

VELADERO MINE- BARRICK GOLD CORPORATION

Cyanide Code Audit Summary Audit Report

PROJECT NO. 0446872

OCTOBER 2018

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SUMMARY AUDIT REPORT

1 GENERAL SUMMARY

1.1 INFORMATION ON THE AUDITED OPERATION

Name of Mine: Veladero Mine
Name of Owner: Minera Argentina Gold S.R.L.
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1.2 LOCATION DETAIL AND DESCRIPTION OF OPERATION

Minera Argentina Gold S.R.L (MAG) is a limited liability company incorporated under the laws of Argentina, governed by a Joint Venture Agreement entered into on June 30, 2017, between Barrick Gold Corporation, which has its headquarters located in the city of Toronto, Canada and Shandong Gold, a Chinese Mining Company whose headquarters are located in the province of Shandong. MAG operates Mina Veladero, located in the province of San Juan, in the Republic of Argentina.

The main activity of MAG is mining, including prospecting, exploration and exploitation of minerals. Veladero Mine (Mine) includes the exploitation of gold and silver mineral resources by traditional methods including open pit, crushing, heap leaching, Merrill-Crowe type processing plants and supplementary facilities. These methods are used to obtain gold/silver bearing material as a final product.

Veladero is located in the northeast of Argentina, in the province of San Juan, in the western watershed of Andean Cordillera, 5 km from the western border with Chile. The site is at an approximate elevation of between 3,800 and 5,000-meters above sea level (masl).

The mine is located in the district of Iglesia, approximately 370 km northeast of the city of San Juan by road.

Veladero was certified as fully compliant with the Code on 13th December 2007, and last recertified in March 13, 2015.

1.3 OVERALL AUDITOR'S FINDING

Veladero had three cyanide related incidents in the recertification process:

- 2015: on 12 September 2015 due to severe temperature fluctuations, a relief valve in a pregnant solution pipe got broken. The released solution saturated the mineral in the leach pad, which resulted in a landslide that reached a non-contact storm water channel. The storm water channel's discharge gate was open, as snow had been melting the previous days. The release was discovered on 13 September 2015. Only the samples collected on 13 September from the solution reached the Potrerillos River. According to the results of the monitoring performed downstream, no cyanide concentrations above 0.1 mg/l (the legal limit in Argentina for drinking water) were detected beyond the mine's direct area of influence. Only the samples collected from Las Traguas river (within the mine site) reported total cyanide concentrations above 0.1 mg/l. All water samples collected on 14 and 15 September from downstream reported concentrations below 0.0285 mg/l. All water samples collected on 16 September 2015 and later reported total cyanide concentrations below the laboratory detection limit. The fauna inspections performed downstream did not report any damage on aquatic life.

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- 2016: a piece of ice fell on a corrugated pipe separating two sections that were coupled. The ice was melting at the time of the incident due to season change. The released solution saturated the mineral, which resulted in a landslide exceeding the pad limits.
- 2017: a pipe coupling started to leak. The leak eroded the floor under the pipe and caused the full coupling failure; The increased flow resulted in further erosion and a chain failure of five solution pipes. The solution spill did not reach beyond the leach pad area.

The mine has implemented the following corrective measures as a result of these incidents:

- All valves are now covered with protective casing to reduce exposure to extreme weather. Temperature and pressure sensors were also installed.
- Corrugated pipes have been replaced with HDPE thermo-fused pipes in the areas where the incidents took place.
- The non-contact storm-water channel was relocated away from the leach pad and the level of the berms was raised.
- The former storm water channel was converted in an emergency channel, lined and connected to the emergency ponds
- A video survey system was installed at different points of the leach pad, including the areas where the incidents took place.
- The leach pad slope was modified to prevent landslides
- A drop box was installed to distribute the flow evenly among the pipes that carry solution from upper areas of the pad to the AASR1 (pregnant solution storage area 1).
- The solution pipes were covered with soil to protect them from impacts.
- Construction of two additional emergency channels, lined and connected to the emergency pond.

This operation is

- in full compliance
- in substantial compliance *(see below)
- not in compliance

With the International Cyanide Management Code.

- * For mining operations seeking Code certification, the Corrective Action Plan to bring an operation in substantial compliance into full compliance must be enclosed with this Summary Audit Report. The plan must be fully implemented within one year of the date of this audit.

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Names and Signatures of Other Auditors:

Carlo Vargas (Mining Technical Auditor) _____

Date(s) of Audit: 5 to 8 March 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 Summary Audit Report accurately describes the findings of the verification audit. I further attest that the verification audit was conducted in a professional manner in accordance with the International Cyanide Management Code Verification Protocol for mining operations and using standard and accepted practices for health, safety and environmental audits.

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This operation is

- in full compliance
- in substantial compliance
- not in compliance

with the International Cyanide Management Code.

2.1 **PRODUCTION: ENCOURAGE RESPONSIBLE CYANIDE MANUFACTURING BY PURCHASING FROM MANUFACTURERS THAT OPERATE IN A SAFE AND ENVIRONMENTALLY PROTECTIVE MANNER.**

2.1.1 **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 with
- in substantial compliance with Standard of Practice 1.1
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Since 1 January 2009, Orica has supplied cyanide to the Veladero. Cyanide is produced at the Yarwun Plant in Queensland, Australia. This plant was initially certified as code compliant on 28 November 2006 and was latest recertified as code compliant on 22 February 2017.

The supply contract was latest renewed in June 2018, expires in December 2019, and can be renewed for 18 months.

The cyanide supply contract maintains the same requirements as prior certification cycles regarding compliance with the Code. The contract requires that Orica maintain full compliance with the International Cyanide Management Code:

- Clause 13.1, 'seller shall maintain its compliance with the International Cyanide Management Code'; and
- Appendix A International Cyanide Management Code Compliance.

Orica retains all responsibility for the cyanide from the production site to its delivery at Veladero.

Orica's production operations at their Yarwun Plant in Queensland, Australia were first certified as code compliant on 28 November 2006; the facility has maintained the certification with the latest recertification was granted in February 2017.

According to the personnel interviewed there were no events that caused interruption of service from Orica and no other providers were used. No deviations were noted during the review of the procurement records.

2.2 **TRANSPORTATION: PROTECT COMMUNITIES AND THE ENVIRONMENT DURING CYANIDE TRANSPORT.**

2.2.1 **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.**

The operation is

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- in full compliance with
- in substantial compliance with Standard of Practice 2.1
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The global contract establishes that the product is to be delivered at the mine, with all handling and transport responsibilities to be carried by the supplier (Orica), except unloading at the mine; and that all transport and distribution operations of the supplier their subcontractors must comply with the Cyanide Code requirements (current and future).

The supply chain includes the following elements:

- Orica's Land transport in within Australia, from the production site to the Melbourne and Brisbane Ports (last certified 26 January 2015, the recertification audit was on January 2018, and according to the reviewed communications the report in full compliance was being prepared at the time of the audit)
- Orica's Global Marine Supply Chain, including shipping companies and the Buenos Aires port (among other) last certified in January 2018.
- Orica's Latin America Supply Chain including Land transport from Buenos Aires Port to the mine (last certified on January 2018).
- Within Argentina, solid sodium cyanide is transported by road to Veladero by Cruz del Sur, which has been fully Code compliant for the duration of this recertification period and last recertified on 28 February 2017.

According to the reviewed contract, Orica is responsible for itself and its subcontractors, including transportation, for Code compliance. This responsibility extends from the production site and until the cyanide enters the mine property.

2.2.2

Standard of Practice 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 with
- in substantial compliance with Standard of Practice 2.2
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Since January 2009, the cyanide supply contract for the mine is with Orica. The cyanide supply contract requires that the supply chain be certified as fully compliant under the Code. The Code requires adequate emergency response plans and capabilities to be in place.

The certified supply chain includes the following elements:

- Orica's Land transport in within Australia, from the production site to the Melbourne and Brisbane Ports (last certified 26 January 2015, the recertification audit was on January 2018, and according to the reviewed communications the report in full compliance was being prepared at the time of the audit)
- Orica's Global Marine Supply Chain, including shipping companies and the Buenos Aires port (among other) last certified in January 2018.
- Orica's Latin America Supply Chain including Land transport from Buenos Aires Port to the mine (last certified on January 2018).
- Within Argentina, solid sodium cyanide is transported by road to Veladero by Cruz del Sur, which has been fully Code compliant for the duration of this recertification period and last recertified on 28 February 2017.

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This supply chain remained certified during the Veladero re-certification period.

Veladero maintains full chain of custody records for the delivery of NaCN as part of the delivery documentation. The procurement department keeps copies of the relevant documentation regarding the code compliance, status of the supply chain from Yarwun to the mine site; this evidence was made available to the auditors. This comprises Bills of Lading showing the chain of custody from Yarwun to Buenos Aires showing the chain of custody from Buenos Aires to the mine. Orica's supply chain from Yarwun to the Port of Brisbane is fully certified under the Code. Its Latin America supply chain from the Port of Brisbane to the mine is also fully certified under the Code.

2.3 **HANDLING AND STORAGE: PROTECT WORKERS AND THE ENVIRONMENT DURING CYANIDE HANDLING AND STORAGE.**

2.3.1 ***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.***

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 3.1
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The cyanide unloading, storage, and mixing facilities have not been modified since the previous recertification audit. They are located away from people and surface waters and were found to be fully compliant the previous reports. These were maintained in good condition in the intervening three years since recertification. The cyanide solution tanks high-level alarm is set at 80% tank capacity. There is also a high-high alarm. Audible and visual alarms are also located in the plant's control room and in the remote control room.

The areas secondary containments are have been maintained in good condition in the intervening 3 years since recertification. Secondary containments are formed of reinforced concrete painted with epoxy sealant paint. All construction and movement joints are sealed. These materials are suitable to provide a competent barrier to leakage.

The cyanide storage is well ventilated, under a roof, with a concrete floor, in a secure area and away from incompatible materials. The cyanide store has been maintained in good order.

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

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/Deficiencies Identified:

Cyanide bags and boxes are rinsed at the mixing area, water is collected in the mixing tank and packaging materials are then collected by the environmental department and disposed of as hazardous waste in San Juan through incineration. Chains of custody reflecting the box numbers and, related purchase orders are used as internal controls until they are sent for disposal; shipment manifests are

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also used to document the destruction. These activities are supervised by Valero's Environmental Department.

To date no problems/incidents with damaged boxes or during handling activities on site have reportedly occurred:

- a) The cyanide mixing procedure PRO-PVL-116 contains detailed information regarding the operation of all valves during cyanide mixing.
- b) The cyanide mixing procedure details the handling requirements of the cyanide containers to ensure they are not damaged during handling.
- c) Boxes are stacked to a maximum stowage of three in the storage area, which complies with Orica's recommendations
- d) Veladero has a spill response procedure to ensure timely cleanup of any spills during the handling of cyanide boxes; spill collection materials are readily available at the storage area and the mixing area has secondary containment with sumps and pumps to collect any spill and return it to the tanks.
- e) During the cyanide unloading and mixing processes, all operators use Tyvek suits and dust masks. Portable HCN monitors are also used at the warehouse and during the mix. Operators are in two-way radio communication with the control room, from which the operation can be observed by CCTV.

2.4 OPERATIONS: MANAGE CYANIDE PROCESS SOLUTIONS AND WASTE STREAMS TO PROTECT HUMAN HEALTH AND THE ENVIRONMENT.

2.4.1 *Standard 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 with
 in substantial compliance with Standard of Practice 4.1
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Veladero has a suite of operating procedures that were certified as fully compliant in 2008. Since then, they have been updated regularly. The operation has not changed although the leach pad has expanded.

- Plant Startup after an Emergency Stop or a Scheduled (Stop Arranque de Planta por parada de emergencia o programada), Rev 09 10/02/16
- Transfer of Sodium Cyanide Solution (Transferencia de cianuro de sodio en solución) Rev 9 10/02/18
- pH regulation in case of pH drop (Regulacion del pH en caso de Disminucion del Mismo) Rev 10 10/02/2018
- Balance of Flow and Tank Levels (Balance de flujos y niveles de los tanques) Rev 7 10/02/18
- Management and Control of Solution Samplers (Manejo y control de muestreadores de solución) Rev 8 10/02/18
- Pumps Control (Encendido y apagado de bombas) Rev 6 10/02/18
- Sump Pumps Operation (Operacion de las Bombas de Sumidero) Rev 7 10/02/18
- Replacement of filtering fabric of the Metpor Filter (Reemplazo de telas filtrantes del filtro Metpor) Rev 8 10/02/18
- Chain of Custody for Cyanide Packages (Cadena de Custodia Embalajas de Cianuro) Rev 7 10/02/18
- Emptying of Preparation and Storage Tanks (Vaciado de los tanques de preparación y almacenamiento) Rev 7 10/02/18
- Barren Solution Distribution Network Operation (Operación de la red de distribución de solución barren) Rev 6 10/02/18

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- Sludge Evacuation System to the Leach Pad (Sistema de evacuación de lodos) Rev 6 10/02/18
- Visual Control of Tank Level (Control visual de niveles de tanques) Rev 6 10/02/18
- Operation of the Make Up Water System (Operación del sistema de reposición de agua) Rev 8 10/02/18
- Cyanide Solution Preparation (Preparación de solución cianurada (cianuro de sodio)) Rev 11 10/02/18
- Operation of the Clarifying Metpor Filters (Operación de los filtros clarificadores Metpor) Rev 8 10/02/18
- Final Disposal of Packages that were in contact with Sodium Cyanide (Disposición final de embalajes, bolsas y recipientes contaminados con cianuro de sodio) Rev 11 10/02/18
- How to increase flow towards the Leach Pad (Modo de Operacion para Incrementar Caudal hacia el Valle de Lixivicion) Rev 6 10/02/18
- Delivery of Equipment for Repair and Maintenance, Leach Pad, and Merrill-Crowe Plant (Entrega de equipos para mantenimiento, reparación del Valle Lixiviación y Planta Merril Crowe) Rev 7 10/02/2018

The Action Plan for the Leach Pad operation, developed by Vector in 2007, is an operating manual developed for the operation of the leach pad. Descriptions of various emergency levels and specific action plan criteria have been developed. There is also a procedure for the management of solution from the underdrain system at the toe of the Valley Fill Heap Leach should cyanide be detected in the Primary Sump to prevent discharge of cyanide solution to the Contingency Pond or the Potrerillos River. The procedure includes the description of the water management strategies and pump capacities and detailed information on the installed equipment.

Veladero has also developed plans and procedures that cover the safe operation of the entire system of cyanide management facilities. Inspection activities are covered under the following procedures:

- Plan of Operations for the Monitoring, Maintenance and Contingency (POMM);
- MAM-PLV-008 Environmental Monitoring;
- STE-PVL-161 piezometer monitoring;
- STE-PVL-160 Inclinator Monitoring;
- MAP-PVL-100 Maintenance of leach pad;
- PRO-PVL-228 Visual Inspections of the leach pad; and
- PRO-JVL-002 Emergency Action Plan.

Inspections of the embankment of the leaching system were carried out by a dam expert in December 2017. This is carried out annually and includes:

- General leach pad inspection
- Subdrainage System
- SP Pool and Contingency Pool
- Waterproofing System
- Drainage system
- Solution management systems
- Multiple pump systems
- Leakage collection and recovery system
- Emergency pools
- Berm closing and contingency
- Surface Water Management System
- Leach pad wall

Also, visual inspections are planned in the leach pad (PRO-PLV-228, dated 12/26/2017) made by representatives from different departments (environmental, process, maintenance, geotechnical)

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- Mineral discharge inspection
- Valves and drainage
- Sub drain and contingency basins
- Pumps
- Sludge pools
- Bypass tanks
- Leak collection and recovery systems
- Collector pipes
- Leach pad perimeter
- Contingency channel

Preventative Maintenance activities are covered under following procedures:

- Delivery of Equipment to Maintenance and Repair Leach Pad, and Merrill-Crowe Plant
- Procedure for Assigning Priorities for the Repair of Equipment
- Work with Equipment in Contact with Cyanide
- Training and Induction Specifically for the Maintenance Personnel for the International Cyanide Management Code

Maintenance personnel receive specific training for work on the cyanide equipment. Specific work instructions are provided for each cyanide related task. Safe Job Assessments are completed by the maintenance personnel for each cyanide related task documenting hazards and actions taken to assure safe and environmentally sound operation. Regular observations are made by supervisors of the maintenance personnel and documented on forms -Planned Performance Observation.

Veladero has developed and implemented a procedure to identify and evaluate changes in operation related to safe management of cyanide. This procedure was developed and is followed as part of the ISO 140001 program and addresses any process change with the potential to affect the environment or worker safety. This procedure has been implemented over the past 3 years for changes that may affect on the safe management of cyanide.

A review of change management examples and interviews with personnel confirmed mine is using the change management process and that the process allowed for proposed changes to be reviewed for their potential impacts on the environment and worker health and safety by appropriate supervisors. The auditors reviewed the three completed change management forms, to verify compliance throughout the recertification period.

The Operation has developed various plans and manuals that address contingency procedures for situations when inspections and monitoring identify a deviation from design or standard operating procedures.

There are Operation Pre-Plans that cover emergency response tied to the Leach Pad and other cyanide handling areas; these define discharge levels, use of equipment like sump pumps, alarms, safety equipment, antidotes, environmental aspects, contacts, and possible scenarios (such as fires or seismic events). These documents specify actions for differing pond water elevations and describe where process solutions need to be conveyed to prevent discharge to the environment.

The Operation also has protocols to handle the cyanide containing solutions in case of operational stops:

- When the stop of operations is due to factors that do not affect the operation of the leach path, the barren and rich solutions continue their circulation in process circuit.
- In case of emergency shut down, cyanide addition is stop and the barren/reach solutions continue circulation in the solution circuit.
- In case prolonged stops, total energy interruptions or major failures in the pumping systems, the all solution is stored in the rich solution storage area.

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Veladero has maintained the system of inspections in place reviewed in prior certification periods. Inspections are completed by the Process Department and the Maintenance Department to evaluate the performance of the cyanide facilities. Inspections of various cyanide facilities is completed on a variable frequency depending on the specific issues involved and range from shift to annually as described above in Standard of Practice 4.1.3. In addition, supervisors conduct detailed monthly inspections of the cyanide facilities. These inspections are sufficient to ensure and document that the facilities are functioning within the design parameters. Inspections provide information on the performance of the leach pad leak detection systems and the solution levels.

The preventive maintenance program also ensures that the cyanide facilities are operating within the design parameters. The audit included review of shift logs maintained by operators, and daily, monthly, and yearly inspection forms.

The following areas are inspected on a periodic basis:

- a) Veladero constantly inspects the structural integrity and corrosion state of tanks; their operators also check for any evidence of leakage. A sample of inspections records was reviewed during the audit. Veladero contracts a specialized company for evaluating thickness of the plant components, being the latest in 2015, 2016 and 2017.
- b) Veladero operators inspect secondary containment and the drain valves control. The process department visually inspects the secondary containments to look for the presence of fluids and their available capacity, and verifies that drains are closed and locked, to prevent accidental releases to the environment.
- c) There is a spill collection system. The operation conducts inspections of leak detection and collection systems at leach pads and ponds.
- d) Veladero, inspect pipes, pumps and valves, to identify and correct any signs of deterioration or leakage.
- e) The pregnant solution pond has been filled with waste rock and is operated as a sump. The level of the solution is monitored in the pumping riser. The integrity and issues of the surface water channel are fixed by the inspecting operators where possible; otherwise, supervisors are notified for a work order to be written and implemented.

Veladero keeps inspections records with the dates, name of inspector and non-conformities found. The corrective actions and their priority are documented. Veladero has established shift, daily, monthly and quarterly inspection frequencies as part of the management procedures that were in place at the time of the original compliance audit in 2008 and during the previous recertification audits. These systems have been maintained over the intervening 3 years since recertification. These inspections are documented in shift logbooks and inspection forms. The documentation includes the name of the inspector, date and deficiencies observed. The inspection forms with identified deficiencies are reviewed by shift supervisors and sent to the maintenance-planning department to issue work orders through the Oracle-based maintenance program. The Maintenance Department has developed a procedure for the daily planning.

The Veladero preventive maintenance programs are designed to ensure the continuous and safe operation of the equipment for cyanide management. The elements necessary for cyanide safety, such as the cyanide monitors, are calibrated and tested on a weekly basis (i.e detectors are calibrated with 10 ppm standard gas). The high-level alarms for the cyanide mixing and storage tanks are tested on a 15-day basis. Other critical items for cyanide management include inspections of cyanide pumps and storage tanks on a 15-day basis. Back-up generator startup testing is performed on a weekly basis.

The site uses cyanide monitors, which are calibrated at least on a biannual basis. Veladero's staff carry out a check of calibration using calibration gases on a monthly basis.

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Veladero is independent of the electricity grid. It produces all the electricity required for its operation through 10 generators with a total capacity of 10 MW. Veladero only uses six or seven generators at any given time. The generators that are not being operated are part of a regular preventative maintenance and start up by a contractor. The additional generator capacity is structured to power emergency equipment necessary to maintain the containment and control of process solutions. Veladero has developed a procedure for the operation of critical plant equipment to ensure that containment of process solution is maintained. Inspection and testing records were reviewed. The procedure "Electric emergency plan" covers potential response activities for emergency electrical shutdown. This plan has been updated twice since first issued. Within the scenarios contemplated in the Plan are:

- Failure of electrical power supply in cyanide preparation area
- Failure in primary and / or secondary line
- Failure of one of the two underground lines that feed the MT bar of the CCM
- Failure of transformers
- Simultaneous failure of busway

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

The operation is

THIS PRACTICE DOES NOT APPLY TO THE OPERATION

- in full compliance with
- in substantial compliance with Standard of Practice 4.2
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

As described in Section 1, the scope of this audit was only for the heap leach operations performed by Veladero; therefore, this standard of practice does not apply.

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 4.3
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Veladero has developed a comprehensive, probabilistic water balance. It utilizes water balance models for process water management. Schlumberger Water Knight Piesold Consulting developed a model using Goldsim© software, which is currently the primary model used by Veladero for planning purposes.

The Goldsim© model was developed to determine whether existing facilities (water treatment plants, ponds and pumping transfer systems) are able to support the operating plan associated with the current Life of Mine (LOM) planning period.

This model is used for probabilistic simulations of water balance and most usually for prediction of makeup water requirements, volume in Riser, volume of uptake within the heap leach and transit time/draindown.

Additionally, Veladero has included the following considerations in their operation:

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- a) The water balance considers the rates at which solutions are applied to leach pad;
- b) The water balance considers a design storm duration and storm return interval that provides a sufficient degree of probability that overtopping of the pond or impoundment could be prevented during the Operational life of the facility (Design storm. 100 year return, 24 hr. event 22mm - applied manually in the water balance program for each run);
- c) Data quality: uses daily data collected on site;
- d) Precipitation upstream is not considered as surface water is diverted upstream of the facility;
- e) Freezing and thawing is considered in the model;
- f) Solution losses due to evaporation, solution pumped to the Merrill Crowe circuit through the riser, recirculation of solution through the pile are considered. An allowance is made for solution losses through the liner systems;
- g) Power outage is applied manually in the modelling process. An extreme condition of 3 days with no power is considered;
- h) Not applicable as no solution is discharged;
- i) Other aspects - pump failures are applied manually in the modelling process.

The water balance is updated daily with data regarding the loading of the ore on the pad (quantity, moisture content, thickness of the mineral, area of irrigation). This based on actual production figures for reconciliations and on short-term production plans and longer-term Life of Mine plans for future projections of the water balance.

The operating procedures incorporate inspection and monitoring activities to feed the water balance with current information and prevent overtopping of ponds and impoundments and unplanned solutions releases to the environment.

The Contingency Plan for the Management of Solutions was developed based on varying conditions of rainfall intensity and/or pond volumes, and provides different time management solutions (response scenarios) necessary to manage process solutions accordingly. Veladero updates the document annually.

Veladero environmental impact assessment indicates that the ponds capacity is based on the production capacity and a safety factor for water inflow from storm events; this design is based on the water balance. Additionally, these ponds have larger capacities than any process vessel and would work as secondary containment if needed.

According to the ponds inspection, these operate with the freeboard required as defined by the water balance.

Meteorological data is collected at the site for inclusion in the water balance. Data from the Potrerillos Meteorological station is used in the water balance as this is the closest to the leach facility. Calibration of model is carried out with historical data from the site.

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 4.4
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Veladero has maintained the measures to prevent wildlife access to solutions with >50mg/L CNwad reported in the prior recertification audits. These measures include:

- Backfilled PLS pond;

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- Use of buried drip irrigation.
- Leak collection and recovery system solutions are contained in enclosed chamber for direct pumping back to the Valley Fill Leach Facility.
- Perimeter fence to prevent livestock access and chain link fences around the ponds.

Additionally, in 2018, the emergency pond was covered with a net. Because of the operation shutdown ruled by the environmental authorities after the March 2017 incident, this pond contained solutions with >50 mg/l of CN WAD during the period the mine was out of operation and during a few months after the re-start while the process was stabilized again. The net installation was completed in April 2018. The pond was constructed in 2016 and its use started because of the incident.

During the period that the emergency pond contained process solution and the net was under construction, fifteen birds were found dead in or around the emergency pond. The net construction and installation was completed in April 2018; the pond emptying was also completed in that month.

According to the wildlife monitoring information and inspection forms reviewed during the audit, no other cyanide-related wildlife mortalities occurred at the site since the 2014 re-certification Audit. Additionally, a review of the open water ponds that usually contain liquids, WAD cyanide data indicated that the water quality is maintained below 50 mg/l WAD cyanide.

Veladero uses drip irrigation buried 30 cm below surface; no ponding was observed. Additionally, the leach pad is inspected by the operator at the beginning and ending of their shift as well as several times during the same.

2.4.5 ***Standard of Practice 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 with
- in substantial compliance with Standard of Practice 4.5
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Veladero does not have direct or indirect discharge to surface water. Nevertheless, Veladero monitors water bodies located downstream the mine. According to the monitoring reports available during the audit, cyanide has not been detected in surface water.

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 4.6
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Veladero has a number of systems in place to protect the beneficial use of groundwater, including use of a composite clay and geomembrane liner system in the leach pad, underdrainage and leak detection systems and secondary containment for all process tanks containing cyanide solutions. As previously mentioned, Veladero does not have a mill that produces tailings and the mine is operated as an open pit.

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Groundwater monitoring results show all measurements of cyanide (free, WAD, and total) to be below the quantification limit (0.02 mg/L) (lab detection limit 0.007 mg/L). The national standard for cyanide in drinking water is 0.1 mg/L. Therefore, no remediation measures have been undertaken.

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 4.7
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Secondary containment is available for all cyanide storage facilities. Veladero has spill prevention and containment measures for the two cyanide storage areas, the associated process tanks in the Tank Farm, and Merrill-Crowe process areas. Veladero has automated sump pumps with level controls within the containments to pump collected solutions into the process circuit. The containments are constructed of cast-in-place reinforced concrete.

Veladero has completed an extensive internal analysis of the containment areas to verify the tank sizes and the available secondary containment. Procedures are in place to prevent spills and to ensure containment capacity.

The cyanide preparation and storage tanks have a 108-m³ capacity each and are located under a roof within a 27-m³ containment that flows to the Merrill-Crowe containment area of 762 m³. The Merrill-Crowe process containment has been connected with a 12-inch pipe to the adjacent tank farm containment providing a combined capacity of 2,519 m³; this pipe runs in a concrete trench. The barren tank is the single largest tank in the Tank Farm with an operating capacity of 2,206 m³.

The secondary containment system also includes a containment pond called emergency pond, integrated to the containment system for tanks and mixing solution.

Veladero maintenance program regular pipeline and pump, inspections are routine procedures used to prevent and eliminate releases the environment. As soon as a leak is detected, it is repaired and registered as closed; in accordance with the corrective action indicated in the respective report.

In the last three years, the mine has increased their secondary continent capacity for pipes and has replaced corrugated pipes that was just coupled by pressure with thermally welded pipes to reduce the risk of leaks in the areas where the incidents have taken place; additionally, these pipes are now covered with soil for protection from physical elements. Sump pumping system returns any spillage to the barren solution tank.

The pipelines outside the leach pad or the process plant containments are constructed within HDPE lined conveyance channels or within concrete lined tunnels. In addition, all pipelines are encased in thermos-protection layers or encased in a layer of HDPE that further prevents the possibility of spraying off the lined containment in the case of a pipe break. Pressure sensors have been placed on the pregnant and barren pipelines on the section between the Process Plant and leach pad with the pressure differential indicator in the Control Room. No additional protections seem to be required.

Veladero has automated the collection sumps in the containment areas to pump immediately any cyanide solution to the process circuits. Veladero, in addition to the containment areas for the process, has constructed an Emergency Pond with an additional 3,449 m³. Operation and sampling of water collected in the

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Emergency Pond are included in a Procedure named Manejo de La Pileta De Deriviacion de Planta de Procesos (Management of Process Solution in the Emergency Pond). The Operation Pre-Plans address and evaluate potential scenarios where solution is collected in the secondary containments and provide contingency planning. The Veladero operating procedures require that all spills be addressed immediately. Veladero also has procedures in place to address immediately any critical pump failure to ensure that the resources are always in place to manage spills.

All Veladero cyanide process tanks and pipelines are constructed with materials compatible with high pH cyanide solutions. These include Carbon Steel ANSI B36.10, Schedule 40, 150-pound class pipelines for the Pregnant and Barren lines, API 650 steel tanks and HDPE pipelines.

2.4.8 *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.*

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 4.8
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The quality control of the construction for the construction works performed in the re-certification period was documented through procedures, certificates, tests, and protocols, which demonstrate and certify the works were performed according to the standards of construction, drawings, specifications and directions approved by Veladero.

The records of the following projects were reviewed:

Project: Re-adaptation of the canal and canal areas. The North Channel, Landfill of the Leach Pad, Unloading of Excess of Plant and Contingency Channel. This has a 30-cm thick filling covered with a 2-mm HDPE geomembrane.

The formulation of the project was carried out by the company Knight Piesold Consulting in June 2016.

Which included:

- AASR exceedance collection system
 - Collection sector to favor the solution runoff to the landfill
 - Reduction of the current level of the lip of the Landfill
 - Waterproofing
 - Installation of HDPE pipes for sewer waterproofing
 - Two new reinforced concrete culverts
 - Restitution of access road to the pool SP
 - Discharge bowl
- Bypass pool
 - Placement of a sand trap at the entrance of fluids to the pool
 - Waterproofing of its current dump together with its discharge channel
- Sludge pool
 - Installation of discharge pipe
 - South infiltration ditch
- Contingency Channel upstream of the dam
 - Change of trace
 - Channel waterproofing
 - Reduction and waterproofing of the culvert of sector 420
 - New service road to access the contingency channel

Some quality control records include:

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- The approval of the Ministry of Public Infrastructure and Services Secretary of Water - San Juan was evidenced with resolution No. 1141 of August 24, 2017. The proper functioning of the new Canal del Norte was verified by means of the corresponding hydraulic test.

Also, according to the Inspection Report No. 344 and 346 bis, the Mining authority in Argentina accepted the safety measures implemented as result of the 2017 incident.

For the re-adaptation of the pipeline portal south leach pad project, Veladero requested a inspection from the Hydraulic Department which included:

- Modification of the rich solution conduction system, downstream of the crossing of the current channel with the Argent Route
- Driving with solid HDPE pipes, making the change of the corrugated HDPE
- Compatibility with the Mine Closure tasks, including re-profiling the slope with slope 2.5 H: 1V
- Arrival of the new pipeline to Sentina 430, without modification of the same
- Valve installation
- Collector chamber - DROPBOX
- Recovery of the existing channel as a contingency channel

In addition to the internal quality control documents, the mine has the approval for these projects from the Ministry of Public Infrastructure and Services Secretary of Water - San Juan (resolution No. 1588 of November 9, 2017)

Veladero has implemented QC/QA programs for all projects related to geomembrane liners for ponds, pipes, and others, which includes improvements as result of the incidents. These QC/QA reports were prepared by Knight Piesold Consulting. The reports include copies of the field inspection reports, lab and field data, construction observations, and photographs.

The operation also retains the QA/QC documents for the construction of existing cyanide handling facilities, including those reviewed as part of the original certification (2008) and the previous re-certifications (2011 and 2015).

2.4.9

Standard of Practice 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 with
- in substantial compliance with Standard of Practice 4.9
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The Operation has prepared and implemented written standard procedures for wild life, surface and groundwater water and soil monitoring activities.

The Biodiversity Sampling Protocols establish the methods and guidelines for sampling of flora and fauna and provide guidance and instruction on standardized methods and sampling techniques according to internal requirements and legal commitments.

Other aspects of the monitoring plan have remained the same as for the recertification audit of 2015.

The original plan was been updated by Environmental Engineers (Leandro Poblete and Roberto Caso with review by Jose Fornes all certified civil engineers through the College of Professional Engineers and Land Surveyors) and was reviewed and approved by Mining Secretariat as part of the mining approvals. Monitoring is carried out with trained personnel and evaluated by the environmental manager.

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Sampling procedures are the same as were found to be fully compliant in 2008 and again in 2011 and 2015. The water quality sampling documents specifies the standard operating procedures for surface water, process water and groundwater including sample preservation requirements. Locations of sampling sites and sample parameter lists including cyanide species are also specified. Chain of Custody procedures are included.

Veladero has no discharges to surface water. Groundwater and surface water monitoring is performed downstream.

Veladero provides wildlife mortality training to all company and contract employees with an annual refresher. Each employee is responsible for contacting the Environmental Department should they encounter wildlife mortality or activity. Any animal carcasses cannot be moved without permission from the Environmental Department.

As previously noted, there were mortality cases during the re-certification period due to process solution stored in the emergency pond. The mine has taken the required steps to prevent this from repeating by covering the pond with a plastic net.

Veladero conducts environmental monitoring at frequencies adequate to characterize the surface water (monthly), groundwater (monthly), underdrains (monthly), leak detection systems (daily), wildlife (daily). Wildlife monitoring is continuous while employees are outside on the property.

2.5 **DECOMMISSIONING: PROTECT COMMUNITIES AND THE ENVIRONMENT FROM CYANIDE THROUGH DEVELOPMENT AND IMPLEMENTATION OF DECOMMISSIONING PLANS FOR CYANIDE FACILITIES.**

2.5.1 **Standard 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 with
- in substantial compliance with Standard of Practice 5.1
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The environmental impact assessment establishes a written procedure that must be developed regarding the termination of Operation of the processing plant.

The Mine Closure Plan describes specific temporary, progressive and final closure plans for closure and reclamation of the entire mine including processing facilities, waste management facilities, water management facilities, mining facilities, and ancillary facilities. The primary components covered under final closure include closure of roads; abandonment of wells; rehabilitation of pits; quarries and trenches; closure of ponds and water reservoirs; treatment/management of heap leach pad water and pit water; closure and rehabilitation of the heap leach pads; demolition and removal of industrial installations; and post-closure monitoring. These activities include dismantling; demolition, recovery and disposal; physical, geochemical decommissioning of the cyanide facilities including the following:

- Decontamination, demolition and disposal of process and water handling facilities including all pipes, liners, ponds, concrete containments and tanks
- Physical and geochemical stabilization of heap leach pads
- Water treatment of leach and process solutions
- Post-closure monitoring

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The mine closure plan includes GANTT charts for the closure planning, closure works and post closure periods. These incorporate the activities relevant for a comprehensive mine closure plan such as rehabilitation of the heap leach piles, plant demolition and ongoing monitoring and maintenance works.

The Operation developed supplemental reports to provide detailed evaluation and costing for the dismantling, decommissioning and decontamination of cyanide facilities. Veladero internally requires annual updates, which include a cost estimate for Asset Retirement Obligations reporting and financial audits. This re-evaluated annually under the corporate Provisions for Environmental Reclamation Policy (which has superseded the Asset Retirement Obligations (ARO) policy). The auditor observed updated and approved PER plans for Veladero for Q4 2017 for which provisions of USD\$450 million are contemplated.

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 5.2
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Cost estimates have been updated annually Provisions for Environmental Restoration reporting requirements. Latest version of ARO and LOM were calculated in 2017. The quantities have also changed as the plan has been updated. The unit rates are obtained from contractors bidding for projects on the site and other Barrick sites nearby.

Additionally, the organization has the PER BRCE 2017 ARCA024 20171110 FNL RevB Standardized Reclamation Cost Estimator, with which annual closing costs are reviewed according to the procedure BGENV-G-01 Mine Closure Guidance; base on the auditor review, the estimation covers all the activities required to close the facility through external companies.

The Argentine authorities do not require a financial guarantee. Veladero uses a self-guarantee to assure sufficient finance for detoxification and decommissioning of its cyanide facilities

Veladoer holds audited financial statements. Additionally a certified Public Accountants, prepared the document "Statement of Financial Strength for the ICMI 2017" for Barrick Gold Corporation - Veladero. The result of the report indicates that the mine has financial resources for the decommissioning and decontamination of the Veladero site.

2.6 ***WORKER SAFETY: PROTECT WORKERS' HEALTH AND SAFETY FROM EXPOSURE TO CYANIDE.***

2.6.1 ***Standard 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 with
- in substantial compliance with Standard of Practice 6.1
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

All workers undergo site-specific inductions highlighting the presence of cyanide at the site.

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Veladero has operating plans and procedures that describe the management and operation of the cyanide facilities. These plans and procedures cover the safe operation of the entire cyanide management facilities and include all the mitigation measures included in the operations risks analysis.

These documents have formed the basis for task specific standard operating procedures. The documents have been updated as required and at regular intervals of two years.

The procedures implemented at Veladero require that risk analyses be performed for tasks related to products including sodium cyanide. These written procedures include work in confined space and equipment decontamination prior to maintenance. These procedures detail the risk involved with each task and adequately describe safe work practices (mitigation measures). Task specific personal protective equipment (PPE) requirements are stated in each standard operating procedure.

Among the procedures described by the organization, it is evident:

- MAN-PVL-005 Working procedure with equipment in contact with cyanide solution
- MAN-PVL-0015 Electric Contingency Plan in case of Line MT failure
- MAN-PVL-039 Work in Cyanide Pumps
- MAN-PVL-057 Electric Emergency Plan
- MAN-PVL-063 Alarm check for very low, high, and very high tank levels
- PRO-PVL-409 Cyanide Spill Control Procedures
- PRO-PVL-410 Inspection control procedure in the Process Plant
- Operational Plan for the Monitoring and Maintenance of the Leaching System (POMM)
- Action Plan for Emergencies

Each safe work procedure includes the requirement to use personal protective equipment. Procedures specify the type of clothing, personal protective equipment (PPE) tools, equipment and other materials.

Records reviewed during the audit included hazard identification, risk assessment and continuous control measures for the preparation of cyanide solution, maintenance of cyanide measuring equipment in the different plants, among others.

Additionally, Veladero has implemented a Management of Change (MoC) Procedure that requires the participation of stakeholders, a formal risk assessment, approval, signed documents, and follow-up audits and monitoring. Furthermore, this procedure is complemented with the Change Control Procedure. There is also the document "Request for change and review of functional areas", and includes a formal risk assessment covering the areas of Safety, Environment and the area involved in the change.

Records of MoC were reviewed for different projects implemented after the 2015, 2016 and 2017 incidents.

Worker participation in the design of the procedures is given in several ways:

- Task Observation: This activity enables the active participation of workers in the design of operating procedures.
- Suggestion System: This system allows workers to leave their suggestions in boxes. These suggestions are then uploaded to the intranet, where the evaluation is carried out by a committee and suggestions are evaluated and scored.
- Risk assessment system, the worker performs a review of the risks prior to the activations and informs the supervisor of the conditions and actions to take in case of risks.

Record related to worker participation for years 2015, 2016 and 2017 were reviewed.

Proposed improvements are discussed at the Weekly Safety Committee meetings that provide further opportunity to discuss process and operational modifications. The Committee is comprised of representatives of each area of the

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mine who meets monthly. Employees from different areas such as human development, general coordinators, and communication and management representatives participate in this Committee.

2.6.2 *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.*

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 6.2
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The following procedures to define the pH value were observed:

- PRO-PVL-102 Adjustment of pH in case of decreasing. It provides that the desired pH should be 10.
- PRO-PVL-116 Preparation of CN. It stipulates that the pH must be greater than 10.

pH meters undergo internal and external calibrations. Inspection sheets of the instruments were presented. The dosage of lime in the crusher is 100g /t-ore.

The operation has installed an electronic system to detect levels of HCN gas in the different areas. This system allows continuous monitoring of HCN gas levels and results are displayed on electronic boards placed in highly visible areas. Fixed and portable detectors alarms are set to 4.7 ppm.

The operation has the following CNH measurement devices:

Fixed

- Area of NaCN Preparation (2 monitors)
- Smelter Area (1 monitor)

Portable

- Plant Area (3)
- Valley Heap leach (1)
- Smelter Area (1)
- Risk Preventionist (1)
- Process Superintendent (1)

All monitors are controlled by the Risk Preventionist of Veladero (internal calibration).

When a sensor detects a 4.7 ppm or higher concentration, the area is evacuated and the control room is alerted. This is considered an emergency and the emergency response procedures are activated to identify and address the emission source.

Veladero has identified areas where there is potential workers exposure to cyanide. For example, cyanide preparation area. Safe working procedures, which specify the PPE (Personal Protective Equipment) required, have been developed and implemented in these areas.

Working procedures are generally designed to ensure that the HCN gas is not emitted through pH control. Portable detectors and fixed alarms are provided to mitigate accidental spills or gas leaks.

HCN levels in the cyanide storage warehouse are measured prior to entry with a portable hand-held monitor, which was verified by the auditors

Inspections of HCN monitoring equipment includes fixed and portable devices. There are two types of inspections:

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- Internal, which is performed on a monthly basis (PRI-PVL-211 Inspection of HCN monitoring devices).
- External: this refers to calibrations scheduled every six months. The operation has calibration certificate issued by DAFTEC.

These records are retained for at least 5 years.

In the work areas where cyanide is present, Veladero has installed signs indicating the presence of cyanide product through the NFPA diamond; cartels alerting the presence of cyanide; other warning signs indicating that smoking, open flames, and eating and drinking are not allowed. There are showers and eyewash stations. All eyewash stations have been regulated to reduce the water pressure to ensure it does not present a hazard to users.

There are sodium bicarbonate extinguishers strategically located throughout the operation. Veladero integrates standard procedures for maintenance and inspection of showers, eyewash stations and fire extinguishers, at least once per month.

Inspection documents were reviewed and the auditor verified that the showers and eyewash stations are functional and that the pressure in the eyewash stations is adequate.

The auditors inspected the cyanide solution circuit, including the cyanide unloading and storage areas, the cyanide warehouse, the process areas, process tanks, leach pad and pond system. Pipes containing cyanide are marked as containing cyanide solution and show flow direction. Veladero also uses a color-coded piping system to identify pregnant solution, barren solution, makeup water, etc.

Veladero first aid procedures in the local language are available in the areas where cyanide is managed. First aid procedures include examination of the victim, medical care, rescue squad, symptoms of poisoning, first aid and antidote among others.

Veladero has a procedure used to activate the emergency in case of incidents related to the CN management. In the event of an incident, the emergency is activated immediately and workers proceed to control the situation. Within 24 hours of the incident (or quasi incident or fatality) a flash report must be prepared. This report includes a brief description of what happened and the actions taken. Subsequently, the investigation of the incident is done. Depending on the potential of the incident, the procedure is as follows:

- The PRI-PVL-901 Structural Process (Incident Investigation). This procedure includes causes and corrective actions. If applicable, it also includes Annex 9 PRI-PVL-901 Cost Estimate. As part of the procedure, it follows:
 - Report of almost incidents
 - Report Incident Summary
 - Flowchart
 - Reports
 - Risk Matrix to determine the Incident Loss Potential
- All incidents are uploaded to the RIMS (Responsibility Incident Management System)

2.6.3

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/Deficiencies Identified:

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Cyanide kits are checked monthly by the Health Service, There are two kind of kits:

- Basic kit: instructions, bag valve mask, oxygen mask; examination gloves, gauze and cotton.
- Kit to be used exclusively by health personnel: sodium thiosulfate, sodium nitrite syringe ligature elastic, examination gloves, nasogastric tube, voiles, perfuse no. 1 on needle catheter no. 16 and 18, physiological solution and activated carbon.

Ambulances have the following means of communication: VHF, SSB, Tetra, satellite phone. Inspection records of the kits that are in Veladero Hospital were checked.

Veladero has an emergency communication procedure with instructions to activate the alarm system by radio or telephone. All employees and visitors are trained in this system as part of the induction.

There are showers and low-pressure eyewash stations strategically placed in all areas where cyanide is managed. Self-contained breathing apparatus are available.

Antidote based on nitrite, replacing the amyl nitrite since it is difficult to procure. Antidotes can only be administered by medical personnel. All areas where cyanide is present are monitored by video cameras systems.

Veladero regularly inspects the first aid kit to ensure that equipment and items are available and in proper condition for use. The replacement of materials and equipment is performed as recommended by the manufacturers. Because antidotes can only be administered by a doctor and is only available in the medical service, Veladero has emphasized the training of workers on the use of oxygen tanks that are available at workspaces.

Veladero has emergency response procedures for specific briefs to address potential accidental releases of cyanide. SAL-PVL-004 Emergency Procedure in case of cyanide poisoning refers to the following:

- Scene assessment
- Safety
- Brigade Medical Care
- Symptoms
- Antidotes
- Recovery and Disposal

Veladero has the following medical facilities:

- Hospital High complexity care service: Doctor on call, surgical instrumentalist, anesthetist and permanent nurse. Availability of shock room and auto-analyzer. Kinesiology for ambulatory care.
- Polyclinic at Construction Camp Doctor, nurse and radiologist. Permanent staffs.
- Emergency post at Truck Shop Permanent paramedic and ambulance driver.
- Emergency post at Sepultura Permanent paramedic and ambulance driver. It has a satellite phone and 2 ambulances Emergency

Veladero has trained professionals at the Health Service and ambulance to assist patients poisoned with cyanide 24 hours a day.

Ambulances are parked at the entrance of the health services. Ambulances are equipped with oxygen tube and resuscitator.

In the medical center, there are available beds, oxygen tubes, resuscitator, and other equipment for critical care patients. Sodium thiosulfate and sodium nitrite are kept at a controlled temperature

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Veladero has an agreement with Jáchal, Rodeo Hospitals as well as the Centro de Estudios de Alta Complejidad (CEAC) located in San Juan. These agreements provide for the training of doctors and nurses on how to treat a patient intoxicated with CN and the availability of suitable professionals trained in the care of patients with CN poisoning. The following documentation was observed:

- CEAC Training - 29/11/2017
- Jáchal Hospital Training - 1/11/2017
- Rodeo Hospital Training - 2/11/2017
- Agreements with the above mentioned hospitals.

Rodeo and Jáchal hospital are small health centers in the communities and could be used to assist in emergency response in the route to the mine (whether cyanide related or not). The CEAC would be used to transport a patient that would require additional attention beyond the mine hospital capacity. The mine has an intensive therapy ambulance that would be used to transport a patient to CEAC.

Procedure SAL-PVL-004, presents a description on how to transport a patient from the mine or road camp to the Centro de Estudios de Alta Complejidad (CEAC) located in San Juan, the procedure includes special instructions on the additional materials to be transported with the patient when it is a cyanide intoxication case.

For patients transport, there is available a mobile intensive therapy unit. The mine also has contact details for the helicopter of San Juan Province; however, there are several potential limitations for its use (cannot flight at night or with high wind speeds or low visibility) and it is not considered the first option.

The health department performs periodic drill to assess the response procedure in different situations of cyanide exposure, the following drill were conducted during the recertification period:

- 14 December 2017, pipe leak resulting in HCN generation with one intoxicated employee who was transferred to the mine hospital.
- 27 December 2017 intoxicated employee, who was transferred to the mine hospital.

Communication improvement areas were identified in the second drill and this were corrected through an information session with the different elements of the mine's health team and the contractor that manages the mine's hospital. Reports on the drills are prepared and lessons learned drills are incorporated into its response planning, when relevant.

2.7 **EMERGENCY RESPONSE: PROTECT COMMUNITIES AND THE ENVIRONMENT THROUGH THE DEVELOPMENT OF EMERGENCY RESPONSE STRATEGIES AND CAPABILITIES.**

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 7.1
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Veladero has developed the Procedure PRI-PVL-122 Sodium Cyanide Emergency Response Plan (last updated on 20 January 2018) (CERP). The mine also has an Emergency Operations Plan (latest update 12-January 2018) (POE for its Spanish name).

This is a general plan that establishes the guidelines to follow in case of any emergency. In addition, it has more detailed plans that are originated from the POE. This procedure defines objectives, emergency telephones, emergency

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response protocols, minimum emergency response materials, and roles and responsibilities.

The CERP establishes measures in the case of cyanide gas release or spills of cyanide solution or solid cyanide.

The POE consider three levels of emergency: I, II and III to made available additional resources.

For emergency response, there are specific instructions available for the emergency response team and for the operations team in case of Level 1 emergencies that can be controlled within the process area.

The CERP establishes the specific procedures for different cyanide release, scenarios (e.g. solid cyanide spill on dry or wet ground, cyanide solution spill, solid cyanide spill on a water body, release of cyanide gas). These scenarios are related to releases during unloading and mixing operations, valve, pipes and tanks failures, overtopping of ponds and other failures. Additionally, there are operational procedures to respond to the same operational deviations from the operations standpoint.

The supplier is responsible for the ground transport of cyanide and the response to emergencies; however, Veladero is ready to provide support in case of emergency.

For emergencies that cannot be controlled at the process areas (e.g. failure of ponds or the leach pad), the POE would be activated.

According to the supply contract, Orica and their subcontractors are responsible for the response to an emergency during the cyanide transport; however, the mine has emergency response equipment along the last 150 km of the route to provide support if needed.

The POE includes general response instructions and references to different specific procedures including, the CERP, the procedure of the emergency system for cyanide intoxication (that includes first aid instructions and the use of cyanide antidotes by the mine doctors), operational procedures to control cyanide releases at the source, remediation and monitoring procedures. The POE also includes the requirements of assessing the causes for the incidents and implementing action plans to prevent future releases.

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 7.2
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The POE and the CERP were prepared by the emergency response team, the emergency system for intoxication cases was prepared by the medical team; the remediation and monitoring procedure was prepared by the environmental team. The POE is submitted to the Mining Authority every two years.

The Door to Door program informs the community regarding the risks involved in mining activities and how they are prevented. The risks mentioned include the transportation and use of sodium cyanide. The Door to Door program also provides general emergency response written information. Over 8,000 handbooks were distributed during the recertification period in the communities that are the nearest to the mine.

The mine is far from communities and the possibility of external responders (other than hospitals) assisting in an emergency is not considered in the POE and CERP; however, Veladero provides information to firefighters, civil defense and other authorities of their emergency response procedures and general information on cyanide emergency response. One of these information sessions was held in Pigmanta in December 2017.

As previously noted, Veladero has agreements with Jáchal and Rodeo hospitals as well as the hospital Centro de Estudios de Alta Complejidad (CEAC) located in San Juan. These agreements include training of doctors and nurses on how to treat a patient intoxicated with cyanide. The following documentation was reviewed:

- CEAC Training - 29/11/2017
- Jáchal Hospital Training - 1/11/2017
- Rodeo Hospital Training - 2/11/2017
- Agreements with the above mentioned hospitals.

Rodeo and Jáchal hospital are small health centers in the communities and could be used to assist in emergency response in the route to the mine (whether cyanide related or not). The CEAC would be used to transport a patient that would require additional attention beyond the mine hospital capacity. The mine has an intensive therapy ambulance that would be used to transport a patient to CEAC.

The Emergency Response Plan is submitted to Mining Authority, the Fire Fighters, Gendarmerie, Environment Authority, and Public Health Authority every two years.

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 7.3
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The following aspects are consider in the Emergency Response documents:

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- a) In case of emergency Level 2, the Incident Command meets. Incident Command is composed of the Heads of Area (Managers). If Managers are not on duty, they report via mail transferring the responsibility to a Superintendent. In addition, there is a form called Rol de Turno (Shift role) that defines those responsible for each shift, who must report any emergency and includes their replacement.
- b) Veladero has two emergency teams: Volunteer Brigade (approximately 6 per shift, with over 50 volunteers) and Emergency Team (two teams in different shifts)
- c) Volunteer members of the brigade receive training provided by the Emergency team, 8 hours per week, including HAZMAT; rescue from confined space, collapsed structures, heights, and vehicles; avalanche, incident command, first aid, and psychology of the emergency. Training records are kept by the Emergency team.
- d) The POE includes the responsibilities of the different emergency response roles, these roles are designed in the week's shift role to members of the management team.
- e) A list of emergency response equipment, including personal protection gear, available along transportation routes and on-site is found in Annex M of the POE. The POE is updated by the Emergency Team.
- f) Annex F of the POE includes a list of emergency response equipment at the mine and at the Peñasquitos and Sepultura road camps. The availability of the emergency response equipment at the mine was confirmed during the audit as well as the weekly inspection records.
- g) Emergency response equipment is reviewed on a weekly basis by the Emergency Team, inspection records for the past three years were reviewed, missing equipment was replaced promptly or when was lent to other areas the location was recorded.
- h) No external emergency service providers are considered as part of the POE given the distance from the mine to the nearest communities with emergency response infrastructure. There are agreements with local health centers that could provide assistance in case of emergency in the route and with a Hospital at San Juan for treatment of complicated cases that could not be taken care at the mine medical facilities.

As previously noted, the mine is far from communities and the possibility of external responders (other than hospitals) assisting in an emergency is not considered. However, Veladero provides information to firefighters, civil defense and other authorities of their emergency response procedures and general information on cyanide emergency response. One of these information sessions was held in Pigmanta in December 2017.

As previously noted, Veladero has agreements with Jáchal and Rodeo hospitals as well as the hospital Centro de Estudios de Alta Complejidad (CEAC) located in San Juan. These agreements include training of doctors and nurses on how to treat a patient intoxicated with cyanide. The following documentation was reviewed:

- CEAC Training - 29/11/2017
- Jáchal Hospital Training - 1/11/2017
- Rodeo Hospital Training - 2/11/2017
- Agreements with the above mentioned hospitals.

2.7.4

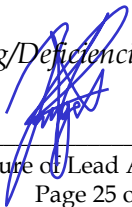
Standard of Practice 7.4: Develop procedures for internal and external emergency notification and reporting.

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 7.4
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

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The POE includes a detailed list of authorities and communities that have to be notified in case of emergency. This is provided in the form of a table that describes the events and identifies the enforcement authorities, who must to be informed of the fact. Additionally, the POE includes a phone list of all the authorities and /or other entities.

Operations Area provides the Communications Area, who is responsible for communication with the media, the available details in case of emergency.

The POE includes response procedures and contact information for reporting accidents involving cyanide that could affect surrounding communities

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 7.5
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The CERP establishes that recovered solid cyanide must be collected and sent to the mixing area; solutions recovered in secondary containments is sent to the barren solution tank or the cyanide solution tank. The Procedure for Operative Activities of the Environmental department during Cyanide Related activities establishes that all the soil that was impacted with cyanide must be disposed at the leach pad. The procedure establishes the sampling and analysis procedures to determine the cyanide concentration. Any soil with cyanide result above the detection limit would be considered as impacted soil any other material that was in contact with cyanide (e.g. EPP) is disposed as hazardous waste.

In the event that alternative drinking water supply is required, this would be provided in bottles.

The POE clearly prohibits the use of sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat surface waters or in conditions where the spill or treatment chemicals could reach surface waters.

The Procedure for Operative Activities of the Environmental department during Cyanide Related Emergencies the sampling and analysis procedures to determine the cyanide concentration in soil and water.

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 7.6
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The POE is revised at least every 2 years; however, some annexes are regularly reviewed; for example, the contact telephone numbers. The latest version of the POE was dated January 2018; the previous version was dated October 2016.

The mine prepares an annual emergency drill program. The latest mock drills included:

- May 2017, exposure to cyanide gas and rescue.
- October 2017 leak from pipe without intoxicated personnel.

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- 14 December 2017, pipe leak resulting in HCN generation with one intoxicated employee who was transferred to the mine hospital.
- December 2017, desktop exercise for the incident command.

Reports on the drills are prepared and lessons learned drills are incorporated into its response planning, as relevant.

2.8 TRAINING: TRAIN WORKERS AND EMERGENCY RESPONSE PERSONNEL TO MANAGE CYANIDE IN A SAFE AND ENVIRONMENTALLY PROTECTIVE MANNER.

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 8.1
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

All the employees, contractors and visitors that may encounter cyanide in the mine receive induction training related to cyanide hazards and its characteristics. The training includes also the symptoms of cyanide exposure and those of altitude illness to help differentiating them.

This training is provided through a PowerPoint presentation. After the training test is completed, a test is applied. Attendance records are kept along with the test.

General cyanide training is refreshed at least on an annual basis to employees and contractor through either safety talks or classroom training. The presentation regarding use of CN, includes among others, the following topics:

- Cyanide transport, storage and handling
- Cyanide risks
- Health effect and intoxication symptoms
- PPE required
- Exposure limits
- Emergency instructions for spill and fire

Training records and training program update are maintained on a database named Lyvelink through the "Annex 5" format, which is an excel file indicating the name of the employee, training title and date when it was completed. Additionally, paper records with attendance list for each training event, indicating the date, training title, and the name of the person lecturing the training.

The paper records are kept by each area (e.g. warehouse, process, emergency response, etc.). A sample of training records for 20 employees was reviewed during the audit. No major deviations were identified

2.8.2 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.

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 8.2
- not in compliance with

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Summarize the basis for this Finding/Deficiencies Identified:

All personnel in job positions that involve the use of cyanide and cyanide management (including unloading, mixing, production and maintenance) receive training on how to perform their assigned tasks with minimum risk to worker health and safety. Individual training is provided for each specific task an operator will perform related to cyanide management. Task specific training includes operating procedures relevant for the worker area (e.g. cyanide unloading and handling for warehouse personnel, cyanide transfer, cyanide bags and boxes disposal, critical valves management, etc. for process area employees). Verification was conducted through interview with process personnel, and review of training records.

Employees that are new to an area receive on the job training and classroom training prior to be allowed to work independently. On-the-job training is provided by experienced employees and the supervisor. The supervisor is responsible for determining when an employee is ready to work independently. The area supervisors have been in their position for several years and have helped to develop the Standard Operation Procedures

Elements of training required for each job that involves handling of cyanide are adequately identified in the training materials. In general, the procedures are used as part of the training materials as well as power point presentations. Safety toolbox talks are used also to refresh operational procedures, safety rules, cyanide hazards, emergency response, among other topics. The Annex 5 form (excel matrix) includes the list of trainings designed to an employee and the date the training was provided.

For the emergency response brigades, training is provided on hazardous materials response, rescue in confined space, etc.; these training topics are provided by the Emergency Response team (professional firefighters). First aid and use of cyanide kits training is provided by the mine medical staff and the contractor that manages the medical center (professional doctors). The name of the trainer is kept in the attendance list of each training event.

Veladero gives employees refresher training about cyanide hazards at least once per year. The Annex 5 form in the Lyvelink system helps track the re-training of the staff.

Veladero has a customized training program for each employee. Its annual evaluation considers the operation and compliance with the training program.

Training records are maintained on a database named Lyvelink through the "Annex 5" format, which is an excel file indicating the name of the employee, training title and date when it was completed. Additionally, paper records with attendance list for each training event, indicating the date, training title, and the name of the person lecturing the training. The paper records are kept by each area (e.g. warehouse, process, emergency response, etc.).

2.8.3

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/Deficiencies Identified:

Personnel responsible for unloading, mixing, production, and maintenance are trained in decontamination and first aid procedures for cyanide release incidents.

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Verification included review of training records and interviews with cyanide operators.

The mine prepares an annual emergency drill program. The latest mock drills included:

- May 2017, exposure to cyanide gas and rescue.
- October 2017 leak from pipe without intoxicated personnel.
- 14 December 2017, pipe leak resulting in HCN generation with one intoxicated employee who was transferred to the mine hospital.
- December 2017, desktop exercise for the incident command.

The drills are performed in the process areas, usually without notifying the workers; however, due to the sensitivity in recent dates, all drills have been notified to prevent over reactions.

Volunteer members of the brigade receive training provided by the Emergency team, 8 hours per week, including HAZMAT; rescue from confined space, collapsed structures, heights, and vehicles; avalanche, incident command, first aid, and psychology of the emergency. Training records are kept by the Emergency team. Additionally, the members of the Incident Command Team receive training specific to their role.

The mine is far from communities and the possibility of external responders (other than hospitals) assisting in an emergency is not considered in the POE and CERP; however, Veladero provides information to firefighters, civil defense and other authorities of their emergency response procedures and general information on cyanide emergency response. One of these information sessions was held in Pigmenta in December 2017.

As previously noted, Veladero has agreements with Jáchal and Rodeo hospitals as well as the hospital Centro de Estudios de Alta Complejidad (CEAC) located in San Juan. These agreements include training of doctors and nurses on how to treat a patient intoxicated with cyanide. These were the most recent training provided to the hospitals:

- CEAC Training - 29/11/2017
- Jáchal Hospital Training - 1/11/2017
- Rodeo Hospital Training - 2/11/2017

Veladero gives annual refresher training to their employees related to cyanide hazards and response to cyanide exposure.

Verification was through interview with process, loss control and emergency response personnel, interviews with in-field employees, and review of training records.

The mine prepares an annual emergency drill program. The latest mock drills included:

- May 2017, exposure to cyanide gas and rescue.
- October 2017 leak from pipe without intoxicated personnel.
- 14 December 2017, pipe leak resulting in HCN generation with one intoxicated employee who was transferred to the mine hospital.
- December 2017, desktop exercise for the incident command.

Veladero evaluates the mock drills and identifies deficiencies and corrective actions. A debrief is also conducted to discuss lessons learned from the drills and corrective actions. Veladero incorporates lesson learned into its emergency response planning and training materials, if required. Auditors reviewed mock drill reports and supporting documentation to verify that action items identified after the mock drills have been accomplished. Record of mock drill debriefs were also reviewed.

Cyanide emergency drills are also evaluated from a training perspective to determine if personnel have knowledge and skills required for effective response. When required, the response procedures have been changed and the response personnel have been re-trained in those procedures.

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Training records and training program update are maintained on a database named Lyvelink through the "Annex 5" format, which is an excel file indicating the name of the employee, training title and date when it was completed. Additionally, paper records with attendance list for each training event, indicating the date, training title, and the name of the person lecturing the training.

The paper records are kept by each area (e.g. warehouse, process, emergency response, etc.). A sample of training records for 20 employees was reviewed during the audit. No major deviations were identified. Classroom training is also accompanied by a written test; the results are kept in the paper records.

2.9 **DIALOGUE: ENGAGE IN PUBLIC CONSULTATION AND DISCLOSURE.**

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 9.1
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation has kept the system to provide the stakeholders with the opportunities to communicate issues of concern. By the evidence observed and the interviews with the employees the auditor notice the strong interest in updating the contents and improving the programs.

Below there is a brief of the programs in effect today. Veladero kept records of all the activities developed in the frame of the programs, detailing date, name and identification of the attendees, community, and assessments.

- Suggestion Box: This program did not work out as expected so it has been removed from the system.
- Door to Door Program (Programa Puerta a Puerta): This program has been in operation since 2006. It includes visits to neighbors' homes of the Department of Iglesia and Jáchal, and consists of gathering opinions and community demands, as well as the delivery of information about the operation, such as videos and leaflets that address various issues related to the operation, including those related to the use of cyanide in Veladero. These visits are conducted every month, by external consultants who live in the region within the scope of the program (IOPPS, Instituto de Opinión Pública y Proyectos Sociales San Juan). This program provides Barrick with quantitative information as well as community perceptions. Veladero has documented this program via sign-in sheets and reports prepared by external consultants.
- Community Diffusion Program (Programa de Difusión Comunitaria). This program was implemented in 2008 and is updated every 2 years. The scope of this program includes mainly Iglesia and Jáchal, the nearest communities to the Project. This program informs the communities regarding the mine operations. Conferences are split into topics with outside experts and Barrick Personnel. About 20 to 30 presentations per year are conducted. The presentations are aimed at colleges, schools, neighborhood associations, municipalities, churches, among other institutions, and consist of a presentation of the operation covering different topics among which is the subject of cyanide. The presentation offers the public the possibility to choose the topic they are most interested to listen, among which are the following related with cyanide: hazardous materials, heap leach valley and water. Veladero has documented this program via sign-in sheets and power point presentations that were reviewed by the auditor. The intensity of this program decreased because of the negative perception from the communities resulting from the 2015 and 2016 incidents.
- Community Visits Program (Programa de Visitas Comunitarias): This program has been implemented since 2005 and it continues in force. Topics

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covered during each visit to the mine include: introduction to Barrick corporate overview, Health and Safety and Environment. Cyanide management is covered within the Environment topics. Materials given include pamphlets on "Uso del cianuro en Veladero" and "Certificación del Código Internacional de Cianuro". The visits are done twice per month between August and April (summer season). Among those attending to the mine visits are representatives of schools, colleges, clubs, national parks, NGOs, legislators from other provinces, departmental representatives and other community referrals. After the visit people complete a feedback form, in which they give their opinion of the activity. Veladero has documented this program via sign-in sheets and videos. Due to the incidents from 2015, 2016 and 2017, the Community Visits Program was modified to include the areas where the incidents took place; the corrective measures taken and investments made after the incidents are explained as part of the visit.

- Program of relations with stakeholders (Programa de Relaciones con los Grupos de Interés). This program was implemented in 2012 and, provides the basis for planning the other programs. It is updated once a year and includes a stakeholder map, which is updated twice a year. The stakeholder map allows Barrick to identify critical stakeholders based on Barrick impact and stakeholder influence and develop more appropriate and effective programs to get to the community.
- Social networks: This topic has been updated in accordance with the network evolution and includes the following accounts:
 - Facebook: facebook.com/BarrickArgentina
 - Twitter: twitter.com/BARRICKArgentina
 - Web: barricksudamerica.com/argentina y barricklatam.com
- Grievances management procedure (Procedimiento de Manejo y Resolución de Quejas y Reclamos).

Record of Environmental Communications: All queries are recorded in this registry, including those coming from journalists, citizens, agricultural sector, businesses, etc.

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 9.2
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Veladero provides opportunities to interact with stakeholders and provide information to them via the programs describe above (point 9.1.1):

- Door to Door Program (Programa Puerta a Puerta)
- Community Diffusion Program (Programa de Difusión Comunitaria)
- Community Visits Program (Programa de Visitas Comunitarias);
- Participatory Monitoring Program (Programa de Monitoreo Participativo);


Veladero organizes activities to inform the community regarding safety procedures implemented during operations (environmental as well as health and safety). The operation also invites journalists, both national and provincial, to visit the project. These visits take place once a year. Reports and pictures for the visits from 2015 to 2018 were reviewed, as well as the reports from the Door to Door Program.

2.9.2

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

The operation is

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- √ in full compliance with
- in substantial compliance with Standard of Practice 9.3
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation has developed written leaflets for the communities and other stakeholders that provide detailed information regarding cyanide management.

Veladero has updated the leaflet "How Cyanide is Used in Veladero", which is available at Barrick offices in San Juan, Iglesia y Jáchal.

The website of Barrick publishes information about cyanide management. The Door to Door program, includes the delivering of informative manuals which has been updated in order to keep the attention of its receptors. The topics of the manuals are the following:

- Cyanide;
- Mercury;
- Security Management;
- Environmental Monitoring Plan;
- Risk for Community Health and Environment related to mining;
- Procedures for Environmental Contingencies; and
- Health and Safety Policy.

Other material introduced by Veladero to inform about the operation area the following:

- Video about the processing of gold
- Manual about the fauna in Veladero and Lama

Veladero staff stated that the illiteracy level is low, but with a high percentage of people who have not completed their secondary education. Nonetheless, the main way in which Veladero provides information is verbally and/or visually via the Programs Puerta a Puerta, Programa de Visitas, Programa de Difusión Comunitaria y Programa de Muestreo Participativo. Veladero has documented these programs via sign-in sheets, photographs of site visits and videos that were reviewed by the auditor.

Veladero is required to communicate to the authorities any release of hazardous materials resulting in remediation, adverse effects to the environment, adverse effects to health and exceedances of standards. The authorities will make the information public upon request.

The CERP implemented, includes a list of the legal requirements that need to be followed as well as the authorities that need to be notified depending on the nature of the incident and the place of occurrence. Among the incidents included in the Plan there is one specific related with cyanide management.

During the recertification period, Veladero had one cyanide incident that exceeded the mine limits (2015) and two that were limited to the leach pad (2016 and 2017). The following additional communication efforts have been implemented:

- Leaflets of "what did happen in Veladero" regarding to the incident from 2015 have been distributed among the nearby communities and to the media. .
- A frequent asked question section for each incident that included: explanation of the incident, actions taken by the mine and media releases,
- A communication plan was prepared for each incident
 - To be available to any communication media that would approach the mine, especially those from the local communities.
 - Approximately 300 interview with communication media were held related to the 2015 incident.
 - There were formal 52 meetings within 2 months with the communities to explain the incidents, the community communication program

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focused on the incident as well as the visits to the mine. However, there were several one on one interactions to provide information.

- Information was published in the website barricklatam.com/ Veladero has started a rebranding process, the new name is Minera Andina del Sol and all the information has been relocated from Barrick's website to the new website (www.mineraandinadelsol.com.ar), as well as social network. The change in the name is also related to the transaction carried by Barrick where 50% of the stock was sold to Shandong Gold.

After the first incident, video cameras were installed at critical parts of the mine (6), including the areas where the three incidents have taken place. These cameras can be accessed online from barricklatam.com and show the mine conditions in real time. The third incident was recorded through these cameras.

Additionally, a video has been prepared by the mine to communicate the actions implemented to address the incidents.