

**SUMMARY AUDIT REPORT
FOR GOLD MINING OPERATIONS**



MINERA
Yanaquihua S.A.C.
U.P. ALPACAY



ICMI RECERTIFICATION AUDIT

**GOLD MINING OPERATION
MINERA YANAQUIHUA, S.A.C.**

**DISTRITO YANAQUIHUA
PROVINCIA DE CONDESUYOS
DEPARTAMENTO AREQUIPA, PERÚ**

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

2018 Three year Cycled Audit



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MINERA YANAQUIHUA, S.A.C.
Name of Mine

Lead Auditor

November 7-10, 2018
Date

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GENERAL SUMMARY

A.1 Information of the Audited Operation –

Name of Mine: Minera Yanaquihua, S.A.C.

Name of Mine Owner: Minera Yanaquihua, S.A.C.

Name of Mine Operator: Minera Yanaquihua, S.A.C.

Name of Responsible Manager: Virginia Samaniego A.

Address Office: Avenida Paseo de la Republica N° 5809, Miraflores.

State/Province: Country: Lima/ Perú

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The auditor validated the recertification audit, visiting the mine during operations from November 7st to 10th, 2018. The two recent innovations in infrastructure were followed up:

A.2 Installation and Preparation Assembly – Cyanide Preparation Tank

The performance of the mix tank of 12.2 m³ was verified of capacity, given the use of cyanide in big bag of 1 ton, personnel interview and equipment inspection were conducted.

Since 2016, a new mixing tank continues to be used, which involves a safer handling and transfer from the cyanide warehouse. The implementation of the mixing tank, and the elimination of the previous one, is part of the process of expansion of the Process Plant from 150 TPD to 215 TPD.

A.3 Tailing Filtration Plant

Another innovation was the implementation of the Filtration Plant, which aims to treat the tailings that leave the Process Plant, thereby eliminating 84% of humidity, which favors the recirculation of water from the process and it eliminates the water mirror of the sludge for protection of wildlife.

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A handwritten signature in blue ink, appearing to read "Virginia Samaniego", is written over a horizontal line.

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(RECERTIFICATION AUDIT)

Mine location and description of operation:

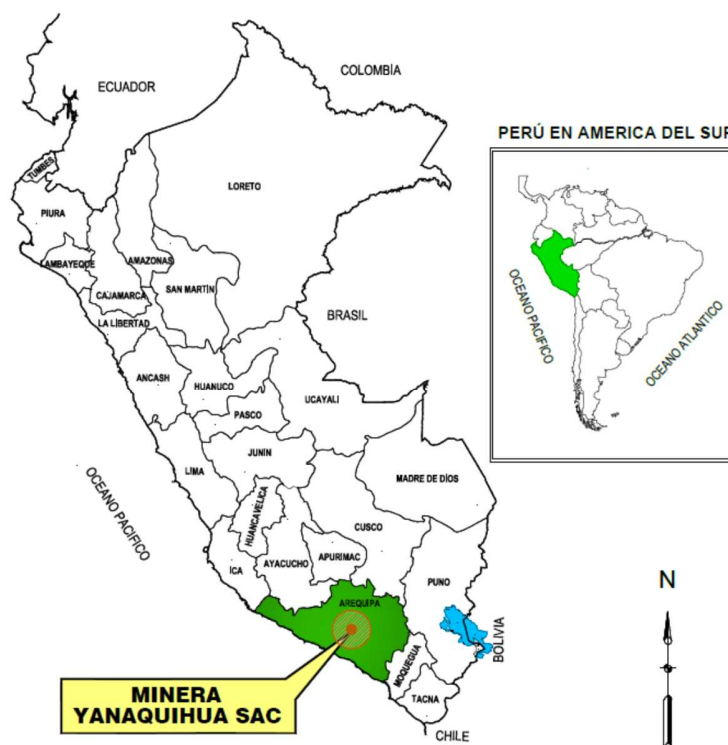
Minera Yanaquihua, S.A.C. (MYSAC), is located in the Condesuyos Province, Department of Arequipa, in the Republic of Peru; under the regional government of Arequipa.

It is located at 2,700 meters above sea level, to the southeast of Peru. The operation comprises a CIP plant, processing about Production was increased from 150 Tons of ore to 215 tons.

Road access is achieved to Yanaquihua from Arequipa through Corire, Aplao, Chuquibamba Yanaquihua, detour to Ispacas and Field Camp and Processing Plant Alpacay, making a total of approximately 191.38 miles. The road is paved from Arequipa to Chuquibamba; the rest to Alpacay is affirmed.

With respect to access, improvements were observed regarding the pavement for the year 2018 with respect to 2013, there are some safety rails and warning signs.

Map Location - Access



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Regional Geology: the geological model remains the same since the last audit in 2013.

Consists of intrusive rocks of granodiorite composition - tonalite from the Coast Upper Cretaceous Batholith - Lower Tertiary (According with Cedimin S.A., 1986) and Tiabaya Super Unit, from Upper Cretaceous (according INGEMMET 1994). On these intrusive rocks, sequences of sedimentary and volcanic rocks were deposited during the Tertiary and recent Quaternary and are represented for the Moquegua Formation from Upper Tertiary - Pliocene Volcanic Sencca, from Tertiary Upper Middle Pliocene and Volcanic Barroso (Upper Tertiary - Pleistocene) .

Local Geology: The area of MYSAC operations, is comprised mainly of intrusive granodiorite rock along the entire operation, but is also found in the northwest tonalite intrusive rock formations. Additionally, in the northeast of the operation are volcanic rocks from the Sencca Formation, which consists of a set of volcanic pyroclastic rocks, besides rhyolitic tuff with biotite. The rocks that make up this formation are essentially pyroclastic

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composed of dacitic tuffs and rhyodacites whose predominant color is gray. The presence of Consuelo geological fault, which SE strike, reaches the central area of the operation.

Process flow Sheet

At a Yanaquihua mining unit Minera Yanaquihua, SAC, (MYSAC) exploits a mineralized gold deposit using the underground mining method of mineralized structures. The ore obtained is processed in the Processing Plant called "Alpacay" with capacity of **215 Tons** per day (TPD). The treatment process consists on using sodium cyanide diluted in agitation tanks, the final product is a gold concentrate, the generated tailings is sent to a filtration plant, in which tailings are thickened with 14% moisture in tailings dam No. 3.

1- Thickness Area

The Alpacay Process Plant has a coarse field to carry out the blending of the ore supported by heavy equipment to obtain a homogeneous mixture of different lots that make it up. The Court with a capacity of approximately 2,000 Ton.

2- Crushing area

The ore to be processed is fed to the hopper with a thickness of 50 tons per hour (MTH) of capacity, which has a grid of rails that allows to pass ore no larger than 6 ".

The ore passes through conveyor belt N°1 of 24 " x 9.24 m, and discharge it to a stationary grizzly of 0.75 m x 0.5 m and 1" opening, which classifies the mineral in 2 fractions + 1" the primary Jaw crusher 10 "x 16" is fed which has a set of discharge of $\frac{3}{4}$ "; The fraction - 1" passes through the stationary grizzly.

The product of this crusher together with the classified fine ore (fraction $-\frac{3}{4}$ ") in the stationary grizzly are unloaded in conveyor belt N°2 of 20" x 15.7m; the transported ore feeds a 3' x 8' vibrating screen with $\frac{1}{4}$ " metal mesh, where the fines ($-\frac{1}{4}$ ") fall directly to the 60 MTH Fines Hopper of storage capacity located under the vibrating screen and the thick ($+\frac{1}{4}$ ") are transported by conveyor belt N° 3 of 24" x 21 m to a secondary crusher Symons 2', with a setting of 7 mm, this in turn unloads to a conveyor belt N° 5 of 24" x 19.20 m, which also discharges in the same strip N ° 2 indicated above, in such a way that the crushing circuit is closed. The final product of crushing is 100% - $\frac{1}{4}$ ".

3- Grinding Area:

The ore stored in the hopper of fines, is transported by strip N° 6 of 24" x 13.80 m and conveyor belt No. 7 of 18" x 12.06 m to the feed chute of the 6'x5 'ball mill (primary mill) the treatment is 218 MTD. At the point of unloading of strip No. 6, the automatic head mineral sampler is installed.

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In the feeding chute of the 6'x5' mill the following reagents are added for the dissolution of Au and Ag, of the mineral:

- Barren solution.
- Caustic soda solution.
- Sodium cyanide solution.

The discharge of the 6' x 5' primary mill is driven by a 3" x 3" SRL pulp centrifugal pump to D-6 Hydrocyclone No. 1. The underflow of this equipment as a whole feeds the secondary mill 5' x 5'.

The overflow of hydrocyclone No. 1 leads to the 3'x4" chipshaft to separate the wood present; The undersize of this sieve is sent to the discharge of the secondary mill 5'x5' to be pumped by centrifugation SRL 3"x 3" to hydrocyclone D-6 No. 2, whose underflow is fed to the mills of 4'x5' and 5'x5'm, the discharge of the mill 3'x4' is pumped by centrifugal pump 2½"x 2" to the discharge drawer of the mill 4'x5' and from there it is pumped with SRL 3"x3" to hydrocyclone D-6 N° 3, whose underflow joins with the underflow of D-6 N° 2 where they feed the 3'x4' mills (20%), 4'x5' (30%) and 5'x5' (50%). The Overflow of hydrocyclones D-6 N° 1 and N° 2, are fed to the 4'x6' high frequency Landsky 4'x6'.

In the sieve 4'x6' the oversize (thick fraction) they feed to mill 3'x4' and the undersize in its entirety (fraction dies) feeds by means of centrifugal bomb 2 ½ "x2" to the agitator 19'x19'.

4- Leaching Area - Adsorption:

This process has the following operation.

- a. Leaching - It consists of 4 agitators 19'x19' with motor-reducer of 25 HP, with direct operation. The pulp coming from the grinding O / F is fed to the agitator 19'x19' N° 1, in addition here we have an automatic sampler for head analysis with cut every 8 min and cascaded through the agitators 19'x19' No. 2, 3 and 4. With a residence time of 30.90 hours of leaching, the pulp continues to the Adsorption stage.

The head sample is sent to the Chemical Laboratory to be analyzed by Au, Ag, Cu, and % -200 meshes, in each shift. The concentration of free cyanide is 1800 ppm and pH 10.70 to avoid the loss by hydrolysis of cyanide.

- b. Adsorption - Consists of 06 agitators 12'x15' with motor-reducer of 15 HP, 01 with direct drive and 05 agitators with transmission wheel system. The pulp coming from the agitator 19'x19' N° 4 feeds the adsorption stirrer 12'x15' N° 1 where the agitators 12'x15' N° 2,

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3, 4, 5 and 6 are discharged in cascade form. In these agitators it has a carbon ratio of 60 kg of activated carbon / m³ of pulp, carbon that will adsorb in the 06 adsorption agitators, the dissolved gold and silver of the leaching stage.

After a residence time of 14.52 hours of adsorption, the pulp with a minimum quantity of Au, Ag in the solid and liquid is discharged by the agitator 12'x15' N° 6 as a final cyanidation tail to the filtration plant. At this point it is sampled automatically every 12 min / cut.

In this stage the pulp is maintained at a concentration of 1450 ppm of free cyanide and pH 10.42 to avoid loss by hydrolysis of the cyanide.

Rich Coal Harvest - Activity carried out periodically during the month, the coal of the first agitator 12'x15' (A-1) with the highest concentration of gold adsorbed is by-passes in the circuit and the pulp with coal is discharged to the vibrating screen Derrick 2'x7' that has a mesh No. 30, the carbon retained in the mesh is washed by means of sprinklers that inject water under pressure, which is bagged, weighed and sealed for dispatch. Previously it is sampled manually to determine its law.

Pulp through mesh No. 30 is pumped by a SRL pump 21/2 "x2" to the leach agitator 19'x19' N° 2 of the leaching circuit.

5- Filtered Plant Area:

The final tailings of the adsorption process goes by gravity to the filtering plant feeding the hydrocyclone D-4 N° 1, 2 (the 3rd in stand by) where it is classified into 2 fractions.

The Underflow coarse fraction with an average density of 1600 gr / l, (59.58% solids) are discharged directly to the holding tank and then fed to filter press No. 1 or No. 2.

The fine fraction Overflow of these hydrocyclones with 26% solids is fed to the 19'x19' dilution tank where 18.31 m³ / hr of barren solution is added to dilute the pulp to 10% solids, in order to accelerate the sedimentation in the thickener. Then from there it is pumped through the Galigher pump 2 "x 21/2" to the vertical thickener.

In the vertical thickener there are 2 flows, the discharge of the pulp with 53.58% solids is sent by the Bredel pump SPX-50 House Pump to the holding tank and the overflow of the thickener in solution barren is pumped to plant benefit by a Hidromac pump N° 1 and N° 2 of 15 HP.

In addition, with the barren solution, flocculant MT-4302 is prepared to dose the thickener.

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Filtration

From the Stirring Tank 19'x19' and with the pump Galigher 6"x4" or Wilfley 3"x4" is pumped to the filter press No. 1 or No. 2, after the solid-liquid separation a cake is obtained with a humidity of 14.45% which is discharged by gravity to the concrete slab under the filters. Subsequently, the filtered tailings are transferred to court No. 3 or court 2A, where it is extended with a dump truck and is compacted with a roller. The humidity of the filtered tailings allows normal handling with equipment on the storage court. The filtering cycle of 35 minutes consists of the following stages:

Pulp feeding, squeezing (water to the inside membrane plate), blown (with air) and dried. From there, the filtered solution or liquor is deposited in the 12'x12' tank that also receives overflow solution from the thickener, and both are sent to the process plant by means of Hidromac pumps N° 1 and N° 2.

The main objective of the tailings thickened and filtered plant is to recover the barren solution, which is reused in the process, reducing the consumption of fresh water throughout the process.

6- Tailing court:

Water is currently being recovered in the filtration plant as part of the technological improvements in the Alpacay Benefit Plant, generating tailings with lower humidity but greater specific weight that is currently being transferred and depositing this filtrate tailings to field No. 3; that is why the need for reinforcement in the current tailings deposit. The transfer is made by means of a dump truck of 15 m³ capacity.

In October of 2018, a Geotechnical Study was incorporated (which is included in Attachment 4.8.2 - Tailing 3. Geotechnical Study), due to the new characteristics of the tailings, which are now discharged with 14% humidity.

Previously Stability Studies were conducted to both, the expansion of Deposit N° 1 and the design of Deposit N° 2, according to the requirements of "Resolución Directorial" (R.D.) No. 440-96 EM / DGM for the compliance of S.D. No. 016-93, Articles 20, 29, 37 and 43 of The Environmental Protection Regulation of Mining Activities in Peru.

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A.4 Auditor's Finding

This operation is

- ✓ In full compliance

with the International Cyanide Management Code.

This operation has maintained full compliance with the International Cyanide Management Code throughout the previous three-year audit cycle.

Audit Company: Geosoluciones Panamá
Technical & Leader Auditor: Jorge Efrén Chong Pérez
Email: geosoluciones@cwpanama.net

Dates of Audit: November 7nd -10th, 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 Cyanided 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 Gold Mine Operations and using standard and accepted practices for health, safety and environmental audits.

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ROLE AS CYANIDE MINING OPERATION

1. PRODUCTION:

Encourage responsible cyanide manufacturing by purchasing from manufacturers that operate in a safe and environmentally protective manner.

Standard of Practice 1.1:

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

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:

MYSAC maintains supply contract with QUIMTIA, S.A., since January 13, 2016, renewed every 3 months automatically (hereinafter called as QUIMTIA), a cyanide warehouse distributor, and transportation contract with the company CITSSA S.A.C. (hereinafter called as CITSSA); both are International Cyanide Management Institute (ICMI) signatory companies.

<https://www.cyanidecode.org/signatory-company-categories/quimtia-sa-peru>

The selected cyanide will come from Australian Gold Reagents Pty Ltd., Australia (hereinafter called as AGR) with its plant in Petrochemical Complex Kwinana, Western Australia.

The AGR was initially ICMI Certified during October 2007 and re-certified during March 2014 and its last recertification on August 3, 2017.

<https://www.cyanidecode.org/signatory-company/australian-gold-reagents>

MYSAC has purchase orders sent to QUIMTIA, S.A together with its referral sheets. In each purchase comes the MSDS sheets, technical sheet and have a quality certificate.

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The supply of cyanide to MYSAC has not been interrupted since the initial certification. The process will start through a new tank of increased capacity designed and manufactured by Fabricators and Technology SAC. The purchase of 50Kg cyanide cylinders was eliminated.

QUIMTIA has been the provider to MYSAC since the initial audit 3 years ago, a cyanide distributor for AGR, will be the cyanide supplying company of the project, who delivers to MYSAC the required documentation including the chain of custody, in the referral guide.

2. TRANSPORTATION:

Protect communities and the environment during cyanide transport.

Standard of Practice 2.1:

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

The operation is

- 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:

An agreement of adherence exists to the Code of Cyanide between the distributor QUIMTIA, S.A. and the transporters, CITSSA LOGISTICS S.A.C. in January 2016 and EDEWIT.

The packages are in compliance with the United Nations and local authorities; this requirement has been agreed upon "Adherence Agreement" signed between QUIMTIA, MYSAC, CITSSA y EDEWIT.

The containers are properly labeled in English and Spanish before arriving to the mine, each box of cyanide brings its MSDS sheet.

Addition of colorant dye to high strength liquid cyanide, prior to delivery at the mining operation was include in a companies agreement of adherence.

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QUIMTIA, S.A., a Code signatory member, had its warehouse facility certified on October 26, 2017.

CITSSA LOGISTICS, S.A.C., the company assigned for transport performed a route evaluation, which was recertified in force since August 8, 2018.

In the same way, EDEWIT keeps its certification in effect July 12, 2017

In the 2018 audit it was evidenced that the cargo arrives at the port of El Callao, and then it will transport by chain of custody, and shipper/carrier waybills until MYSAC.

The cargo is transported from the Port in Callao to QUIMTIA's cyanide storage unit by Transportes ZETRAMSA, S.A.C. Then, CITSSA or EDEWIT, an ICMI certified transport companies, will deliver the cargo directly to the mine without the need of any interim storage. CITSSA or EDEWIT, a transport companies certified by the Cyanide Code, oversee making the entire land transportation of the cargo, from QUIMTIA, S.A. to the mine.

In the 2018 audit it was evidenced that there is a new forklift unit Caterpillar with 3 Ton capacity purchased in 2016, with inspection and certification records of its two operators, which is used for unload of cyanide in the mine.

ZETRAMSA, CITSSA and EDEWIT has a safety program and a preventive and corrective plan as ICMI Certified Companies.

All drivers have been trained for hazardous materials handling, as required as companies certified by ICMI. The convoy personnel are trained to provide emergency response in case of hazardous material spill and intoxication.

The cargo is always monitored by GPS and escorted, by the transport companies certified by the ICMI. MYSAC performs surveillance during transport, and at the end of the transportation process, MYSAC receives a trip report with GPS records.

The adhesion agreement of the transport companies with the certified transport companies requires trained for hazardous materials handling and emergency response.

The established agreements require the carrier and supplier; including shipping to be certified.

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A handwritten signature in blue ink, appearing to read "Francisco Pizarro".

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There is a written agreement between MYSAC, QUIMTIA, EDEWIT, ZETRAMSA and CITSSA, designating responsibility, the contract establishes AGR, a cyanide manufacturer, as the specific cyanide supplier.

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:

MYSAC requires that its transport chain be certified and the same way QUIMTIA, S.A. who maintains a cyanide warehouse facility in Lima-Peru:

<http://www.cyanidecode.org/signatory-company/quimtia-sa>

In this way the companies

CITSSA LOGISTICS, S.A.C.

<http://www.cyanidecode.org/signatory-company/tamse-transportes-sudamericanos-sac>

EDEWIT, SR LTDA

<https://www.cyanidecode.org/signatory-company-categories/edewit-sr-ltda-peru>

ZETRAMSA, S.A.C.

<https://www.cyanidecode.org/signatory-company-categories/transportes-zetramsa-sac-peru>

are bound by an adhesion contract with MYSAC to be committed to the Code of Cyanide in its transportation requirements.

All cyanide carriers in the supply chain to MYSAC are certified.

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The certified transporters and supply chains involved in the transport of cyanide from the point it leaves the Australian Gold Reagents Pty Ltd. (AGR), Australia production facility to its final delivery at Minera Yanacocha, S.A.C. are as follow:

- Transportation from AGR's Kwinana production facility, using rail and road transport to end user mine sites in Western Australia; as well as road transport to Fremantle Port for export supply. For export product this supply chain is up to and includes the stevedory operation at Fremantle Port.

Certification date on February 7th, 2018.

<http://www.cyanidecode.org/signatory-company/australian-gold-reagents-ltd>

- Transportation from From Fremantle, Western Australia to the Port of Callao, Peru via AGR's Ocean Freight Supply Chain; receipt and management of cyanide at the port, and truck transport from the port either directly to customer mine sites in Peru or first to Quimtia S.A.'s certified warehouse for storage and then to customer mine sites using certified carriers EDEWIT S.L. LTDA or CITSSA Logistics SAC.

<http://www.cyanidecode.org/signatory-company/australian-gold-reagents-ltd>

- Transporter from QUIMTIA, S.A.C. Warehouse to Yanacocha Mine (Peru): CITSSA Logistics SAC and EDEWIT, S.R. LTDA

The mining operation maintains records that were randomly reviewed, chain of custody that identifies all elements of the supply chain from the manufacturer, and all carriers involved are certified by the Cyanide Code.

3. HANDLING AND STORAGE:

Protect workers and the environment during cyanide handling and storage.

Standard of Practice 3.1:

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 3.1
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Summarize the basis for this Finding/Deficiencies Identified:

The cyanide discharge, mixing and handling facilities maintain their designs and have not undergone structural modifications in the 2018 audit. Improvements were observed, such as additional protection against rain in the new mixing tank, improvements in the lifting equipment: The manual-mechanical system was replaced by electromechanical with a capacity of 2 Tons.

The cyanide warehouse has not been modified since the last audit. Improvements were made to the drains and their access in the back, in the audit of 2018 the installation continuous located on a plain, occupying an area of approximately 645.8 sq. feet, and located 65.62 feet away from the Alpacay Plant. At the back of the facility, at approximately 6.6 feet. of height there is a slope with protection against erosion.

This storage unit was designed by “*Administración y Gerencia en Minería y Construcción*” (Mining and Construction Management) engineering firm. It was built with concrete floor and cement block walls.

The roof and doors are made of metal elements. It has natural ventilation through a wire mesh. A perimeter ditch was installed to minimize the risk of rainwater entering the premises. These designs have been submitted to the Environment Protection Authority of Peru as part of the documentation submitted by MYSAC, to get the approval.

On May 4, 2016, the National Institute of Civil Defense of Peru (INDECI) conducted an inspection to corroborate its structural stability against earthquakes and natural disasters of the entire mine facility, including storage areas, processing plant and infrastructures that involve the use of cyanide, issuing a certificate.

The cyanide storage site is not near where workers congregate.

Unloading and storage areas for solid cyanide are located away from surface water. As indicated in the storage drawings a perimeter ditch was installed to minimize the risk of rainwater entering the premises. In the 2018 audit, the drains in the back of the warehouse were channeled to minimize the risk of erosion to the foundation of the structures and the slope, located in the back, in the same way improvements were made to the floor of the warehouse.

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When reviewing inspection records, a cyanide detection instrument was identified, which was not satisfactory, on February 2, 2016, which was immediately replaced. At that time there were 4 instruments.

Currently, of the eight (8) cyanide meters that MYSAC has, there is a permanent one on the outside of the warehouse with visible and audible signage.

In the same way, every time there is cyanide discharge, both the transporter and MYSAC carry out monitoring.

During the 2018 audit, adequate signaling was observed, improvements were added to the system for locking the doors of the warehouse, as well as to the shower.

On the outside of the warehouse there is a communication board for an emergency response. In the audit of 2018, no liquid cyanide is involved or used in this operation. There are no liquid cyanide storage tanks used as part of the operation.

In the audit of 2018, no liquid cyanide is involved or used in this operation.

There are level indicators in four tanks: in the new mix tank of 12 m³ capacity, in the two (2) leach tanks, and in the retention tank of the filtration plant. The instrumentation personnel Engineer Diego Rosado is responsible for carrying out the functional tests, which were carried out in the presence of the auditor.

In the 2018 audit, the integrity of the cyanide mixing tank was located on a concrete surface. A spill containment pond will be built under it in case of emergency, which was found in good condition to prevent leaks.

In the audit of 2018, the secondary containment is concrete-built and located under the cyanide mixing tank, and its infrastructure is in good condition.

In the audit of 2018, the cyanide warehouse has adequate ventilation to prevent accumulation of hydrogen cyanide gas, and free of obstructions.

The warehouse roof and floor are made of concrete to minimize contact with water. Audit verification indicates the integrity of floors, walls and ceilings.

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MYSAC has perimeter security with access to authorized personnel only. There is a permanent entry/exit control to all the persons. In the audit of 2018 it was verified that the protection of the installation is carried out by a specialized company. Additionally, access control and surveillance cameras were placed throughout the process plant. In total MYSAC has about 30 people dedicated to the protection of the installation.

In the audit of 2018 it is verified that, the warehouse stores no other materials such as: acids, strong oxidizers, explosives, food, animal feed or tobacco. A part of the warehouse is used for storing empty boxes of detoxified cyanide.

In visual inspection, the auditor reviewed the containment measures in the areas of discharge, storage and tanks of process solution, finding them intact.

In the audit of 2018, MYSAC does not use liquid cyanide nor unloads tankers. Both, the mixing tank and the solution tanks used in this process have a secondary spill containment pond.

The 14-PETS-MATET procedure was revised and replaced by a new format as it is the Procedure SODIUM CYANIDE STORAGE MAINTENANCE Code: PET-ALP-PL-44.44, to give a more specific maintenance to the needs.

In the 2018 audit, the containment devices have not changed, the secondary containments for mixing and process tanks are sized to hold a volume greater than of the largest tank and any piping draining back to the tank.

There is a spill containment of 195.75 cubic meter of capacity around all ten processing tanks. The four largest tanks (lixiviation tanks) have a capacity of 145 cubic meter. The remaining six tanks (absorption tanks) have a capacity of 45 cubic meter each one.

The secondary containment system also includes another containment pond called "contingency pond" with additional capacity of 425 cubic meter, integrated to the containment system for tanks and mixing solution, which was verified in good condition.

MYSAC has maintained its weekly inspection program to pipelines and pump inspections are considered routine procedures in order to prevent and eliminate leaks to 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 report. Among the aspects of relevant improvements are the change of metal flanges, for High Density Polyethylene. Flow meters have been installed in order to have better control of the flows.

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In the 2018 audit, it is verified that all tanks and pipelines are constructed of materials compatible with cyanide and high pH conditions, using metal elements and HDP pipes.

The National Institute of Civil Defense (INDECI), inspected the entire plant finding it as required and issuing certificate.

In the 2018 audit there have been no modifications of the infrastructure related to the storage and mixing tank, the same designs are maintained.

Certified engineering firms have made the drawing of the facilities as well as detailed technical studies.

The procedures created and verified in the initial audit, which have the purpose of ensuring quality and guaranteeing it, have been modified in format, and five new procedures were incorporated: 1- Manipulation and Preparation of Cyanide in the Cyanide Tank of sodium. 2- Operation of Press Filters. 3- Preparation of Flocculant, 4- Changes of Tarps in the Tailings Thickener Press. 5- Filtered tailings loading

A new procedure was created to comply with Supreme Decree No. 024-2016 E.M. (Corrected in some Articles by Supreme Decree 023-2017), called Safety and Occupational Health Regulation in Mining, in terms of the format in its Annex N ° 10 requires modifying the ordinal 4. Eliminating the column "Risks and Controls" , and keep only the "Steps" column; and refer to ANNEX N ° 7 of the same Decree, in which the IPERC is used (Hazard Identification, Risk Assessment and Controls).

On the occasion of the installation of mixing tank and filtration plant for tailings thickener, pits were made in order to evaluate the properties of the subsoil, yielding favorable geotechnical results, these were attached in the initial audit report sent to ICMI in 2016.

In the case of the tailings with deposition of filtered material, laboratory tests were made, considering the increase of the capacity of the tailings with different characteristics; These results showed the need to reinforce the slope in the segment with the greatest decline in the valley.

Inspection records from the cyanide warehouse are evidenced.

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For the cyanide storage facilities, in the initial audit sent to ICMI in 2016 quality controls were considered in both its design and execution considering the ground/underground conditions and the structure weight.

MYSAC, maintains records of QA / AC applied in the cyanide facilities for the storage and mixing. (INDECI).

The additions corresponding to the mix tank and the tailings thickener filtration plant have documentation backed by the project manager engineer, who certifies that the installation was constructed or modified according to the design.

The project manager certified (Engineer Orlando Flores), that the storage and mixing facilities still maintain their integrity based on visual inspection.

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:

The procedure 12-PET-ACVC, version 4, was modified only in its format, which conforms to the new Supreme Decree 024-2016 (Mining Regulation), where empty boxes are taken to a designated site within the cyanide warehouse, where they were protected and safe after being treated, and later they were taken to PETRAMAS, SAC, for final disposal. The empty packages are transported by EDEWIT.

Both PETRAMAS, SAC as EDEWIT, have the permission of the Ministry of Health in force N ° 002413-2016 / DSA / DIGESA and N ° 002715-2018 / DCEA / DIGESA; respectively.

Mr. Samuel Ramírez was interviewed, who is the person who performs the mixing procedure, who at the same time is in charge of the treatment of the empty packaging, immediately after

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its use. Mr. Ramírez described in detail the process he performs, which makes clear his technical level and abilities to perform the job.

As verified in the 2018 audit, the empty plastic bags are rinsed at least three times, adding the resulting rinsing water to the cyanidation process with strict control de pH. as indicated in the new Procedure PET-ALP-PL-10. ("STORAGE OF EMPTY CYANIDE BOXES").

Empty boxes are storage in a cyanide warehouse before being transferred to PETRAMAS for final disposal, MYSAC does not use cyanide in metal cylinder packaging.

In the recertification audit of 2018, it is maintained that after cyanide residue is poured into the mixing tank, it is immediately washed with sodium hypochlorite and lime, inside and outside.

In the audit of 2018, it is verified that MYSAC does not use liquid cyanide.

MYSAC through photographic sequence and description of on-stage events during the handling and preparation in the cyanide mixing tank, indicates that it has implemented the procedure PET-ALP-09-05:

- The leaching worker receives the work order using full EPP.
- The leaching worker fills out the Risk Assessment and Hazard Identification and Controls form ("IPERC").
- The shift foreman supervises and always monitors the cyanide preparation in the cyanide preparation tank.
- The solution valve is opened to fill the cyanide preparation tank.
- The pH of the barren solution is verified and monitored, which must be above 10.50. If the pH is less than 10.5, Sodium Hydroxide will be added until it is above 10.5
- The handles of the big bag of 1 ton are verified, placing the handles in the crossroads of the electric lifting device.
- The presence of HCN is always verified and monitored during the Preparation of cyanide.
- The leaching worker lowers the empty Big Bag towards the empty cyanide box using the electric lifting device.
- The leaching worker completes the level with barren solution up to 2.30 m (sensor level) and proceeds to turn on the agitator of the cyanide preparation tank to obtain the cyanide solution.

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- The preparation of cyanide ends.

To minimize the risk of tearing or puncturing of the boxes, 2 Tons electromechanical hoist equipment is used connected to a bracket that holds the boxes with cyanide, and then, lift them to the mixing tank.

The operation implemented the procedure PET-ALP-PL-08.05 (Transference of Cyanide from Warehouse to Cyanide Preparation Tank) for safely moving cyanide from the cyanide storage facility to the mixing facility as following:

- The leaching worker and the forklift operator carry out continuous Hazards Identification Risk Assessment and Controls (“IPERC”).
- Rescue camera, anti-spill kit, showers and eyewash are inspected.
- The forklift operator checks the equipment, performing visual inspection and keeping record.
- The warehouse padlock is opened and the presence of HCN gas is monitored in order to be able to enter the warehouse safely.
- The operator enters the warehouse with the forklift to pick up the cyanide box and transport it to the cyanide mixing tank platform delimiting the work area.
- The operator takes his forklift back to the parking area and the leaching worker proceeds to lock the cyanide warehouse.

MYSAC meets the new Supreme Decree D.S. for mining activities N° 045-2013, section 9.6.2 f) which prohibits stacking more than three cylinders or containers, one above the other vertically. Only two boxes are stack at the cyanide warehouse. The capacity of the warehouse is marked and limited to 20 Tons.

If a spill occurs during mixing, ordinal 4.8 and 4.12 from PEM-ALP-PL-04.04 (“DERRAME DE CIANURO DE SODIO, SOLUCIÓN Y PULPA”) requires the activation of the emergency central committee; and the emergency brigade.

During manual mixing of solid cyanide, the person (“Lixiviador”) uses full personal protective equipment, and there is always a second person (Chief of Guard) watching from a safe area, but the cyanide discharge is done remotely. An interview was conducted with the “Lixiviador”, Mr. Samuel Ramirez and the Head of the guard, who demonstrated to know the procedure.

In the 2018 audit, MYSAC has established the following procedures:

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PET-ALP-PL-06.05 “Descarga y Almacenamiento de Cianuro de Sodio”-Unloading & Storage Sodium Cyanide.

PET-ALP-PL-08.05 “Traslado de Cianuro de Almacén a Tanque de Preparación de Cianuro”- Cyanide transportation from MYSAC warehouse to Cyanide Preparation Tank.

PET-ALP-PL-09.05 “Manipulación y Preparación de Cianuro de Sodio”- Handling and Preparation of Sodium Cyanide.

PET-ALP-PL-10.05 “Almacenamiento de Cajas Vacías de Cianuro” - Empty Cyanide Boxes Storage.

In its structure objectives, scope, references, definitions, personal protective equipment, equipment / tools / materials, procedures and restrictions are considered. In the audit of recertification 2018 it was verified that the format was modified due to a new governmental Supreme Decree.

The operation has developed new procedures to detail the necessary standard practices such as inspections and preventive maintenance for the safe and environmentally sound operation.

PET-ALP-PL-37.02 “Mantenimiento de Tanques de Cianuración.

PET-ALP-PL-44.04 “Mantenimiento de Almacén de Cianuro”

PET-ALP-PL-38.01 “Mantenimiento de Bombas de Soluciones Cianuradas”

PET-ALP-PL-39.01 “Mantenimiento de Tuberías, Válvulas con Soluciones Cianuradas”.

There are inspection records of the tailings dam and pipes, which regulate their periodicity in a weekly schedule. In times of rain, records show more frequent inspections. Inspection records of mixing tanks and accessories are available.

The inspection records of the process solution tanks, in terms of structural integrity and signs of corrosion and leaks are documented in the records indicated 4.1.7

In audit 2018 it was verified that the operation makes periodic inspections to the solutions process tanks. Some of the inspection records were reviewed, the parameters observed on the records under the inspection procedure (PET-ALP-PL-37.02 “Mantenimiento de Tanques de Cianuración”) for verification of the structural integrity and signs of corrosion or leakage were shown.

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Inspection records of the secondary containment devices and functionality of the control valves are contained in the registers 4.1.7

The inspection records of the spill catchment systems in dams and tailings are contained in 4.1.7

Procedures have been updated (PET-ALP-PL-37.02 "Maintenance of Cyanidation Tanks"), PET-ALP-PL-38.01 "Maintenance of Cyanized Solutions Pumps" and PET-ALP-PL-39.01 "Maintenance of Pipes, Valves with Cyanurated Solutions".

The records of the inspections of the pipes, ponds and tailings, are in compliance with the procedure PET-ALP-PL-39.01 "Maintenance of Pipes, Valves with Cyanide Solutions.

In audit 2018, MYSAC keeps inspections records with dates, name of inspectors and non-conformities found, In addition, photographic illustrations of the findings are made. The corrective action plan and priorities needed are documented; the procedures (PETS) are defined and set for a three-year period which is the minimum period of time the facility is required to retain inspection records.

PET-ALP-PL-04.04 was created ("Sodium cyanide, solution and pulp spill"), section 4.8 considers the use of secondary containment called contingency pond "poza de contingencia." Any spill in the secondary containment will be piped to the main containment, before being pumped to the process.

4. OPERATIONS:

Manage cyanide process solutions and waste streams to protect human health and the environment.

Standard of Practice 4.1:

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

The operation is

- in full compliance with
- in substantial compliance with Standard of Practice 4.1
- not in compliance with

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Summarize the basis for this Finding/Deficiencies Identified:

Procedures were created PET-ALP-PL-04.05 ("Operation of leaching"), likewise PET-ALP-PL-06.06 (Discharge and Storage of Cyanide) and PET-ALP-PL-08.05 ("Transfer of Cyanide from Warehouse to Cyanide Preparation Tank "). All had modifications in format, except for the transfer of cyanide due to the implementation of the mixing tank and the use of cyanide in 1 Ton packages.

The procedure PET-ALP-PL-09.05 ("Handling and Preparation in the Cyanide Tank"), which was created especially for the change to the use of cyanide in packages of 1 Ton.

Inspection records of the tanks and valves are evidenced, in which work orders for repairs in metal structures were originated.

The operation maintains tailings that only stores thickened material, after having withdrawn 84% of water.

Attached is a study to evaluate the stability of the tailings being now storing tail material in thickened state.

The geotechnical evaluation proposed the realization of the reinforcement of the dike.

In the 2018 audit, MYSAC maintains preventive inspection procedures, which include tanks, valves, pumps, pipes, emergency and tailings ponds.

The pipe maintenance procedure was modified adapting it to all types of pipes where cyanide solutions flow. Towards the tailings no longer flow cyanided sludge, but thickened solids are transported from the filtration plant to the said tailings.

The return pipes go from the Filtration Plant to the Process Plant, they are inspected, like the rest, which has been the modification.

The procedure PET-ALP-PL-39.01 was incorporated ("Mantenimiento de Tuberías Válvulas con Soluciones Cianuradas").

The Water Management Procedure only changed in accordance with the new requirement of the Peruvian Mining Regulation Supreme Decree N ° 024-2016.

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In the 2018 audit, it is evident that MYSAC has operational procedures and practices to identify and correct an operating process that may increase the potential risk of cyanide spill. Being mandatory by the Peruvian Safety Regulation, Article 76, "Whenever new methods of operation, processes, equipment, machines and materials are introduced, based on PETS, PETAR and standards established for each case, training must be carried out ", timely communication to workers in environmental and security matters, and MYSAC being a small mine, it is in weekly security meetings where communications are given to workers.

The operation has the Sodium Cyanide Solid Solution, Pulp and Solution spill section 4.16 to 4.20, which is within the Emergency Plan for the Use and Handling of Sodium Cyanide, which indicates that depending on the magnitude of the spill, it activates the emergency brigade. In case of exceeding the solutions of the leaching tanks the excess water is sent to the contingency ponds.

Due to the implementation of the Filtration Plant and the creation of thickened material, the inspections of wildlife mortality are given once (1) per week, since there is no presence of water masses (water mirrors) in the tailings.

According with my professional opinion the operation inspect cyanide facilities on an established frequency sufficient to assure and document that they are functioning within design parameters.

In the audit of the year 2018, the Engineer Hernán Jimenez continues to be assigned to exclusively coordinate everything related to ICMI System, including inspections and taking corrective actions.

During the Audit of the year 2018, a bird was sighted a few meters from the perimeter of the Process Plant. In the inspection records 7 bird species have been identified.

There are inspection records of mixing and process tanks in which minor metal repairs are evidenced.

The auditor verified that the secondary containment systems are hermetic and connected to additional containment ponds.

MYSAC has inspection records available for leak detection means and collection systems in ponds and tailings.

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In the audit of the year 2018, MYSAC pumps and valves inspection records are available for deterioration and leakage. Every year a detailed inspection of these components is carried out.

In the audit of the year 2018, the auditor has verified the integrity of the channels and safety margins, which are acceptable.

In the audit of the year 2018, It has been verified that the inspection reports maintain the standard structure: date of inspection, name of the inspector and any deficiency observed. There is a record of preventive maintenance and history of the generator sets.

The procedure PET-ALP-PL-42.01 ("Preventative Maintenance of the Generating Group") has been created, the preventive maintenances are carried out every 250 hours.

In the audit of the year 2018, MYSAC have one emergency power supply sources to operate pumps and other equipment. It is to prevent unintentional releases and exposures if by any situations its primary power source is interrupted, and implemented a testing and maintenance for a new procedure PET-ALP-PL-41.01 ("Operation of Generating Sets"), PET-ALP-PL-43.02 ("Start-up of Equipment in Plant with Power Generating Sets due to Energy Cutting") and of power generation equipment to ensure backup operation. The frequency of the test is performed and recorded every 30 days by maintenance personnel and recorded in a log book.

The Caterpillar and Olympia generators were permanently put out of service; and a new 680 KW, ALGESA was incorporated.

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

- 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:

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The metallurgical laboratory of the Process Plant performs leaching tests to previously determine the consumption of cyanide on a reduced scale. The head of the metallurgical laboratory Engineer Juan Carlos Díaz is responsible for carrying out these tests.

In an interview, he reports that "every day analyzes are made on samples of the different minerals that are collected in the field. These tests have the objective of projecting: cyanide consumption, soda consumption, and recovery percentage, considering the blending of the different minerals.

It was reviewed random records of metallurgical tests in order to optimize the cyanide consumption, according to the characteristics of the ore and observed the operation of the laboratory as a pilot scale plant of the Process Plant.

In the audit of the year 2018, from the composite samples of ore that enter the milling, cyanidation tests have been carried out in three parameters: % cyanide, granulometry and cyanide time. From the above information, the cyanide dosage was varied. Initially only cyanide was added in two mills (6 'x 5' and 5 'x 5'), now the dosage is made in three mills (6 'x 5', 5 'x 5' and 4 'x 5'). With the above, it has been possible to reduce consumption by 0.18%, even though production has been increased (in tonnage and head grade).

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:

According to the statistics records, in the audit of the year 2018, the water balance is maintained.

The rates of application of solutions, tailing rates, precipitation-evaporation index and filtration have been revised; runoff diverted from gradients above the wells and sludge, possible power cuts and capacity-availability of surface water discharge treatment system.

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MYSAC modified to water balance of the 215 TON per day for the process, based on the return of water from the filtering plant and changes in evaporation.

For the water balance in the audit of the year 2018, data from the initial audit were used, based on rainfall data.

In the Audit of the year 2018, the estimated calculations for the return period of rainfall, remain unchanged.

MYSAC has a corrective environmental management instrument in which the new parameters are included to adjust them to the increased production of 215 TPD, and what is related to water balance and rainfall forecasts.

According to the water balance report of “Minera Yanaquihua” operational system, there is a balance between the system and the environment, meaning that there are no leaks or effluents in what goes in and recirculates. There is only water lost by evaporation (14% water) in the system (tanks, tailings dam) due to temperature because of the dry or semi-arid climate. During the last 3 years prior to the 2018 audit, the maximum rainfalls were:

- February 18, 2018: 7.4 mm
- February 26, 2017: 14.7 mm
- February 21, 2016: 20.2 mm

Water Outlet

Evaporation:

According to studies, an analysis was made of the evaporation in the country. The envelope curves related to altitude showed that evaporation increases. Yanaquihua area has a range of 2,650 mm annual average evaporation from 1,500 to 1,900 mm of water.

For purposes of calculation in the 2018 audit they are maintained, the annual average of 1992 mm was taken as reference from the Pampilla, Arequipa meteorological station.

This gives an annual average of daily evaporation of 5.23 mm.

Water retained in voids:

No water is retained during the process of the plant because no deposition from pulp is performed in the circuit.

Table of water balance in 215 TMD Process Plant

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There is water balance between the entry and exit of the water element in the components of the “Minera Yanacqhua SAC” operating system for the following reasons:

- Process water recirculation "Barren solution" 100%
- The recirculation process is optimized making use of Pinoc area fresh water and reducing its demand. Groundwater in the area is not being used or an inventory of it made.
- There are no leaks in the pipe system, so there is no contact with the soil and vegetation cover.
- There is a natural product of evaporation temperature weather, being located in a semiarid area.
- Precipitation ranges except for the years 2015 and 2018 (as reported by SENAMHI) have been deficient which does not contribute greatly to the operational system.

The SENAMHI (National Meteorology and Hydrology Service of Peru) is a Peruvian government agency that keeps records of temperature, wind and precipitation, which hereinafter will be used to clarify the fundamental protocols 4.3.2 (a) and 4.3.4 indicated on to "water balance".

https://www.senamhi.gob.pe/mapas/mapa_estaciones/ dat_esta_tipo.php?estaciones=000864

From the information available from the Yanacqhua meteorological station, according to October 23th, 2018 REPORT No. 201810000010-SENAMHI-DZ6-2018, the parameter of Monthly Total Precipitation (mm or L/m²) of February to March 2015 and 2016 both are considered wet years, to January to March 2017 are considered wet years, compared to January to April 2018 which are considered dry years.

According to the recorded daily rainfall statistics, during wetter years from 1966 to 2018, it can be concluded that by history the area can have a maximum rainfall of 39 mm in 24 hours over a period 52-year return. Taking as reference the specific rainfall occurred on March 1, 2017.

In the audit of the year 2018, remain that the environmental impact assessment has predicted storm data from the past 200 years which provides sufficient probability margins to ensure an overflow.

MYSAC has designed a monthly water balance for an average year, including the filtration plant water recirculation.

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Yanaquihua is considered an area of dry climate with an annual average of 147 mm. 1984 ranks as the wettest in the last 43 years.

According to the National Hydropower Potential Study in Peru, Yanaquihua is located at an area of annual evaporation rates between 1500 y 1900 mm.

Within the water balance study in the Environmental Impact Assessment for Tailing Dam N°3, MYSAC considers the precipitation resulting for runoff infiltration. During the audit of 2018 there is evidence of improvements in the coronation channels, preventing water from entering runoff.

Potential freezing and thawing conditions are not applicable in this operation.

MYSAC recycles and sends the solution to the process plant, from the filtration plant is 4.55 L / sec.

MYSAC considers the effects of interruption of electrical energy that the solutions in case of spill lower by gravity the containment pond, and in the same way if there are power cuts in the filtration plant, its containment pond is also by gravity.

In the audit of the year 2018, MYSAC makes not surface water solution discharges.

There is no affectation to the water balance in the phreatic surface since the sludge is protected with polyethylene blanket.

Both contingency pools remain dry all the time, and ready for cases of overflowing in the process areas, in case of an unfavorable water balance, to avoid unplanned discharges to the environment.

The operation has established operating procedures for monitoring and maintenance, so that the proper water balance is maintained and prevents overflow or spillage of cyanide solutions to the environment, through the control of water pumping of tanks and pipes "PET-ALP-MA-15.05", for a good management and use of water.

During the inspection in the 2018 audit, no birds and / or any other animals were found dead around the area.

In the audit of the year 2018, MYSAC by modifying the characteristics of the tailings in pulp, passing to filtrate filtered, no pond or pond with solutions is operated.

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For the 2018 audit of MYSAC they still work and the meteorological data from nearby weather station de Yanacuy, with sufficient proximity and topographical conditions to generate rainfall data representative of site conditions.

These data are available on the web:

<https://www.senamhi.gob.pe/mapas/mapa-estaciones/ dat esta tipo.php?estaciones=000864>

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:

The Tailing # 3 no longer maintains a water mirror due to the setting in operation of the Filtration Plant, which generates tailings material with 14% humidity, which is deposited on the tailings. There are channels around the perimeter of the tailings, to collect rainwater to prevent it from entering and overloading the tailings.

Net has been placed in rainwater collection ditches in the tailing, it covered the pond where the solution resulting from rainwater was collected as well.

In the 2018 audit, it is observed that MYSAC has a perimeter fence around the tailing dams with warning signs in Spanish and the local language to restrict the access of people, wildlife and livestock to the open waters, and restrictions on access of birds and other wildlife.

The auditor during the 4 days of the audit did not observe open water accumulated in the sludge. In conversation with the auditee, there will be demonstrations of efficient infiltration in the sludge, considering that there can be no water mirrors in the channels either.

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In the monitoring of wild birds, no bird mortality has been found in the last three (3), but birds have been sighted periodically (every month). During the audit a live bird was spotted about 40 meters from the leach tanks in the Process Plant.

MYSAC maintains, after reviewing records in the 2018 audit periodic inspection record of the tailing dam surroundings with chronological verification of the presence or absence of dead birds. The frequency of tailings dam inspections focused on wildlife mortality is sufficient enough to determine whether significant wildlife mortality is occurring, which is done every week.

MYSAC does not use the heap leach method during its operations.

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:

MYSAC does not have a direct discharge to surface water. The auditor did not observe discharges to surface waters during the 2018 audit.

MYSAC does not have a direct discharge to surface water. The auditor did not observe discharges in mixing zones of the surface waters.

MYSAC does not have an indirect discharge to surface water.

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Standard of Practice 4.6:

Implement measures designed to manage seepage from cyanide facilities to protect the beneficial uses of ground water.

The operation is

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

Summarize the basis for this Finding/Deficiencies Identified:

MYSAC implemented measures to protect groundwater under the tailing dam, doing it by placing a geomembrane of Polyvinyl chloride (PVC) 0.5 mm thick, smooth on both sides. It extends over the upstream slope of the dam and back, a total of 20,653 m² of geomembrane to cover the two dams.

MYSAC has three piezometers upstream and downstream. The coordinates of the piezometers are indicated:

- # 1 (PZ-01) N 8254584 / E721637. The depth: 100.5 m
- # 2 (PZ-02) N 8254497 / E722638. The depth: 250.4 m
- # 3 (PZ-03) N 8254049 / E722723. The depth: 200.0 m

And the values that have been determined semiannually according to the Environmental Impact Study and the Corrective Environmental Management Instrument (IGAC) are below the norm, required by the Supreme Decree -004-2012 - MINAM; for water for restricted and unrestricted irrigation, whose environmental quality standards for water category 3 was 0.0368 mg / L of WAD cyanide, in PZ-01. In the PZ-02 and PZ-03 the results were <0.0008 mg / L of WAD cyanide.

Auditor's review did not observe any point in which point of filtration is demonstrated to the underground waters.

In Peru there is no cyanide regulation for underground, but in any case, it uses the required one for surface water, which is Supreme Decree No. 004-2017-MINAM, whose maximum value established for population and recreational use is 0.08 mg / L of WAD cyanide.

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The auditor has interviewed Engineer Denis García, Head of Community Relations, confirming that no population around the mine, extracted for a beneficial use immediately down gradient of the operation.

In the 2018 audit, even the groundwater standard has not been formalized.

National Environmental Quality Standards for Groundwater Proposal published in 2012 but has not yet been formalized.

MYSAC does not use mill tailing as underground backfill.

According to interview with Engineer Garcia of Community Relations no leaks from any source have caused cyanide concentrations to exceed any numerical standards established, thus, no remediation activities have been necessary.

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:

The auditor inspected the containment devices, finding them in acceptable conditions, without cracks and with concrete floors. Additionally, each containment device has a Contingency Pond.

The secondary containments for mixing and process tanks are sized to hold a volume greater than of the largest tank and any piping draining back to the tank. The containment device has a capacity of 195.75 cubic meter, which is around the leaching tanks, being the largest of 145 cubic meters.

For the new filtering plant in the audit of the year 2018, the capacity of the containment device is 240 cubic meters, with the largest volume of 145 cubic meters.

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In both plants the devices have more than 110% containment capacity.

The secondary containment system also includes another containment pond called contingency pond “poza de contingencia” with additional capacity of 420 cubic meters, integrated to the containment system for tanks and mixing solution.

And the contingency pond of the filtered plant has a capacity of 1,055 cubic meters. In case of leakage of solution to the containment device, it is directed towards a contingency pond, in which there are pumps for return to the process plant.

The same procedure is maintained in the 2018 audit, so that as soon as a leak is detected, it is repaired and registered as closed, in accordance with the corrective action indicated in the report.

It is verified in the 2018 audit that all process tanks have secondary containment.

The PETS-06-OL procedure has been modified, creating the new procedure called PET-ALP-PL-04.05 section 4.2 procedure establishes measures to prevent leaks and spills, which determine that all tanks including mixing, leaching and pipes must have a containment pond and the inspection of all tanks and pipes daily. Should a spill or leak take place, the solution will go to a contingency pool. The above described procedure details the parameters of the inspection.

The maintenance procedure for pipes, valves with cyanide solutions PET-ALP-PL-39.01 has been created.

In the 2018 audit it was verified that there are no cyanide pipelines near surface water.

All tanks and pipelines are constructed of materials compatible with cyanide and high pH conditions, through tanks, metallic and HDPE pipelines.

So that materials compatible with cyanide solutions are maintained in the pipes installed, as well as in the tanks.

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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:

In the 2018 audit, it was verified that the process plant had 10 tanks: 4 for leaching and 6 for absorption. For the incorporation of the 2 absorption tanks are the construction designs embodied in the Quality Dossier OT-6F0109 in which are contained the technical specifications of the materials, subsoil tests, anti-corrosive paints, hydrostatic tests, radiographic tests.

For the construction of the two new absorption tanks, tests of the foundations were made, to close with the formal delivery of the same, through the final release # ADG-AC-FT-013. Geotechnical studies were carried out related to the new thickened tailings placement system and also linked to the new filtration plant. From the geotechnical studies it was concluded that reinforcement of the base of the slope was necessary, in order to give more stability and greater capacity given the new tailings specifications.

The filtering plant was also subjected to an exhaustive quality control from its conception with subsoil tests, selection of the machinery to be used, the manufacture of the infrastructure. The auditor has verified in the 2018 audit that MYSAC maintains records of the designs made by the companies SOLANO INGENIEROS CONTRATISTAS, SAC (made leaching tank 19' x 19') and ADGEMINCO (made absorption tank of 12' x 15') and the new filtering plant.

Engineer Orlando Flores Chetilan, with registration # CIP: 200576 confirms by certification that the facilities have been constructed as indicated in the design drawings. Mr. Flores constantly coordinates control and quality assurance.

In the audit of the year 2018, all the components of the mine have quality documentation and quality assurance.

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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:

In the audit of the year 2018, MYSAC continues to implement written standard procedure for monitoring activities in the environmental impact assessment “Procedimiento de Monitoreo Ambiental” Anexo 4.9.1 Environmental monitoring procedure chapter 4.9.1

The auditor has verified quarterly records prepared by accredited companies of Environmental Monitoring Reports on Water, Air and Noise Quality.

MYSAC has protocols established by a specialized external company, among which includes a map of the monitoring locations developed by appropriately qualified personnel. Constant reports are submitted to the Regional Environmental Authority in Arequipa. These companies that carry out the environmental monitoring are accredited by the National Institute of Quality (INACAL)

In the audit of the year 2018, “Minera Yanacuihua SAC” continues to perform quarterly Environmental Monitoring (March, June, September and December) according to Ministerial Resolution No. 315-96 EM / VMM (July 19, 1996), issued by the Arequipa Regional Environmental Authority-ARMA. This ENVIRONMENTAL MONITORING PROGRAM that must be observed.

The water and air monitoring are performed by specialized companies SGS from Perú and ALS CORPLAB. The auditor verified that MYSAC has the documents that support monitoring methodologies, sample preservation techniques procedures, chain of custody procedures, transportation instructions and the cyanide species to be analyzed.

MYSAC consider sampling condition like weather, livestock/wildlife activity, anthropogenic influences, etc. and procedure documented in writing: New 2018 Sampling Procedure Leaching Test PET-ALP-PL-15.01, which establishes the conditions in which the sample must be taken to preserve it and that there is no interference in the results, for further analysis.

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In the 2018 audit it is corroborated that MYSAC makes no processed water discharge to surface water. The water needed for the plant is balanced with rain water.

MYSAC inspect for and record wildlife mortalities related to contact with and ingestion of cyanide solutions, in the audit of the year 2018 weekly record were verify.

The auditor after reviewing the conditions in the field of the tailings that no longer has a water mirror, considers that the frequency of monitoring is adequate.

The distances from the operation to the Pinoc and Socosani Rivers are 4,440 meters and 318 meters, as shown in map to the auditor.

The operation monitoring frequency is adequate and reasonable, and without significant consequences in the performance of the operation. In the audit of the year 2018, the rivers continue to be monitored Piñoc and Socosani rivers surface water monitoring records yielded results well below regulatory limits. Monitoring result of Piñoc and Socosani rivers were submitted.

5. DECOMMISSIONING:

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

Standard of Practice 5.1:

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

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:

On page 8-6 of the Environmental Impact Assessment for 2013 related to the production of 150 TPD, it establishes a written procedure that must be developed regarding the termination of operation of the processing plant. It indicates that a general cleaning will be done.

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With the increase of the production to 215 TMD, MYSAC presented a corrective environmental management instrument, prepared in July 2016 before the Regional Government of Energy and Mines of Arequipa which details the new processes, including the filtering plant and the Closing and Post Closing Plan, in Section 7.5 is addressed.

The EMI is a written plan to carry out the activities necessary, as appropriate to their facilities in a specific way since this plan addresses general aspects, an address specific dismantling. MYSAC includes:

Finally, at the Post Closure stage maintenance and monitoring of the following will be performed:

- Physical stability.
- Chemical Stability.
- Biological Monitoring.
- Monitoring slope stability.

In the 2018 audit, it remains the same, that is to say after the operation is over, the decommissioning activities will begin by the end of all charity work. The closure plan will be progressive and simultaneously to the operation.

This schedule is not linked to specific dates but indicates the order in which the planned activities will be verified, starting from the moment the installation ceases production, or the cyanide facilities are no longer in use. At present, the operation maintains proven reserves for the next two years, however, due to the contribution of ore collection from artisanal mining, these reserves are gradually increased. Of the 215 TPD that the mine processes through cyanidation, approximately 50% comes from the collection of ore from artisanal miners.

The following documents were presented to the Environmental Authority of Arequipa regarding the decommissioning process of MYSAC cyanidation metallurgic plant:

1. The mine closure plan submitted in 2009
2. Environmental Impact Assessment Project of the plant expanding Operations to 150 TMD, submitted in March 2013.

On March 12, 2014, the regional government of Arequipa made some technical comments regarding the Environmental Impact Assessment submitted by MYSAC in 2013, through the official document No. 234-2014-GRA/ARMA/SG.

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In the audit of the year 2018, the Corrective Environmental Management Instrument delivered in July 2016, updates the general closure procedure and MYSAC creates a Specific Plan to carry out the activities necessary for the dismantling and decontamination of cyanide.

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:

In the 2018 audit it is still in force, the operation has detailed financial securities to implement the decommissioning plan, as required by the "Supreme Decree No. 33-2005-EM that approves the regulations for the control of mine closure in Peru"; and the Supreme Decree still governs.

MYSAC established cost estimates for decommissioning in the Yanacuyhua Mining Closure Plan prepared by the company SVS INGENIEROS, SAC, in March 2009.

On July 20, 2012 "Minera Yanacuyhua SAC" through "**Desarrollo Ecología Liderazgo SRL Consulting Company**" submitted a Semi-detailed Environmental Impact Study to expand the Metallurgical Operations of Alpacay P.U. (production unit) to 150 TMD (Metric tons per day). The study included the Plant Closing Plan with an estimated sum of USD 858,482.90.

"Minera Yanacuyhua SAC" presented to the Regional Environmental Authority-ARMA through a February 6, 2013 document No. 211-2013 ARMA/SG an Environmental Management Corrective Report (IGAC) for the Mining Operations Expansion to 150 TMD (metric tons per day). It included the Closing Plan with an estimated sum of USD \$398,182.68, which is still current and complete responsibility of "Minera Yanacuyhua" because it is not being applied or implemented by others.

MYSAC calculated the first final closure for March 2009. Last has been updated the estimated cost calculation to March 2013.

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MYSAC has prepared a Closure Plan for the cyanide dismantling activities, considering the increase in capacity of the Process Plant and the Filtration Plant.

The auditor met with the Quality and Environment Manager; and Chief of Occupational Health and Safety, in which he showed us the recent report of the Corrective Environmental Management tool and the need to update the Closure Plan for activities related to cyanide.

The closure plan in Section 7.3 sets values for financial security as established by the Peruvian government in the Supreme Decree 33-2005-EM, Title IV, Chapter II, by letter of guarantee, which remain in force and in accordance with the corresponding authority.

MYSAC requires a financial guarantee required by the Peruvian government, so the operation does not require establishing a mechanism of self-insurance or self-guarantee.

As mentioned above, in the 2018 audit, the legal requirement of the Peruvian Government that guarantees a financial mechanism is maintained. MYSAC is constantly monitored and supervised by the Peruvian government in accordance with Supreme Decree 33-2005-EM which states sanctions to those who fail to meet the requirements.

6. WORKER SAFETY:

Protect workers' health and safety from exposure to cyanide.

Standard of Practice 6.1:

Identify potential cyanide exposure scenarios and take measures as necessary to 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:

In the 2018 audit, all 53 existing PET have been modified in accordance with the new requirement Supreme Decree 024-2016 of the Ministry of Energy and Mines, in terms of form. The contents are maintained, except for the preparation of a Work Permit called "PETAR" (Written Permission for High Risk Work).

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Of the total PET, 19 are related to procedures related to the use of cyanide.

In the 2018 audit, all the procedures require, where necessary, the use of personal protective equipment and address pre-work inspections as standard procedure format. The auditor verified the use of PPE in different areas to verify their correct use, respirator fit test and the existence of inventory in storage.

The warehouse manager, Mr. Luis García, showed the auditor a catalog of the existing equipment. He was interviewed stating that he had training and knowledge in the corrective measures in case a PPE arrives in a non-conforming manner.

MYSAC implements a written procedure to keep record or control changes in order to review process proposals, operational changes and modifications that could impact on the safety or health of employees, which was updated on January 20, 2018 by P-ALP-PL-SIGA-01.01 "Change Management Procedure".

The auditor held a meeting with 32 people among 20 supervisors and 12 workers, in which it was possible to become familiar with the current state of the plants and their changes. In the same way, the warehouse manager was interviewed regarding the continuous improvements that are made, as changes arise.

In the 2018 audit, it is still in use the Supreme Decree in which the operation requests its own workers, customers, and suppliers input, in order to improve procedures – Workplace Safety and Health Act, its Regulation approved by Supreme Decree N° 005-2012-TR, and Mining Occupational Safety and Health Regulation (RSSOM, for its Spanish acronym) approved by Supreme Decree 055-2010-EM.

The Supreme Decree aforementioned was required by Law 29783 called the Occupational Health and Safety Law of the Ministry of Labor.

Additionally, on December 31st, 2013, the MYSAC's Safety Committee was formally created, according to Law N° 29783, which currently continues to operate with 12 members. During the audit, it was verified that an election process was held for the new committee, which lasts two years.

MYSAC maintain available the minutes of the meetings of the MYSAC Safety Committee, highlighting those aspects in which suggestions of the workers have been attended.

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The auditor verified the existence of suggestion boxes, which are reviewed by Engineer Hernán Jiménez, in charge of quality and environment.

Mr. Emerson Chávez, filter press operator, was interviewed about the security procedures in the new Filtration Plant.

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:

In order to avoid the generation and presence of HCN hydrocyanic gas during the preparation of Sodium Cyanide in the mixing stank the pH is checked; this is established in PET-ALP-PL-09.05 HANDLING AND PREPARATION IN THE SODIUM CYANIDE TANK, in section 4.6 and even more so in the restriction section 5.4 that prohibits the preparation of cyanide if the solution is less than or equal to a pH of 10.50.

MYSAC has determined the appropriate pH for limiting the evolution of hydrogen cyanide gas during mixing and production activities. During the audit 2018, a “Lixiviador” made pH measurement, and at the same time it was verified that they have electronic measuring instruments and by colorimetry.

The mix in charge was interviewed, who explained and showed how to perform the pH controls.

During the 2018 audit, it was verified that que the operation monitors all areas, tasks and concentration of cyanide gas or dust that can exceed 10 parts per million or instantly 4.7 ppm continuously for a period of 8 hours:

When interviewed, the “Lixiviador” who participates in both the unloading and the mixing process, corroborating that this measurement is carried out. In the external part of the

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warehouse there is a measure of cyanide gas permanently lit. During the audit the warehouse manager described and showed how he performs his measurement.

The mixing facilities were visited, the person carrying out the mixing was interviewed, finding that he knows his work. For this process, the “lixiviador” has a permanent detector with him.

Coal collection areas;
The surroundings of the process tanks
During cyanide containers washing process

A tour was made over the tanks of the process and filtering plant, observing that the staff always uses their cyanide gas detector.

In the audit of 2018 MYSAC maintains the same identified areas such as the agitation tanks and coal harvesting, where workers may be exposed to cyanide in excess of 10 parts per million on an instantaneous basis and 4.7 parts per million continuously over an 8-hour period and require the use of personal protective equipment.

With the implementation of the filtering tank, other risk areas were identified and added, which are subjected to continuous measurements. An interview was conducted with Mr. Emerson Chávez, who correctly showed how to use it.

In order to avoid the generation and presence of HCN hydrocyanic gas during the preparation of Sodium Cyanide in the mixing stank the pH is checked; this is established in PET-ALP-PL-09.05 HANDLING AND PREPARATION IN THE SODIUM CYANIDE TANK, in section 4.6 and even more so in the restriction section 5.4 that prohibits the preparation of cyanide if the solution is less than or equal to a pH of 10.50.

According to section 5.5 of the PET-ALP-PL-44.04 Maintenance of Cyanide Storage Procedure “Mantenimiento de Almacén de Cianuro de Sodio”, entry is prohibited if cyanide monitoring devices indicate exposure to more than 10 ppm of cyanide in an instantaneous basis and 4.7 ppm of cyanide over an 8-hour period. MYSAC uses of necessary personal protective equipment, and proper signage.

The Cyanidation Tank Maintenance Procedure “Mantenimiento de Tanques de Cianuración”, establishes monitoring the HCN gas before entering the Tank. These values must not be above 10 ppm of cyanide on an instantaneous basis and 4.7 ppm of cyanide over an 8-hour

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period. In case these values exceed the maximum allowable limit, the proper procedure is to ventilate for an extended time.

In the audit of the year 2018, MYSAC uses monitoring devices (MSA-ALTAIR PRO SINGLE GAS DETECTOR) to limit worker exposure to hydrogen cyanide gas, where the potential exists for significant cyanide exposure.

Instead of the three instruments that were counted in the last initial audit, MYSAC currently has eight instruments, 6 of which are in permanent use and 2 of support. MYSAC maintains calibration records of cyanide measurement instruments for one year, as well as evidence of training in the use and interpretation of instrument data and number of series thereof.

The notices kept in the 2018 audit were observed that warning signs have been placed where cyanide is used, in places such as the entrance to the Alpacay Plant, storehouse, mixing tank, agitation tanks. There is a bulletin board accessible to all employees of the plant with information about the risks associated with cyanide with illustrations on care and safety signs, like the Filtering Plant.

The auditor reviewed the warning signs in places where cyanide is used, on the prohibition of not smoking, generating open flames, eating, drinking; as well as the use of Personal Protection Equipment.

In the audit of the year 2018, showers, low-pressure, eye wash stations and dry powder fire extinguishers were observed in cyanide warehouse and area of the plant. A shower and eyewash have been incorporated in the vicinity of the mixing tank, as in the Filtration Plant. MYSAC continues performing in the 2018 audit daily test showers, low-pressure eye wash station on a regular basis; it also has a fire extinguisher monthly inspection program and keeps record. Fire extinguishers are located in the cyanide storage unit, leaching/mix area, filtered plant, administration offices and at the mine.

Each fire extinguisher unit has their inspection card.

It was evidenced in the 2018 audit that the mixing, process tanks and piping containing cyanide are identified to alert workers of their contents and is the direction of cyanide flow in pipes.

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It was verified in the 2018 audit that the Material Safety Data Sheets (MSDS), first aid procedures, or other informational materials on cyanide safety is available in the language of the workforce.. The boxes and the labeling are in understandable language to the workers.

In the 2018 audit, it was evidenced modification of the MYSAC procedure to P-ALP-SE-01.03- "Investigation procedure of accidents, dangerous incidents.

There were no incidents involving cyanide in the last three years.

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:

MYSAC as verified in audit of 2018, has water, oxygen, a resuscitator, antidote kits, and a radio for emergency notification readily available, means that are established as requirements in the Emergency Response Plan Code P-ALP-SE-04.04 "Plan Emergency Use, Handling, Storage, Handling of Sodium Cyanide and Disposal of Hazardous Waste ".

MYSAC inspects its first aid equipment every week to ensure that it is available when needed, the records are placed in a document. The auditor verified the first aid equipment, finding it in good condition, with the antidotes and the temperature within the recommended range.

In order to replace the existing antidote (amyl nitrite), MYSAC purchased Hydroxocobalamin antidote kit, and CYANOKIT.

MYSAC maintains specific written emergency response plans and procedures to respond to cyanide exposures, such as first aid cases, injured transportation to health centers, exposure control and environmental protection, called P-ALP-SE-04.04 "Emergency Plan of Use, Manipulation, Storage, Handling of Sodium Cyanide and Disposal of Hazardous Waste ", in this same Plan, there is the procedure for the transfer of patients due to emergencies.

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The emergency response procedure is placed in murals with posters placed in the Process Plant, Warehouse, Plant and Filtration Plant.

In the 2018 audit, MYSAC has (1) a physician, (1) a trained nurse, (1) an emergency technician, and two (2) operation personnel trained in first aid for cyanide incidents.

Dr. Cluber Apasa was interviewed, providing an explanation of the care procedure in case of cyanide poisoning.

MYSAC developed procedures to transport workers exposed to cyanide to locally available health center, counting now with an ambulance.

The procedure PEM-ALP-PL-02.04 - Transfer of the Patient in Emergencies has been modified. The operation has sufficient familiarity with the center to know that it has the equipment and experience they need to offer a patient adequate treatment.

During the training held at the mine it was explained to the participants management of antidotes, treatment when facing exposure and communication channels were established for emergency situations.

The safety and environment manager / quality, report that they have given at least 1 annual drill, following a program.

For audit 2018, procedure PEM-ALP-PL-06.04 - has been modified. Drill Procedure

7. EMERGENCY RESPONSE:

Protect communities and the environment through the development of emergency response strategies and capabilities.

Standard of Practice 7.1:

Prepare detailed emergency response plans for potential cyanide releases.

The operation is

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

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Summarize the basis for this Finding/Deficiencies Identified:

The Emergency Plan for the Use, Handling, Storage, Cyanide Management and Disposal of Waste Hazards was last updated in the month of March 2018.

The Emergency Plan has undergone change with respect to the non-use of amyl nitrile, and updating with respect to the mixing tank, adjusted to the transfer of patients and assistance of medical personnel.

During the 2018 audit, MYSAC continues to implement Emergency Response Plan to address potential accidental exposures and releases of cyanide, Code P-ALP-SE-04.04 "Emergency Plan for the Use, Handling, Storage, Handling of Sodium Cyanide and Disposal of Hazardous Waste ", Which has been updated and developed in compliance with Law No. 29023 of DS N ° 045-2013-EM, mandatory Law on the development and presentation of "Contingency Plans" (called in Peru) and in other standards issued by the competent sectorial authority related to the use of sodium cyanide.

In its Plan, Section 5.2 considers the possible types of emergencies.

The emergency plan considers scenarios during transport, even both Code certified transporters have carried out trainings and drills during transport.

The MYSAC Emergency Response Plan considers releases during unloading of the truck, storage, and transportation to the mixing tank.

In the 2018 audit, section 5.2.1 is maintained, regarding Emergency Response considerations during the unloading and mixing operations.

MYSAC keeps in the audit 2018 a procedure to minimize the risk of spills during fire, through the "Response Procedure During and After a Fire, Section 5.4.6., of the Emergency Response Plan."

Once a fire that involves sodium cyanide is detected, the first response will be to alert the personnel that are working in the area and then try to extinguish it to avoid the fire from spreading and causing more serious damages. In the cases of fire of great magnitude, the Emergency Central Committee in conjunction with the Firefighting Brigade will organize and coordinate all response actions with the purpose of containing the fire and assuring the safety of the whole personnel.

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Additionally, it has established the procedure PEM-ALP-PL-03.04, "Procedure against fires".

MYSAC has incorporated in the 2018 audit the procedure PEM-ALP-PL-0404 "Spill of Solid Sodium Cyanide, Solution and Pulp", for cases of tank, piping, and valve ruptures, where it indicates the protection equipment for employees, tools, and equipment, as well as the steps to follow.

In Section 4.9 PEM-ALP-PL-04.04 ("Spill Procedure of Solid Cyanide, Solution and Pulp") of the Emergency Response Plan, MYSAC establishes measures to be taken in case of overflowing of tanks, and ponds.

It has the objective of establishing and carrying out measures to avoid or diminish the destructive impact of a spill emergency based in an analysis of the internal and external risks existent in operations of the Process Plant.

In case of power or pumps failure, MYSAC has backup power generator and backup pumps.

Additionally, they have procedures to inspect the pumps which consider replacing the same in case of failures: PET-ALP-PL-38.01 "Maintenance of Cyanized Solutions Pumps".

In audit 2018, the same procedure is maintained for emergencies cases of leaks, spills, broken valves, piping, tanks, power failure, tailing dam sliding and other uncontrolled; the response procedures are in the Emergency Response Plan Management and Cyanide Handling:

- a. Remain calm, do not shout or run.
- b. Notify the supervisor and / or head area, either verbally or using radio communications.
- c. Activate the emergency alarm for general communication in all MYSAC areas.
- d. The area manager informs all MYSAC departments to activate the Central Emergency Committee.
- e. The Emergency Brigade will have a blue vest and the field coordinator orange.
- f. The Emergency Brigade for attend the tailings spill and the Emergency Central Committee "Comité Central de Emergencias" (CCE), come to the place, led by the field chief, Deputy Chairman and President of Central Emergency Committee.
- g. The Chairman of the Central Emergency Committee decides the actions to take.
- h. It begins to mobilize the equipment and machinery to the area downstream of the

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- tailings dam, then the containment work, diversion and other is done to mitigate the emergency.
- i. The community relations personnel informed all surrounding communities potentially affected for the emergency. If is the case, will be implemented an evacuation program, after coordination with local and district authorities.
 - j. Once temporarily stabilized the event, MYSAC will proceed to pick the solid material into the same tailings dam using heavy machinery.
 - k. The Chairman of the Central Emergency Committee, informs to all support institutions (Civil Defense, Police, Fire Department, etc.), local district authorities (mayors, Directors of Education Centers, Health Posts, Governors, Judges peace, etc.), provincial (Mayors, Directors of Education Centers, Health Posts and Hospitals Governors, Justices of the Peace, etc.) and regional (Mayor, Hospitals & Clinics, Regional Directorate of Energy and Mines -. DREM Arequipa etc.).
 - l. The Environment Department proceeds with the remediation and revegetation of all areas affected by the emergency.
 - m. Permanent environmental monitoring will be conducted in the area, for water quality, soil and air until the parameters are within the limits established Maximum Allowable. At the end of the event, the Security Department prepares the Respective Report to the Operations Department, for their respective purposes, as applicable.

The Emergency Response Plan, section 5.2.2, provides preventive measures to avoid filtration Tailings Dam.

The tailings no longer stores sludge, having been enabled for thickened material, for which geotechnical studies were carried out and strengthened the base of the embankment of the tailings.

The same procedure is maintained in the 2018 audit in which cyanide treatment systems are addressed in the emergency plan through monitoring every hour of the concentrations present in the solutions, and with backup power sources, the same way as with backup pumps in recovery systems.

MYSAC has earth moving machinery available to perform earth moving works in dike or tailing, the same as submersible pumps with backup power energy.

The slope of the tailings has been reinforced by placing a filler at the base of the slope.

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MYSAC uses CITTSA and EDEWIT, company certified by the Code for the transport of cyanide. In Section 8.0 of the Emergency Response Plan it indicates that inspections and audits are performed to the transportation process.

MYSAC in its procedure PEM-ALP-PL-04.04 ("Spill Procedure of Solid Cyanide, Solution and Pulp"), it addresses the response actions to be taken in case of leaks inside and outside the facilities of the Process Plant that could be considered a worse scenario. In such case State support institutions would be involved in conjunction with the MYSAC's Crisis Committee.

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:

In the 2018 audit, "Minera Yanacuyhua S.A.C.", continues supported by two types of emergency organizations to face situations and events that place in risk its personnel, safety, health, environment, and others adjacent to the operations.

The members of the first consideration are the workers in general of the Process Plant, who will attend in first instance any emergency of minor magnitude, either fire, spills, evacuation, or first aid.

Brigades have been organized for the attention of fire, spills, and the attention of first aid and evacuation, within the Company.

In Section 4.2, the physician is included in the Emergency Response Plan, it has been established the Emergency Central Committee that is in charge of coordinating human, logistics, and technological resources to call up in any type of emergencies.

The Emergency Crew and the Emergency Central Committee (CCE, for its Spanish acronym) will be in charge of coordinating with different brigades the actions that will be taken place before, during, and after the event. In order to comply with that, the Committee will be

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provided with all communication systems and facilities for the control of the emergency. The Committee includes a Chairman, field coordinator, and leaderships in the different brigades. of the risks in case of cyanide spills, and maintain a community development plan, records of community meetings where the date, participants, and topics are expressed.

It has been developed a Community Relations Plan which has the objective of establishing a social communication system addressed to the population under the framework of intervention of the Yanacuy District.

The Community Relations Plan which is under the responsibility of a full time engineer, considers as areas of indirect influence the rural communities of Charco and Ispacas, as well as the Yanacuy District, all these related to the issue of the importance of water since they all take water from the affluent of the Piñoc River and because of the road that is used permanently during the whole year for the movement of personnel and entry of materials or supplies for the project.

Among the functions of the community relations are:

- Coordinate with the Environment, Health, and Safety area the process to communicate industrial safety measures of the Company.
- Assure that all workers under the responsibility of the safety area follow safety, environment, health, and personal protection procedures.

They continue making a collective technical monitoring was performed. Authorities and community members visit the facilities during compliance monitoring, which are made by an environmental designated company for dust control, mainly the communication channels, occupational atmosphere and water.

In the Audit 2018, MYSAC has held coordination meetings with the communities of Yanacuy, Charco and Ispacas, regarding the actions to be taken in case of emergencies transporting cyanide. Health authorities, municipal governments and police were present.

Minutes of meetings and accusations of receipt of emergency plan or simulation are keep in records.

In Section 12 of the Emergency Response Plan parameters have been established to keep it up to date. The Plan is updated every year according to the lessons learned from incidents, drills, or reports from the staff, communities, customers, or providers.

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In the audit of the year 2018, MYSAC maintain records of ongoing consultations to interested parties about emergency response and agreements with the parties involved, and regular dialogue with external response managers and stakeholders with responsibilities within the emergency plan.

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:

MYSAC's Emergency Response Plan has established a response coordinator called Chairman of the Crisis Committee who has the authority to provide the necessary resources in the person of the Operations Manager.

In the Emergency Response Plan section 4.2, page 12 of the Plan, the current members of the Central Emergency Committee and their substitutes are indicated in case of emergency. As a result of these coordinations, it has been possible to incorporate a type 1 ambulance, a qualified doctor, the addition of suitable parameters, increase the number of oxygen cylinders as well as cyanide monitoring equipment.

In the 2018 audit they remain in The Emergency Response Plan, Section 4.1, identifies the emergency response team: Spills, First Aid-Evacuation, Transportation of Patients to Health Centers, Fires, and Emergency Evacuations, organized into groups of brigades and established the flow of Communication.

MYSAC has modified the new DS and provided an adequate annual training to its personnel that responded to emergencies, according to the requirements of the Supreme Decree 024-2016-MEM (Occupational Safety and Health Regulation of the Ministry of Energy and Mines), and updated and developed in compliance with Law No. 29023 of the DS N ° 045-2013-EM, Law on the obligation to prepare and submit Emergency Plans and other regulations issued by the competent sector authority related to the use of sodium cyanide.

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Which expressly states that the mining owner must prepare an Emergency Preparedness and Response Plan for the use, handling, storage, handling of sodium cyanide and the final disposal of their solid waste in the mining activity.

In the 2018 audit, it is maintained in Section 5.2.2 of the Plan, Section 5.2.2 of the Plan, indicates that after the occurrence of an emergency, the staff in general will be trained and given feedback in order to analyze deficiencies, which will be the benchmarks for increased training and corrective measures.

The staff camp is located no more than 200 meters from the Process Plant, recovering and recirculation systems. Call-out procedures are ready to respond to emergencies on a 24-hour basis, the list is in the area of Plant coordinated with Eng. José Gavilán.

Section 4.3 of the Emergency Response Plan remains the same in the 2018 audit, indicated the responsibilities and functions of the coordinators and members of the emergency team.

MYSAC, in Attachment 2 of the Emergency Response Plan has established and keeps in place personal protection equipment, for first aid response, intoxications, cleaning, and cyanide neutralization. Dozer D6, Caterpillar Front Loader, Excavator, two trucks and two (2) SCBA equipment, as part of its basic emergency response equipment.

MYSAC made Purchase Order Nro.LIM1010603 for the SCBA rescue equipment on January 11th, 2019, which is operative from April 26, 2019.

MYSAC delivery photos of the equipment, certificates of training and drill of the personnel that is suitable to use it.

MYSAC's Emergency Response Plan, Procedure PEM-ALP-PL-01.04, includes procedures for the inspection of the personal protection equipment and of the response to emergencies.

The salvage station and other premises were verified where the emergency and poisoning equipment is stored, finding them in force and in an adequate quantity.

According to reviewed records, inspections to the emergency response equipment are made every month, and every handling and preparation in the cyanide tank.

In the audit 2018 MYSAC's Emergency Response Plan Code: P-ALP-SE-04.04, Section 4.0 describes the roles of the Emergency Committee and Organized Brigades when handling

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emergency situations. The Emergency Committee and the Brigades have formed a committee of emergency response with sufficient autonomy to handle local emergencies (i.e. small-scale damages to the public or the environment).

In the audit 2018, MYSAC has sent updated letters to external institutions, such as health centers, police, civil authorities, and community representatives. Attached to the letter is the Emergency Response Plan. Those same institutions, authorities, and representatives have been invited for trainings on the use and handling of cyanide, and emergency prevention systems that have been developed.

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:

MYSAC, in its Emergency Response Plan, Revised 2018, keeps the telephone numbers for internal and external notifications. These include telephone numbers of the health centers and hospitals, police and firefighting stations, and community authorities.

On page 59/90 of the Emergency Plan there are updated internal and external contacts. External contacts apply those who have responsibilities in the implementation of the plan.

The Yanacuy Health Center have responsibility and participated in the "Cyanide Intoxication Drill" as an important part and quick response facility of our Emergency Plan; which was made on March 06, 2018 in the operation facilities.

MYSAC Emergency Response Plan, Section 3.1-page 6/90 includes procedure and contact information for notifying affected communities, authorities and for media communication.

The distance from the operation to the closest town (Ispacas) is 2.7 km. The next closest community is 4.4 km and the name es "El Charco".

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Section 6.2 on page 41 indicates the procedure for communication with the media in case of an emergency. This communication will be provided by the president of the Central Emergency Committee.

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:

Section 9.2 on page 54/90 indicates the use of specific chemicals for neutralization or changing the nature of the toxic substances spilled. Chemical mitigation has to be accepted by the Safety Committee and may also require the approval of local and state authorities. On page 76/90 of the Emergency Plan it is indicated that the fine part that remains on the ground will be collected, all the material affected and will be fed to the process, depending on the material and decisions of the leader of the emergency crew.

Section 5.2 of the Emergency Response Plan, through the application of lime, recovering of the soil or other contaminated means.

In the Emergency Plan version of March 2018 indicates that filtration residues are incorporated to the process, Section 5.2.4 on page 22 "DECISION TREE IN CASE OF SODIUM CYANIDE SPILLS."

MYSAC uses bottled water for human consumption.

Section 5.2.2, step 19., page 20, prohibits the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide that has been released into surface water since these products are dangerous to aquatic life.

In the 2018 audit, in case of spills, MYSAC maintains the obey the decision tree (3), established in the emergency response plan, for both emergency cases dry and wet locations,

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the plan indicates warnings to communities, monitoring gas / water and sample collection, coordinated by the person in charge of community relations.

The auditor verified the location of the sampling points by default in the event of a spill, based on the probabilities. Among them are the contingency pools and downstream of the process plant and surroundings of the filtration plant.

In the 2018 audit, it is maintained that for spill cases in volumes greater than 5m³, MYSAC will proceed to the evaluate the affected soil, according with the protocols established in the Soil Sampling and Preparation of Soil Decontamination Plans “Muestreo de Suelos y Elaboración de Planes de Descontaminación de Suelos” approved on R.M. N ° 085-2014-MINAM and parameters established in ECAs-approved in the Peruvian Supreme Decree DS N ° 002-2013-MINAM.

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:

MYSAC established period of evaluations of the Emergency Response Plan and capabilities and reviews every year. The latest version of the Emergency Response Plan was May 16th, 2018, in section 12.0, page 56/90, the revision history is detailed.

Three simulation reports were submitted, one every year, including with the transportation company.

MYSAC has not had any cyanide related emergency, however in Section 12. It establishes that it can be modified in case of an emergency, where an evaluation of the developed performance of the response teams, emergency response training will be made, notification and operation procedures, decision-making process, etc., after an emergency response and / or every six months. The person in charge of the Emergency Plan and / or Central Emergency

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Committee will meet to carry out a review of the different plans of change and action to be applied by the Emergency Brigades.

The revision and update of the present Emergency Plan will be carried out with a frequency of one year or when there are changes in the processes, deficiencies.

8. TRAINING:

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

Standard of Practice 8.1:

Train workers to understand the hazards associated with cyanide use.

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:

In the 2018 audit, MYSAC maintains training matrix which is more complete than required by Decree 024-2016 of the Ministry of Energy and Mines of Peru. This matrix considers 24 issues, "Use and Handling of Cyanide" the one that entails a minimum of 4 hours of training. Section 7.2.

A training meeting was held with 15 workers and 17 supervisors of "Minera Yanacuy", in which the degree of commitment to support the Cyanide Code was evidenced. In this meeting they were asked questions about the implementation of cyanide management, finding that they dominate the information and possess skills.

In the audit 2018, Cyanide hazard recognition refresher training is conducted periodically, regarding the use and handling of cyanide, as well as response in case of emergencies, training materials and training records for the auditor's review were on site.

In audit 2018, MYSAC training records are retained in its personnel records together with the scores obtained in evaluations that were given after the training to those who attended in order to comply with the new Peruvian mining regulation.

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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

Summarize the basis for this Finding/Deficiencies Identified:

In the 2018 audit it is verified that MYSAC trains workers regarding storage, cyanide use, handling, and maintenance so that there is a minimum risk to health and environment.

MYSAC have training materials available regarding measures to protect health, safety and avoid escapes; also training records including TBM "tool box meeting" or daily short talks.

MYSAC has the necessary elements in its Training Program. It trains new employees; it offers 5-minute tool box talks, 30-minute weekly trainings, formal training with competent instructors, and appropriate didactic material.

MYSAC has a training program, which must identify the specific elements on cyanide management and the important elements that must be communicated to a new worker.

MYSAC has qualified personnel and provides training related to cyanide activities, including the permanent MYSAC physician, paramedics and firefighters who work in the plant, as well as other professionals in the area of Process Chemistry.

During the audit of 2018, it became evident, before working with cyanide each employee receives initial and periodic training; copies of procedures and safety pamphlets on cyanide are given to each employee.

Field MYSAC workers were interviewed regarding the realization of initial, periodic training and whenever a worker is reassigned to a new type of work.

In the 2018 audit, MYSAC offers refresher training on a continuous basis which is documented.

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In an interview with the staff it was evident that they were up to date in training and skills, including the personnel in charge of the new Filtration Plant (thickener).

In the 2018 audit, MYSAC evidenced the performance of evaluation of the efficiency of its trainings. Observations were made on the activities carried out by employees, finding them in accordance with safe work practices.

In the 2018 audit, MYSAC training records were reviewed, evidencing that keeps records documenting training received by its workers. These records include the name of the instructor, date of the training, issues addressed, and copy of the test done by the employee.

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:

During the 2018 audit it was verified that MYSAC offers training to personnel performing mixing and to those in charge of production and maintenance about the procedures to follow in case of a spill. Training records were reviewed with regard to response to exposures and discharges to the environment.

In the 2018 audit, the auditor interviewed the staff with respect to being the first to be in place of the facts of a cyanide exposure incident. The staff has taken part in the drills and carried out improvement actions based on their learning.

In the 2018 audit, the Coordinators of the Emergency Response Plan and members of the brigades were interviewed, corroborating that they have been trained in the indicated actions in such plan related to cyanide and to the response team. With the incorporation of the permanent Physician in MYSAC, the Response topics have been reinforced, which provides constant training to the staff.

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In the 2018 audit it is evident that MYSAC through the Community Relations Coordinator, coordination meetings and practical exercises with external agencies to respond an emergency with paramedics, firefighters, health authorities and community-related emergency response.

In the audit of 2018, MYSAC maintain monthly refresher training to respond to cyanide exposures and releases, with mine medical coordination.

MYSAC established drills periodically for training purposes, which cover workers exposure scenarios and spills into the environment.

The auditor review simulation records of 2018, 2017, 2016.

MYSAC has established a new procedure 13-PETS-PORIPS which has the objective of identifying the deficiencies, failures, and lack of resources and others, in the development of drills; additionally, evaluates the level of preparedness of the emergency crew members and of the Emergency Central Committee of "Minera Yanacqhua S.A.C." that will be registered afterwards for subsequent trainings and implementations.

The auditor review training records in emergencies response regarding the initial, update, and familiarization designated to the person implementing the emergency plan, and evaluations or tests that demonstrate understanding of the training material.

Cyanide training records are retained for new employee induction, five-minute tool box talks, 30-minute weekly safety meetings, and formal trainings, including the names of the employee and trainer, the date of training, the topics covered, pictures, and score evaluation.

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9. DIALOGUE:

Engage in public consultation and disclosure.

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:

In the 2018 audit it is evident that MYSAC maintains an open-door policy, for which it has the support of a person exclusively in charge of dealing with community issues, including those related to cyanide handling, who can offer those interested the opportunity to address any concern.

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:

Open forum held records with neighbors, communities and authorities. Evidence meeting records and attendance have been delivered.

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Standard of Practice 9.3:

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

The operation is

- 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:

In the audit 2018, there have been meetings in which the operations and handling of Cyanide in our Process Plant is made known, as well safety and environmental protection.

As part of what the Peruvian Law requires, in the public hearing held for the dissemination of the Environmental Impact Study was distributed information concerning how the operation was going to be developed, in reference to cyanide handling.

Update meetings have been given on the descriptions of the processes carried out, available to the communities.

The information disseminated about cyanide to the populations involved is understandable in the Spanish language and in the language of the indigenous communities. Including warning signs related to cyanide.

Training has been provided and letters sent by the Department of Community Relations representatives of communities and local authorities to telephone for emergency to support institutions and regional mining regulatory organizations, in order to keep communities informed in case of discharge or exposure incidents.

It is still valid in the 2018 audit, which the Ministry of Energy and Mines (MEM) acting as regulatory agency of Mining Activities requires mining companies through regulations and laws to communicate clear information of any fatal accident, any safety or hygiene emergency, or environmental emergency.

According to law enforcement of mining activities (Approved by the President of Peru arranged by the Congress of the Republic of Peru - 2001) - Law No. 27474, in accordance with the ministerial resolutions provides

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In the case of fatal accidents and emergency situations should be reported to the Environmental Mining Authority within the following 24 hours after it happened.

As verified in audit 2018, there have been no incidents involving hospitalization or fatality, involving cyanide releases off the mine site requiring response or remediation, involving resulting in significant adverse effects to health or the environment, requiring reporting under applicable regulations and there have been no releases that are or that cause applicable limits for cyanide to be exceeded.

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