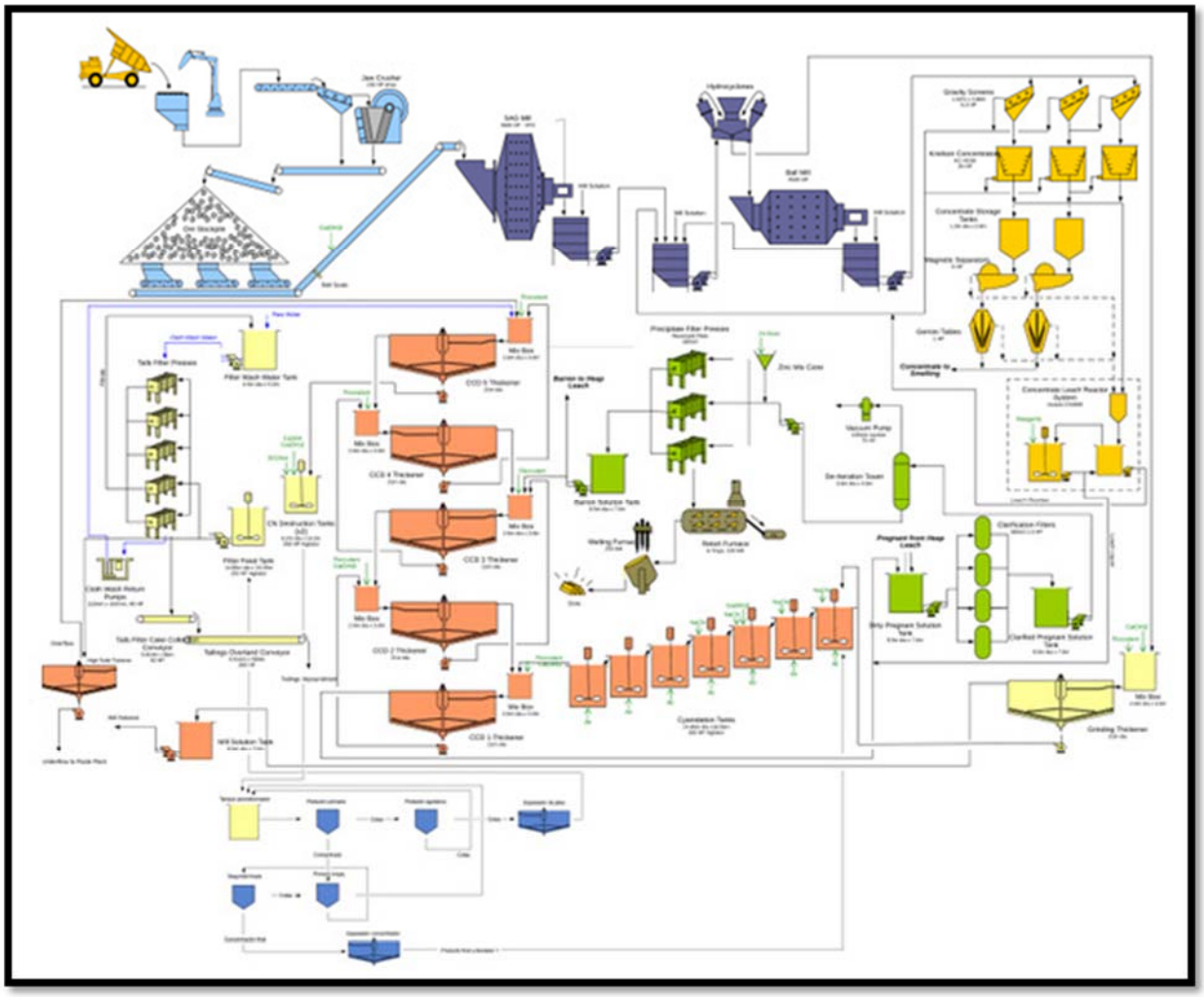

Figure 2: Process Plant Flow Diagram (supplied by Pinos Altos)

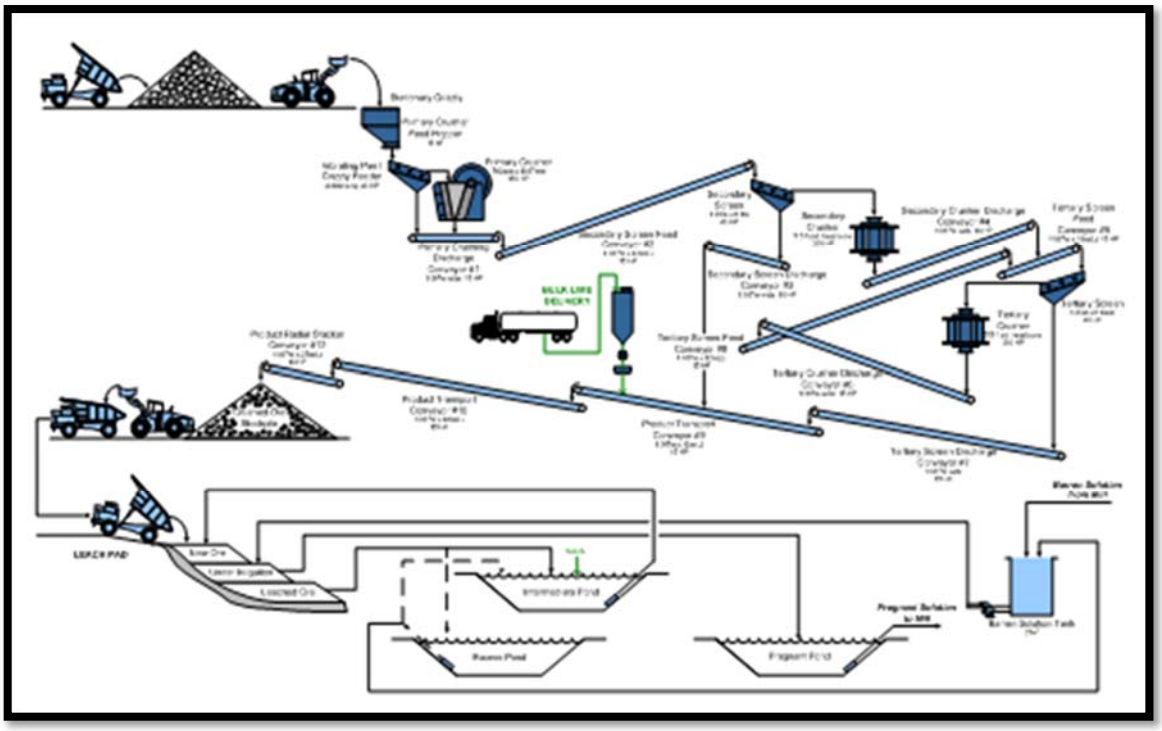

Figure 3: Heap Leach Facility Flow Diagram (supplied by Pinos Altos)

SUMMARY AUDIT REPORT
Auditors Findings

Pinos Altos Mine is:	☒ **in full compliance with**	**The International Cyanide Management Code**
	☐ in substantial compliance with	
	☐ not in compliance with	

This operation has not experienced compliance problems during the previous three-year audit cycle.

Audit Company: Golder Associates

Audit Team Leader: Kent R. Johnejack, Lead Auditor and Mine Technical Specialist

Email: kjohnejack@golder.com

Name of Other Auditors

Name, Position	Signature
Ivon Aguinaga, ICMI Pre-certified Mine Technical Specialist	Ivon Aguinaga C.

Dates of Audit

The Recertification Audit was undertaken over five days from April 23 to 27, 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 (ICMI) and that all members of the audit team meet the applicable criteria established by the ICMI for Code Verification Auditors.

I attest that this Summary Audit Report accurately describes the findings of the verification audit. I further attest that the verification audit was conducted in a professional manner in accordance with the International Cyanide Management Code (Code) Verification Protocol and using standard and accepted practices for health, safety and environmental audits.

Pinos Altos Mine	Kent R Johnejack	September 19, 2018
Name of Facility	Signature of Lead Auditor	Date

PRINCIPLE 1 – PRODUCTION

Encourage Responsible Cyanide Manufacturing by Purchasing from Manufacturers that Operate in a Safe and Environmentally Protective Manner

Standard of Practice 1.1: **Purchase cyanide from manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide, and to prevent releases of cyanide to the environment**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 1.1**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has purchased cyanide from a manufacturer employing appropriate practices and procedures to limit exposure of their workforce to cyanide, and to prevent releases of cyanide to the environment. Pinos Altos has a contract with The Chemours Company FC, LLC (Chemours). The contract requires that cyanide be produced at a facility that has been certified as compliant with the Code. Chemours manufactured cyanide at its plant in Memphis, Tennessee. This facility has been recertified under the Code during the mine's recertification period. Chemours' most recent recertification was obtained on September 16, 2016. As part of the Chemours Mexican supply chain to Pinos Altos, Chemours temporarily stored cyanide at a warehouse in Hermosillo, Sonora. This warehouse has been recertified with the Code. Its most recent recertification was obtained on September 11, 2017.

Pinos Altos only purchased cyanide from Chemours during the recertification period except for a one-time event in September 2017, when Pinos Altos purchased cyanide from Evonik Industries de Mexico, S.A. de C.V. (Evonik), a Mexican operating company of Evonik in Germany. This purchase was necessary due to a potential supply shortage from Chemours as a contingency measure. The cyanide from Evonik was produced at the CyPlus GmbH (CyPlus) production facility in Wesseling, Germany. Cyplus is an Evonik subsidiary. A supply chain document was provided as evidence that cyanide purchased from Evonik was produced by CyPlus at its Wesseling facility. This facility was recertified with the Code. Its most recent recertification was obtained on August 2015. As part of its supply chain to Pinos Altos, Evonik temporarily stored cyanide at a CyPlus Obregon Transloading Terminal and Warehouse in Ciudad Obregon, Sonora. This warehouse has been certified under the production requirements of the Code. Its most recent recertification was obtained on March 11, 2016.

PRINCIPLE 2 – TRANSPORTATION

Protect Communities and the Environment during Cyanide Transport

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

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 2.1**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has established clear lines of responsibility for safety, security release prevention, training and emergency response in written agreements with their producer and transporters. Chemours is the consigner for the cyanide supply chain from its production facility to Pinos Altos, including transportation by rail from the plant to the US/Mexico border in Nogales, then to Chemours warehouse in Hermosillo, Sonora, and finally transportation by road to the mine site. The contract with Chemours states that designated responsibilities extend to any subcontractors used by the producer, distributor, transporter or the operation for transportation related activities. This contract specifies responsibilities for safety, security release prevention, training and emergency response in accordance with Code requirements. Pinos Altos is in full compliance because the entire Chemours supply chain has been certified.

Pinos Altos purchased cyanide from an independent distributor, Evonik, in September 2017 due to a potential supply shortage from Chemours. This was a one-time event. Even though Pinos Altos does not have a formal contract with Evonik that covers all items required under Standard of Practice 2.1, it can be reasonably inferred that Pinos Altos is in full compliance because the full supply chain of the cyanide purchased to Evonik is certified with the Code.

Pinos Altos has not implemented the requirement to add a colorant dye to solid cyanide prior to or at the point of mixing, but they are aware of the deadline to do so by July 1, 2019 to meet this new Code requirement.

Standard of Practice 2.2: **Require that cyanide transporters implement appropriate emergency response plans and capabilities and employ adequate measures for cyanide management**

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 2.2**

☐ not in compliance with

Summarize the basis for this finding:

Chemours is the consigner for the cyanide supply chain from its production facility to Pinos Altos, including transportation by rail from the plant to the US/Mexico border in Nogales, then to Chemours warehouse in Hermosillo, Sonora, and finally transportation by road to the mine site. The operation's contract with Chemours requires that its production and transportation personnel, distributors and contract transporters comply with the Code and its certification requirements. In addition, the full supply chain is certificated under the Code.

Pinos Altos purchased cyanide from Evonik, in September 2017 due to a potential supply shortage from Chemours. Even though Pinos Altos does not have a formal contract with Evonik that requires that its transporters be certified under the Code, it can be reasonably inferred that Pinos Altos is in full compliance with Standard of Practice 2.2's requirements because the full supply chain for Evonik is certified with the Code.

Pinos Altos has chain of custody records identifying elements of the supply chain that handles the cyanide brought to its site from Chemours and Evonik. All identified transporters are certified as Code compliant and have been certified under the Chemours and Evonik supply chain certifications. The auditors reviewed examples of bills of lading for the entire recertification period, the supply chain documents, and the supply chain audit reports on the ICMI website to confirm compliance.

PRINCIPLE 3 – HANDLING AND STORAGE

Protect Workers and the Environment during Cyanide Handling and Storage

Standard of Practice 3.1: **Design and construct unloading, storage and mixing facilities consistent with sound, accepted engineering practices, quality control/quality assurance procedures, spill prevention and spill containment measures.**

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 3.1**

☐ not in compliance with

Summarize the basis for this finding:

Facilities for unloading, storing and mixing cyanide have been designed and constructed in accordance with applicable jurisdictional rules and sound and accepted engineering practices. Pinos Altos has one cyanide warehouse for storing solid cyanide in boxes and two mixing/storage areas. Pinos Altos also had a second cyanide warehouse at the HLF, which was evaluated as part of the initial certification audit; however, this warehouse has been closed since 2016. The cyanide mixing and storage tanks at the HLF are still active and mixing can be conducted if needed using cyanide boxes transferred from the Process Plant warehouse. The last cyanide mixing event at the HLF occurred in 2016. No changes in the cyanide warehouse at the Process Plant and the two mixing/storage areas have occurred since the initial certification audit. Pinos Altos storage and mixing cyanide facilities were evaluated and found fully compliant as part of the initial certification and/or completion of the corrective action plan for the initial audit.

Unloading, mixing and storage areas for solid cyanide are located away from people and surface waters within fenced and/or gated areas. The mixing and storage areas are kept locked and secured. Both cyanide mixing and storage areas are also fenced. Unauthorized access is prohibited to the areas. The nearest surface water body (Arroyo Ana Maria) is located approximately 1 km north of the Process Plant and the HLF. The nearest community, La Bateria de Rodriguez, is located approximately 6.6 km to the west of Pinos Altos, well outside the mine perimeter fence. The potential for releases to surface water and/or human exposures is minimal. The cyanide is also stored under a roof, off the ground, and with measures to minimize the potential for contact of solid cyanide with water. In addition, the cyanide is stored with adequate ventilation to prevent the build-up of hydrogen cyanide (HCN) gas. The warehouse at the Process Plant has vent openings and a fan to provide adequate ventilation. All personnel entering the warehouse must use a handheld cyanide gas monitor. The warehouse at the HLF had vent openings as well and a fixed HCN monitor when it was in operation. Liquid cyanide is stored in the mixing and storage tanks located outside with adequate ventilation. Cyanide mixing and storage tanks are fitted with level indicators and high-level alarms to prevent overfilling. The level sensors and alarms report to the control rooms. The auditors observed that all level sensors were functioning. Pinos Altos provided quarterly maintenance records for the level sensors to verify that they were maintained.

All cyanide mixing and storage tanks are located on reinforced concrete pads and secondary containments that are adequate barriers to prevent seepage to the subsurface. No changes to these pads and secondary containments have occurred during the recertification period except the addition of glass fabric/epoxy layer to the secondary containment of the cyanide mixing and storage tanks at the Process Plant. The auditors observed that the concrete tank pads and secondary containments were in good condition.

Solid cyanide is stored in areas separate from all other chemicals. The warehouse at the Process Plant is exclusively for cyanide, as was the now closed warehouse at the HLF. Concrete berms were considered as part of the secondary containment of the warehouses to prevent any potential mixing. Also, Pinos Altos has isolated the cyanide mix and storage tanks away from incompatible chemicals such as acids, oxidizers and explosives. Smoking, drinking, or eating are prohibited near the cyanide storage areas.

Standard of Practice 3.2: **Operate unloading storage and mixing facilities using inspections, preventative maintenance and contingency plans to prevent or contain releases and control and respond to worker exposures.**

The operation is

☒ **in full compliance with**

☐ in substantial compliance with **Standard of Practice 3.2**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has developed and implemented procedures to prevent exposure and releases of cyanide during unloading, stacking, mixing and storage. The procedures include operation of critical valves and pumps, handling of cyanide containers, spill cleanup during the mixing, appropriate personal protective equipment (PPE) and the management and disposal of the empty bags and wooden crates. Pinos Altos prohibits the use of the empty bags and wooden crates for other purposes. Empty bags are rinsed three times and then are temporarily stored with the wooden crates in the warehouses until they are transferred by an authorized company to an outside facility for final disposal. Pinos Altos tracks the cyanide containers by serial number and checks these numbers against the serial numbers of the empty containers prior to their transport to an outside facility. This ensures that no empty containers stay at the site or are used for other purposes. The auditors reviewed the log book and examples of completed manifests for the transfer and final disposal of the empty containers to verify compliance.

The procedures for cyanide unloading and mixing include procedures for handling cyanide containers with a forklift to prevent rupturing or puncturing during cyanide unloading and the transfer of the containers from the warehouse to the cyanide mixing area. Procedures also require that cyanide containers be stacked no more than two high within the warehouse. The procedures specify the required PPE and require that an observer be present during the cyanide mixing. The auditors observed a cyanide mixing event at the Process Plant to verify the implementation of these procedures.

Pinos Altos has not yet implemented the addition of a colorant dye to solid cyanide prior to or at the point of mixing into solution. However, they are aware of the deadline to implement this new requirement by July 1, 2019.

PRINCIPLE 4 – OPERATIONS

Manage Cyanide Process Solutions and Waste Streams to Protect Human Health and the Environment

Standard of Practice 4.1: **Implement management and operating systems designed to protect human health and the environment including contingency planning and inspection and preventative maintenance procedures.**

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 4.1**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has developed written procedures that describe the management and operation of the cyanide facilities for the following active cyanide facilities:

- Process Plant, consisting of:
  - Cyanide Warehouse
  - Cyanide Mixing Area (including the cyanide mixing tank and the cyanide storage tank)
  - Milling Area
  - Leaching Area (7 leach tanks). Tanks 6 and 7 are new tanks added to the circuit in 2015 and 2016, respectively
  - Thickener Area (6 CCD Thickeners and one Grinding Thickener Tank)
  - Gravity Circuit (Acacia Reactor Area)
  - Merrill Crowe Plant (including a barren solution tank, a clarified pregnant solution tanks, zinc cone, deaeration tower, clarifiers, and precipitate filter presses)
  - Detox Area (an INCO cyanide destruct system with two Detox tanks)
  - Tailings Filtration Area
  - A pond located in the Filtration Tailings Area called Filters Pond (Pileta de Filtros in Spanish)
  - Thickener of High Solids (Espesador de Altos Solidos) to reduce clay content prior to filtration. This is a new facility constructed in 2015. Operations started in 2016.
- HLF consisting of:
  - Phase 1, 2, 3 and 4. Phase 3 and 4 are new facilities that started operation in April 2017 and March 2018. Phase 2 has been inactive since 2017.
  - Pregnant Pond, Intermediate Pond and Emergency Pond

  - Cyanide Warehouse. This warehouse was closed in April 16, 2016 (The Cyanide Mixing and Storage Tanks at the HLF are still active and mixing can be conducted if needed using cyanide boxes stored at the plant warehouse).
  - Cyanide Mixing Area (including the Heap Leach Cyanide Mixing Tank and Barren Solution Tank)
- Flotation Plant for the leaching of tailings. This is a new facility that was constructed in June 2015 and starts operations in 2017.
- TSF consisting of:
  - Dry Stack TSF - Deposition to this facility stopped in February 2016. Its Sedimentation Pond is still active.
  - Oberon de Weber TSF (Deposito de Jales Oberon Weber). This is a new facility in a former open pit that started operation in February 2016.
- Paste Backfill Plant

The procedures detail the risks involved with each cyanide task and adequately describe safe work practices. Each procedure details tasks, PPE requirements, and responsible persons. Pinos Altos has also plans and procedures that identify the design and operating criteria for safe management of cyanide, such as the 0.5 to 1.0 meter (m) of freeboard depending on the pond; the concentration goal of 10 milligrams per liter (mg/L) after cyanide detoxification; a minimum pH of 10 to be to prevent formation of hydrogen cyanide gas (HCN); and others.

Pinos Altos has a procedure for evaluating changes in facilities or practices. The procedure covers environmental and safety aspects and includes a form that must signed by the initiator and the process, environmental, projects, and safety managers. The form includes potential impacts, mitigation measures, implementation steps, and verification. The auditors reviewed completed forms to verify compliance.

Pinos Altos has contingency procedures for upsets in the water balance; deviations from design or standard operating procedures; and temporary closure or cessation. These procedures cover emergency stop of the different process circuits, measures to be taken when the water level in the ponds exceeds the maximum operating levels and other contingency situations. For example, the operating and maintenance manuals for the TSFs include procedures in case of earthquakes, elevated phreatic surfaces, extreme rainfalls, power failures, debris slides, and fires. The conceptual closure plan addresses temporary closure or cessation of the cyanide facilities.

Pinos Altos has procedures that identify the assumptions and parameters on which the design for the cyanide facilities were based and any applicable regulatory requirements to prevent and control cyanide releases and exposures.

Pinos Altos has developed and implemented inspection programs for their cyanide facilities. Pinos Altos inspects the cyanide facilities at a reasonable frequency for each type of facility to assure they are functioning with design parameters. The inspection frequencies are daily to monthly, as well as per event (in the case of pre-work inspections for cyanide mixing and unloading). Inspections cover tanks, pumps, valves, secondary containments, pipelines, ponds, leak detection and collection systems at leach pads and ponds, TSFs, wildlife presence and mortality, and surface water diversion channels. Pinos Altos documents the inspections using the forms and checklists. These forms contain the date, inspector name, yes/no check boxes for a list of specific items, and extra lines for observations regarding the non-conforming condition when the no box is checked. The auditors reviewed examples of the inspection records to verify compliance.

The Pinos Altos preventative maintenance program is designed to assure the continuous and safe operation of the equipment for cyanide management. Pinos Altos uses software to manage its preventative maintenance activities, both preventive (scheduled) and corrective (unscheduled). The system is used for identifying, assigning responsibility, scheduling, and tracking the completion for the maintenance activities. The preventive maintenance program includes fixed HCN monitors, back-up generators, pH meters, non-destructive testing of the cyanide storage tanks, cyanide valves and tanks, cyanide pumps, and level indicators of tanks and sumps. The auditors reviewed examples of closed work orders for cyanide equipment to verify compliance.

Pinos Altos has eight generators (each with 1,850 kilowatts capacity) to operate critical functions at the Process Plant and the HLF during power outages. Critical areas include the control room, cyanide mixing areas, leaching area, thickeners, process pumps, detox area, filtration area, TSFs and the HLF pumps pumping to the Process Plant. The generators are tested weekly and maintained every 1,000 hours of operation or as needed. The auditors observed the generators and reviewed maintenance records to verify compliance.

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

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 4.2**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has continued with metallurgical testing to evaluate adjustments to cyanide addition rates due to operational changes during the recertification period. With the addition of the Flotation Plant for the leaching of tailings to increase silver recovery, Pinos Altos has conducted additional metallurgical testing to re-evaluate cyanide concentrations for optimal gold and silver recoveries at Leach Tank 1 of the Process Plant. In addition, an optimal addition rate to the intense leaching circuit (Intensive Leach Tank 1) at the Flotation Plant has been determined based on metallurgical testing. Also, Pinos Altos has added two more leaching tanks, Tanks 6 and 7, in 2015 and 2016, respectively to increase residence time and increase silver recovery.

Pinos Altos has evaluated manual and automatic control strategies for making real-time adjustments to the cyanide addition rate. Pinos Altos primarily relies on a manual strategy of sampling and titration every two hours and adjusts the cyanide addition rates in Leach Tank 1 of the Process Plant and in Intense Leach Tank 1 of the Flotation Plant, as needed, to maintain an average free cyanide concentration of approximately 850-900 and 10,000 mg/L, respectively. Pinos Altos has also installed an automatic titrator as a secondary strategy. The auditors reviewed examples of the daily production reports to verify compliance.

Standard of Practice 4.3: Implement a comprehensive water management programme to protect against unintentional releases.

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 4.3**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has developed a comprehensive, probabilistic site- wide water balance model using GoldSim that was evaluated during the initial certification audit and that has been updated to incorporate new cyanide facilities constructed during the recertification period (i.e., the Oberon de Weber TSF, and Phases 3 and 4 of the HLF). The model considers the following factors and assigned reasonable values for precipitation, evaporation, moisture content of ore, irrigation areas and rates for the pad, representative climate data, 24-hour draindown from the pad in case of a power outage or pump failure, and seepage from the TSFs. The model also considered the expected average rainfall plus a 100-year, 24-hour storm event of 150 mm superimposed on the facilities. The auditors reviewed the most updated version of the GoldSim model from April 2018 to verify compliance.

Pinos Altos has developed and implemented procedures to manage the solution between ponds and operate the ponds with adequate freeboard above the maximum design storage capacity determined to be necessary from the water balance calculations. Water levels are monitored continuously with level sensors and operators inspect the ponds and diversions daily. A minimum freeboard of 1 m has been applied to the Emergency and Filters Ponds. A minimum freeboard of 0.5 m has been applied to the Pregnant, Intermediate, and Sedimentation Ponds. Freeboard requirements are described in the design documentation and operating procedures. The auditors reviewed water levels in these ponds to verify that the ponds are operated with the required freeboards. Freeboard is inapplicable for both TSFs since they are facilities that store filtered dry tailings.

Pinos Altos has measured precipitation onsite and compared the results to design assumptions as necessary. Pinos Altos has measured precipitation at the site since 2012 using four precipitation gages and the data have been used for the water balance model updates. Pinos Altos has compared actual versus design value and has verified that the 100-year, 24-hour design storm has not occurred at the site during the period of record and that the design value is still valid.

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

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 4.4**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has implemented measures to restrict access by wildlife and livestock to all open waters where Weak Acid Dissociable (WAD) cyanide exceeds 50 mg/L. Measures include fencing around the mine property and around the HLF ponds. Netting has been installed over the Pregnant and Intermediate Ponds. Process solutions are conveyed within pipelines, rather than in open channels, between the pad, plant and ponds. The auditors observed these measures to be in good condition.

Pinos Altos provided monthly WAD cyanide data for the Pregnant, Intermediate, Emergency, Filters, and Sedimentation Ponds for the recertification period. WAD cyanide concentrations were below 50 mg/L for the Filters and Sedimentation Ponds. The Pregnant Pond and the Intermediate Pond had WAD cyanide concentrations above 50 mg/L, but these two ponds have netting over them. WAD cyanide concentrations in the Emergency Pond were below 50 mg/L during the recertification period except for one five-day period during heavy rainfall in 2015 when solution sent to the Emergency Pond was neutralized with hydrogen peroxide according to a written procedure. The auditors reviewed analytical data for all the ponds to verify compliance.

Pinos Altos inspects for wildlife mortalities daily. Pinos Altos staff stated that there have been no wildlife mortalities attributable to cyanide intoxication in the past three years. The auditors reviewed completed inspections forms for the recertification period to confirm this statement.

Pinos Altos applies leach solutions according to a written procedure to avoid significant ponding on the surface of the HLF and to limit overspray of solution off the HLF liner. Measures include ripping and reducing the application flow rate in case of significant ponding. HLF personnel inspect for ponding daily. The auditors did not observe significant areas of ponding during the site visit.

Standard of Practice 4.5: **Implement measures to protect fish and wildlife from direct or indirect discharges of cyanide process solutions to surface water.**

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 4.5**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos does not have a direct discharge of process water to surface water. Pinos Altos has potential indirect discharges to surface water from the Dry Stack TSF and the Oberon de Weber TSF. Foundation drains are constructed beneath both TSFs to remove excess water that accumulates at the base of the tailings mass. Also, Pinos Altos has a potential indirect discharge to surface water associated with the discharge of underground mine water from the Exploration Ramp Pond to Arroyo La Maquina. Data for a monitoring station at this location from April 2015 to February 2018 showed WAD cyanide concentrations ranging from non-detect to 0.035 mg/L with all values below 0.5 mg/L WAD cyanide.

Pinos Altos regularly monitors four watercourses at stations downstream of the cyanide facilities to detect potential indirect discharges. Surface water monitoring data from April 2015 to February 2018 showed non-detect levels (<0.02 mg/L) of WAD cyanide in general and when WAD cyanide was detected, all the values were below <0.022 mg/L. Analytical data also showed that non-detect levels (<1 mg/L) of free cyanide from April 2015 to February 2018. Because the laboratory detection limit (i.e., minimum quantifiable quantity) for free cyanide is greater than 0.022 mg/L, WAD cyanide is a surrogate for free cyanide for compliance purposes. Pinos Altos has not detected indirect discharges of cyanide solutions to surface waters and therefore is not engaged in remediation to prevent degradation.

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

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 4.6**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has implemented the following measures to reduce the potential for seepage to groundwater: geomembrane lining for the leach pad (low permeability underliner fill overlain by geomembrane liner); double liner with leak detection for the Pregnant, Intermediate and Emergency Ponds; single liner for the Filters Pond; and concrete floors in Process Plant (including cyanide warehouses and cyanide mixing areas) and in Flotation

Plant. The Dry Stack TSF and Oberon de Weber TSF were constructed with foundation drains to remove water that accumulates at the base of the tailings mass and pump it back to the mine. Pinos Altos has installed monitoring wells downgradient of the HLF, the TSFs, and the Process and Flotation Plants.

There are no designated beneficial or actual uses of the groundwater beneath and/or downgradient of the mine facilities determined by the Mexican authorities. Pinos Altos monitors for cyanide downgradient of the mine and reports the results from compliance points to the authorities for information only. Pinos Altos monitors for cyanide downgradient of the mine in seven monitoring wells. Analytical results showed non-detect levels of WAD cyanide (<0.02 mg/L) during the recertification period with some isolated values no greater than 0.02 mg/L.

Pinos Altos uses detoxified mill tailings mixed with concrete (tailings paste) as underground backfill. Monthly analytical data results from April 2015 to February 2018 show that WAD cyanide levels in the tailings paste were below 0.5 mg/L, with two exceptions with a maximum value of 1.11 mg/L. Pinos Altos daily monitors HCN concentrations at underground areas including at the area where backfill is or has recently been placed. Workers are required to use a portable HCN monitor. Results obtained are protective of workers and groundwater.

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

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 4.7**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has provided spill containment measures for all cyanide unloading, storage, mixing and process solution tanks. The mixing and storage tanks and the cyanide solution tanks are within concrete secondary containment with adequate capacity. The secondary containment of these tanks and their capacity were evaluated during the previous audit in 2015 and found fully compliant. For the new tanks in the recertification period (i.e., tanks of the Flotation Plant, the new Leach Tanks 6 and 7, and the Thickener of High Solids) have also been constructed within concrete secondary containments. Pinos Altos demonstrated that the secondary containments of the new tanks have been sized to hold a volume at least 110 percent greater than that of the largest tank within the containments, which allows sufficient additional capacity for precipitation. The auditors found the concrete secondary containment for the new tanks to be in good condition and without visible cracks.

Pinos Altos has automated the sumps in the secondary containments at the Process Plant, Flotation Plant and the Thickener of High Solids to pump cyanide solution to the process circuits. In case of the HLF mixing tank and the barren tank, solution drain naturally by gravity to the adjacent Pregnant Pond. The auditors observed the sumps and found them to be in good condition.

Pinos Altos has constructed cyanide solution pipelines with containment measures to collect leaks and prevent releases to the environment. The pipelines are constructed with concrete, pipe-in-pipe, geomembrane-lined ditches, or steel trays as secondary containment. The auditors observed these pipeline secondary containments and found them to be in good condition. There are two segments of pipelines without containments that the auditors found acceptable due to the low cyanide concentrations and the high frequency of the inspections.

There are no areas where cyanide pipelines present a risk to surface water. There is no natural surface water in the immediate vicinity of the mine.

Cyanide tanks and pipelines are constructed of materials that are compatible with cyanide and high pH conditions (i.e., High-Density Polyethylene (HDPE) and American Society of Testing and Materials (ASTM) A36 carbon steel).

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

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 4.8**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos provided evidence of construction quality assurance / quality control (QA/QC) programs during the 2015 the initial certification audit (including the completion of the corrective action plan for the initial audit) for the cyanide facilities existing at that time. QA/QC for these facilities achieved compliance at that point in time.

QA/QC programs were implemented during the construction of new or modified cyanide facilities during the recertification period. The QA/QC programs for the following new and/or modified cyanide facilities were evaluated for the 2018 audit cycle:

- Phases 2, 3 and 4 of the HLF. Phase 2 was constructed in 2012, Phase 3 in 2016 and Phase 4 in 2017.
- Flotation Plant. This is a new facility that was constructed in June 2015 and started operations in 2017.
- Oberon de Weber TSF. New TSF, constructed in January 2015 and in operation since February 2016.
- Leach Tanks 6 and 7 were added to the circuit in 2015 and 2016, respectively.
- Thickener of High Solids started operations in 2016.
- Modifications to the secondary containments of the Thickener of High Solids done in February 2018.
- Pregnant Pond Channel Dyke Construction in July 2017.
- Thermofusion of pipeline from detox to CCD 5.
- Installation of a discharge pregnant solution line to Phase 4 of the HLF.

The QA/QC programs for these facilities have addressed the suitability of materials, adequacy of soil compaction for earthworks and geomembrane liner and tank and pipeline installation as applicable for each project. The auditors reviewed QA/QC documentation for these cyanide facilities to verify compliance.

Pinos Altos has retained QA/QC documentation and records. The auditors observed that QA/QC reports cited in the initial audit report, as well as the accompanying completion report for corrective actions, have been retained.

Appropriately qualified personnel reviewed and approved the construction projects completed during the recertification period. The QA/QC reports from the subcontractor, as well as the letters from AEM stating that the cyanide facilities have been built per the design, have been signed and stamped by qualified engineers with a Mexican Cedula Profesional, which is the method for professional registration in Mexico.

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

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 4.9**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has implemented written procedures for surface water, groundwater and wildlife monitoring. Pinos Altos conducts water and wildlife monitoring at established frequencies from monthly to quarterly that are sufficient to characterize the medium being monitored and to identify changes in a timely manner.

Pinos Altos does not have direct discharges of process water to surface water. Pinos Altos monitors for cyanide in surface water and groundwater downgradient of the site on a regular basis where any potential indirect discharges from the cyanide facilities could be detected. Pinos Altos monitors four watercourses and seven monitoring wells downgradient of the cyanide facilities.

Sampling and analytical protocols have been developed by qualified personnel, including the Health, Safety and Environmental Manager. The water quality sampling procedures have been developed by an accredited laboratory that is responsible for conducting water sampling. The procedures describe sampling locations, steps, equipment, containers, preservatives, chain of custody, cyanide species to be analyzed, shipping instructions, quality control, and data evaluation. Weather and other field conditions at the time of sampling are documented in the field forms. The auditors verified compliance by reviewing the monitoring procedures, as well as completed field forms and chains of custody, from throughout the recertification period.

Pinos Altos monitors for wildlife mortalities daily at the process facilities. Inspections are documented on field forms. Pinos Altos staff reported no mortalities during the recertification period. The auditors reviewed completed inspection forms from throughout the recertification period to verify compliance.

PRINCIPLE 5 – DECOMMISSIONING

Protect Communities and the Environment from Cyanide through Development and Implementation of Decommissioning Plans for Cyanide Facilities.

Standard of Practice 5.1: **Plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife and livestock.**

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 5.1**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has prepared a Closure Plan that includes the appropriate cyanide facilities and decommissioning activities. Residual reagent cyanide will be used, returned to the vendor, or shipped to another AEM mine. Equipment and piping will be rinsed, and the cyanide neutralized. The heap leach pad and ponds will be rinsed. Water recovered from the tailings facilities will be collected, monitored, and subjected to cyanide destruction if necessary. The operational INCO system will also be used to treat rinse solutions.

The Closure Plan includes a Gantt chart showing a reasonable sequence of activities over a three-year closure period. The Closure Plan indicates a minimum post-closure period of five years.

Pinos Altos presented the current Closure Plan and two previous versions to the auditors as evidence of review and revision.

Standard of Practice 5.2: **Establish an assurance mechanism capable of fully funding cyanide related decommissioning activities.**

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 5.2**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has developed an estimate of the cost to fully fund third party implementation of the cyanide-related decommissioning measures as part of their Asset Retirement Obligation (ARO) process. The cost estimate was based on third-party rates, as evidenced by contractor quotes. Pinos Altos presented four ARO cost estimates prepared during the recertification period as evidence of review and revision. Pinos Altos has established self-guarantee as the financial assurance mechanism. A qualified financial auditor, certified by the Mexican Institute of Public Accountants, prepared a statement that the operation has sufficient financial strength to fulfil this obligation as demonstrated under Section 40 of the US Code of Federal Regulations 264.143(f)). The amount of self guarantee was approximately double the subset of cyanide-related decommissioning costs.

PRINCIPLE 6 – WORKER SAFETY

Protect Workers' Health and Safety from Exposure to Cyanide

Standard of Practice 6.1: **Identify potential cyanide exposure scenarios and take measures as necessary to eliminated, reduce and control them.**

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 6.1**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has developed procedures for cyanide-related tasks to minimize worker exposure. These procedures cover cyanide management, detox, thickeners, filtration, heap leaching, tank leaching, maintenance, Merrill Crowe plant, milling, plant, paste plant, flotation, and environmental activities. Each procedure covers the work objective, scope, responsible persons, definitions, safety measures, PPE, tools, materials, precautions, and procedural steps. Section 4.1 of each procedure lists the required PPE for the task. There is a specific pre-work checklist for preparing cyanide. Work observations cards are also used as pre-work inspections. The auditors reviewed these procedures, preparation checklists, and cards to verify compliance.

Pinos Altos has implemented a management of change procedure to evaluate process changes for potential impacts on worker health and safety. The procedure is accompanied by a form that must be signed by the Safety and Security Department and the Environmental Department. The auditors reviewed signed forms to verify compliance.

Pinos Altos has solicited and considered worker input in developing and evaluating health and safety procedures. This input has been obtained during regular 5-minute talks and work observation by supervisors. Worker comments and supervisor responses are tracked in the Intelix software. The auditors reviewed tracking spreadsheets and work observation cards to verify compliance.

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

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 6.2**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has determined that the appropriate pH for limiting the evolution of HCN gas is from 8.5 to 11.3. Pinos Altos monitors pH limits via six in-line pH monitors and through manual sampling. The auditors reviewed tables and time series graphs of pH data to verify compliance.

Pinos Altos has identified areas and activities where workers may be exposed to cyanide more than 10 parts per million (ppm) on an instantaneous basis and 4.7 ppm continuously over an 8-hour period. The areas with a risk of HCN exposure are plant cyanide preparation area, grinding, leach tanks, Merrill Crowe circuit, detox tanks, intensive leach circuit, refinery, laboratory, flotation, heap leach cyanide preparation area, and the heap leach pad. Procedures and signage require the use of PPE and HCN monitoring in these areas.

Pinos Altos has uses six fixed and fifteen portable HCN monitors that are set at a single alarm of 4.7 ppm for evacuation. The auditors observed these monitors and randomly checked them to verify they were functioning. Pinos Altos calibrates these monitors every six months in accordance with the manufacturer's requirements. The auditors reviewed calibration records showing the actual calibration results to verify compliance.

Pinos Altos has installed warning signs regarding the presence of cyanide and the required PPE use. The auditors observed signage detailing all risks present in an area (including cyanide), the required PPE, the Reglas que Salvan Vidas (Rules that Save Lives), the prohibited activities (e.g., no smoking, no food/drinking), and the required safety measures.

Pinos Altos has installed showers, low pressure eye wash stations and dry powder/non-acidic sodium bicarbonate fire extinguishers at strategic locations in the cyanide facilities. The auditors randomly checked the showers, eyewashes, and extinguishers, and reviewed their inspection records, to verify compliance.

Pinos Altos has labelled unloading, storage, mixing and process tanks and pipes containing cyanide to alert workers of their contents. Pipeline labels included arrows indicating the direction of flow.

Pinos Altos has provided Material Safety Data Sheets (MSDS) in each of the antidote kits in the cyanide facilities. The MSDS were in Spanish, the language of the local workforce.

Pinos Altos has developed incident investigation procedures for worker and environmental accidents. The Pinos Altos staff stated that there have not been any cyanide-related worker accidents in the recertification period. The auditors reviewed examples of a non-cyanide vehicle accident investigation and an investigation for a minor spray of cyanide solution to verify that both procedures have been implemented.

Pinos Altos has not implemented dyed high-strength cyanide solution, although the auditors confirmed they are aware of the deadline for implementation.

Standard of Practice 6.3: **Develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.**

The operation is

☒ **in full compliance with**

☐ in substantial compliance with **Standard of Practice 6.3**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has provided oxygen bottles and antidote kits at six locations: cyanide preparation area at the plant, Merrill Crowe circuit, laboratory, heap leach ponds, mill control room, and the onsite clinic. Three types of cyanide poisoning antidotes were observed: amyl nitrite, sodium thiosulfate, and sodium nitrite. Oxygen bottles with mouth pieces were provided with each kit. Automated external defibrillators were present in the clinic and ambulances. The auditors inspected these items to ensure availability and that antidotes were stored at the correct temperature and were not expired. The auditors also reviewed monthly inspection forms for these items.

All staff carry radios and land lines are available in many locations for communication during emergencies. Sirens are also used to alert workers of emergencies. The auditors observed staff with radios during the site visit.

Pinos Altos has developed plans to respond to cyanide exposures. These documents describe the procedures for emergency response, spill response, inhalation of cyanide gas or skin contact with liquid or gaseous cyanide, and include notification procedures, PPE requirements, personnel decontamination, and antidote administration.

Pinos Altos has onsite capabilities to provide first aid and medical treatment to workers exposed to cyanide, including an onsite clinic, two ambulances, a fire truck, and a brigade equipment storage area. The clinic is staffed by three doctors and four paramedics such that between shifts and rotations there is always at least one of each on duty. The brigade equipment includes self-contained breathing apparatus (SCBA), encapsulated suits, portable decontamination pools, and spill kits, among other items. The auditor inspected the clinic, ambulances, firetruck, and brigade equipment, as well as inspection forms for these items, to ensure that they were functioning.

Pinos Altos has developed a procedure to transport workers exposed to cyanide to a regional qualified hospital in the city of Cuauhtemoc. The procedure covers both land and air transport.

Pinos Altos has had two formal agreements with regional hospitals in Chihuahua City and Cuauhtemoc during the recertification period. The letter agreements were countersigned by the hospitals. Pinos Altos is confident that the hospitals have adequate qualified staff, equipment, and expertise to respond to cyanide exposures

Pinos Altos has conducted three mock drills during the recertification period that cover both exposures and releases to test response procedures. Drills were followed by a briefing and report to supervisors. Areas for improvement were identified in each drill report along with an action plan to complete the improvements. The drill reports included attachments with photographs, training lists, etc. to verify completion of the improvements. The auditors reviewed the mock drill reports to verify compliance.

PRINCIPLE 7 – EMERGENCY RESPONSE

Protect Communities and the Environment through the Development of Emergency Response Strategies and Capabilities

Standard of Practice 7.1: Prepare detailed emergency response plans for potential cyanide releases.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 7.1**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has developed emergency planning documents to address accidental releases of cyanide. The primary document is the Contingency Plan, which contains the Emergency Response Plan (ERP). This ERP has been converted to an interactive spreadsheet for online use. In addition, Pinos Altos has developed three supplemental procedures, a manual for the tailings deposit, and a plan for the leach pad that address emergency response for cyanide spills and exposures.

The Pinos Altos emergency planning documents address all the potential cyanide failure scenarios required for the Code. These are: HCN releases; transportation accidents; unloading and mixing releases; fire and explosion releases; pipe, valve and tank ruptures; pond and impoundment overtopping; power outages and pump failures; uncontrolled seepage; cyanide destruction problems; and failure of the tailings impoundment and heap leach facility.

Transportation-related emergencies are addressed by the certification of the land transporter under the Code via their inclusion in the certification of the Chemours Mexico supply chain. However, the Pinos Altos emergency brigade will assist with controlling the scene of a transportation emergency within 30 km of the mine, but the producer/transporter is responsible for the release itself.

Pinos Altos has developed an evacuation procedure of the overall mine and the cyanide emergency spill plan specifically addresses evacuation of the plant. Pinos Altos does not anticipate a need to evacuate communities based on a risk study that concluded no communities were within the zone of potential impact from cyanide spills or HCN releases. Use of cyanide antidotes and first aid measures are covered under the procedure for cyanide poisoning.

Standard of Practice 7.2: Involve site personnel and stakeholders in the planning process.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 7.2**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has involved its workforce in cyanide emergency response planning via the regular 5-Minute Talks and feedback during work observation. The auditors reviewed a tracking spreadsheet and work observation cards to verify compliance.

Pinos Altos has made communities aware of the nature of the risks associated with accidental cyanide releases even though Pinos Altos has concluded that no communities were within the zone of potential impact from a release at the mine. Pinos Altos has not designated any onsite roles for offsite entities in emergency response, other than the hospital in Cuauhtemoc treating patients brought to them, nor are community evacuations or provision of alternative water supplies anticipated. Therefore, there are no direct external stakeholders in emergency planning. Nonetheless, Pinos Altos has communicated continually via monthly community meetings and annual trainings with community leaders, firemen, medical staff, and Red Cross members regarding cyanide-related risks, emergencies, and responses. The auditors reviewed training lists and community relations documentation from throughout the recertification period to verify compliance.

Standard of Practice 7.3: Designate appropriate personnel and commit necessary equipment and resources for emergency response.

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 7.3**

☐ not in compliance with

Summarize the basis for this finding:

The Pinos Altos emergency response documents contain the required elements. The three key documents are the ERP within the Contingency Plan, Emergency Plan (interactive spreadsheet), and the Crisis Management Plan. General coordinators and incident commanders are designated and have the authority to commit resources to respond to emergencies. Brigade members and their call out information are specified. Brigade duties and training are defined. Emergency equipment and inspection protocols are listed. Pinos Altos has performed routine inspections of this equipment throughout the recertification period. Pinos Altos has not designated any roles for offsite entities in emergency response, other than the hospital in Cuauhtemoc to treat patients brought to them, and therefore none have participated in mock drills or exercises. The hospital in Cuauhtemoc is aware of its responsibilities, as evidenced by the letter between the mine and hospital. The auditors reviewed the emergency response documents and interviewed brigade leaders to verify compliance.

Standard of Practice 7.4: Develop procedures for internal and external emergency notification and reporting.

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 7.4**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has prepared procedures and contact lists for notifications and media relations during cyanide emergencies. Between the interactive spreadsheet Emergency Plan and Crisis Management Plan, procedures and contact information are listed for management, regulatory agencies, outside response providers, medical facilities, corporate staff, and federal and state governments. The Community Relations Supervisor maintains a detailed contact list for local communities. The auditors verified compliance by interview with the Community Relations Supervisor and review of the contact lists in the plans.

Standard of Practice 7.5: **Incorporate in response plans and remediation measures monitoring elements that account for the additional hazards of using cyanide treatment chemicals.**

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 7.5**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has developed a procedure that describes remediation measures. Spilled solution is to be pumped and impacted soil is to be excavated. Neutralization is not included. Impacted water or soil are to be returned to the process circuit and/or placed on the heap leach facility.

Bottled water is provided at the mine and there are no nearby communities whose water supply could be affected by a release.

The interactive spreadsheet Emergency Plan specifically prohibits the use of use of sodium hypochlorite, ferrous sulphate and hydrogen peroxide to treat cyanide that has been released into surface water.

Pinos Altos has planned for environmental monitoring for possible cyanide releases. Pinos Altos has developed an Environmental Management Plan, as well as a sampling and analysis procedure that contain monitoring methods, likely sampling locations, field procedures, and laboratory procedures.

Standard of Practice 7.6: **Periodically evaluate response procedures and capabilities and revise them as needed.**

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 7.6**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has reviewed and evaluated the emergency response documents over time. There has been at least one review and evaluation of the ERP within the Contingency Plan, the interactive spreadsheet Emergency Plan, and the Crisis Management Plan during this recertification cycle. The Contingency Plan states that the plan is subject to modifications or additions that derive from any application of the plan. Pinos Altos has conducted three mock drills during the recertification cycle that covered both exposures and releases. All three drills were followed by a briefing and report to supervisors. Pinos Altos staff indicated that modification of the emergency planning documents has not been needed after drills or implementation. The auditors reviewed these documents and interviewed staff to verify compliance.

PRINCIPLE 8 – TRAINING

Train Workers and Emergency Response Personnel to Manage Cyanide in a Safe and Environmentally Protective Manner

Standard of Practice 8.1: Train workers to understand the hazards associated with cyanide use.

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 8.1**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has trained all personnel who may encounter cyanide in cyanide hazard recognition, including visitors, providers, contractors, and staff. Training materials include a video, an AEM presentation on dangerous materials, and another presentation on Mexican regulations regarding dangerous chemicals. The training materials cover how to recognize cyanide, risks associated with cyanide, symptoms and effects from exposure to cyanide, and first aid treatment for cyanide exposure. The auditors reviewed training records to verify compliance.

Pinos Altos regularly conducts refresher training according to annual training schedules and personnel matrices by department. The auditors reviewed schedules, matrices, and training records to verify compliance.

Pinos Altos has retained cyanide training records in hard copy and electronic formats. The auditors reviewed the hard copies, as well as use of the software to retrieve training records, to verify compliance.

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

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 8.2**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has trained workers to perform their normal production tasks, including unloading, production and maintenance, with minimum risk to worker health and safety in a manner that prevents unplanned cyanide releases. Training is completed according to a formal program of annual schedules and matrices by department.

Pinos Altos has used their operating procedures as training materials for each job involving cyanide. Workers have been trained prior to working with cyanide. Workers must pass written exams and be observed by supervisors in the field for approximately 1.5 months before being allowed to work independently.

Pinos Altos has provided refresher training on cyanide management to ensure that employees continue to perform their jobs in a safe and environmentally protective manner. Cyanide task training is redone annually according to training schedules and matrices by department and uses the same materials and exams as the initial training. Supervisors complete documented worker observations throughout the year for refresher purposes.

Pinos Altos has used appropriately qualified personal to provide task training relating to cyanide management activities. Training is provided by two dedicated training staff with 18 and 9 years of experience, respectively. Both have been trained in communication methods, instruction methods, and presentation effectiveness.

Pinos Altos has retained training records throughout an individual's employment using the Sistema 3 software. The records include the employee name, the trainer's name, the procedure title, number of hours per course, and exam results.

The auditors reviewed training schedules and matrices, written exams, observations forms, and worker training histories from the Sistema 3 software for selected workers to verify compliance. The auditors also interviewed these workers in the field to verify information in the records.

Standard of Practice 8.3: **Train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide.**

The operation is

☒ **in full compliance with**

☐ in substantial compliance with **Standard of Practice 8.3**

☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has trained personnel responsible for cyanide unloading, processing and maintenance in the procedures to be followed if cyanide is released, as well as in decontamination and first aid procedures. Response actions to exposures and releases are divided between operators and the brigade. Operators are trained in decontamination and application of the amyl nitrate antidote, as well as initial spill response. Brigade members have the same training but are additionally trained in use of SCBA and specialized spill control equipment. The training is provided annually using the same materials and exams such that new staff and existing staff receive initial and refresher training simultaneously. The auditors reviewed training schedules, training matrices, and training records to verify compliance.

Pinos Altos has trained its brigade and commanders in the procedures regarding cyanide contained within the Contingency Plan and the use of response equipment. The training includes: fire fighting; SCBA use and maintenance; hazardous materials; hazmat injuries; vehicle extraction; vertical rescue; confined space/heights rescue; pre-hospital care; and mine rescue. The brigade commanders have received additional specialized training from external vendors. The auditors reviewed training records and certificates to verify compliance.

Pinos Altos has not designated any onsite roles for offsite emergency responders; therefore, they have not been made familiar with the contingency plan.

Pinos Altos has periodically conducted mock drills that cover both exposures and releases for training purposes and has evaluated them to determine if personnel have the knowledge and skills required for effective response. The mock drills in 2015, 2016, and 2017 covered the entire response process for worker exposure; the 2017 drill also covered spill response and containment. The 2016 and 2017 drills identified training in the contingency plan, antidote use, and establishment of zones as inadequate and corrective actions were completed in a timely manner. The auditors reviewed mock drill reports, including follow-up actions, to verify compliance.

Pinos Altos has retained training records throughout an individual's employment using the Sistema 3 software. Brigade training records are also kept as hard copies by the Emergency Commander. The training records list the employees' names, the instructor's name, the course title, number of hours, and exam results. The auditors reviewed training records for selected staff to verify that ongoing training has been completed for cyanide exposures and releases, as well as for emergency planning.

PRINCIPLE 9 – DIALOGUE

Engage in Public Consultation and Disclosure

Standard of Practice 9.1: Provide stakeholders the opportunity to communicate issues of concern.

☒ **in full compliance with**

The operation is
☐ in substantial compliance with **Standard of Practice 9.1**
☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has provided opportunities for stakeholders to communicate issues of concern. The operation maintains an open-door policy at the mine and has established community offices in the local villages of Yepachi and Jesus del Monte. Promotoras (local volunteer activists), municipal leaders, and newspaper publishers have contact information for the community relations supervisor. AEM publishes a monthly magazine Somos Agnico with an email address at hola@somosaginco.com. At the corporate level, Agnico Eagle has a complaints hotline accessible collect at 770-776-5607, fax at 770-409-5008, email at reportline@tnwinc.com or a web form at http://www.tnwinc.com/webreport.

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

☒ **in full compliance with**

The operation is
☐ in substantial compliance with **Standard of Practice 9.2**
☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has provided opportunities to interact with stakeholders and has provided them with cyanide-related information. The community relations supervisor has made monthly rounds to 13 communities near the mine to give presentations on cyanide risks, procedures for community attention, and the Code. Pinos Altos has offered tours to the public upon request and the community relations supervisor stated that there have been approximately 6 or 7 tours annually.

Standard of Practice 9.3: Make appropriate operational and environmental information regarding cyanide available to stakeholders.

☒ **in full compliance with**

The operation is
☐ in substantial compliance with **Standard of Practice 9.3**
☐ not in compliance with

Summarize the basis for this finding:

Pinos Altos has developed written descriptions of how their activities are conducted and how cyanide is managed. A pamphlet and poster on cyanide management is available at the mine, from the community relations supervisor, and at two community relations offices.

Pinos Altos has disseminated information on cyanide in verbal form even though most of the population is literate and speaks Spanish. The presentations to the local communities during the monthly rounds are accompanied by verbal explanations and pictures.

Pinos Altos has developed mechanisms to make information available to the public on confirmed cyanide releases or exposures, although the operation has not had such incidents during the recertification period. The procedures for making information public for any incident, including cyanide-related, are defined in the Crisis Management Plan. As evidence that the operation would make cyanide-related incidents public if they occurred, the auditors reviewed two corporate annual sustainability reports that included discussion of cyanide releases and exposures at Agnico Eagle mines other than Pinos Altos.

Signature Page

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