SUMMARY AUDIT REPORT

for the October 2018 International Cyanide Management Code Recertification Audit



Prepared for:

Societe Generale de Consignation et d'Entreprises Maritimes (SOGECO)

Submitted to:

International Cyanide Management Institute 1400 I Street, NW, Suite 550 Washington, DC 20005, USA

FINAL

8 February 2019



Ramboll Canada, Inc.

100 Park Royal, Suite 200 West Vancouver, BC V7T 1A2 www.environcorp.com

SUMMARY AUDIT REPORT

Name of Transporter: Societe Generale de Consignation et d'Entreprises Maritimes

Name of Owner: Societe Generale de Consignation et d'Entreprises Maritimes

Name of Responsible Manager: Mr Layti Ndiaye, Director of Operations

Address: SOGECO

Route de L'Aeroport 1765 rue 22-002 Commune du Ksar,

BP 351

Nouakchott, Mauritania

Telephone: +222 45 25 46 52 / 45 25 22 02 /45 25 27 40

Fax: +222 45 25 39 03

E-mail: ndiaye.layti@sogeco-sa.mr

Location detail and description of operation:

Societe Generale de Consignation et d'Entreprises Maritimes (SOGECO) is responsible for transportation of cyanide by road from the Port of Nouakchott to the Tasiast mine operated by Mauritania Ltd. SA (TMLSA) a Kinross Gold Corporation (Kinross) company. The Tasiast mine is located approximately 355 km north by road from Nouakchott in Mauritania.

The cyanide is shipped in sealed standard 20-foot steel intermodal shipping containers. Within each shipping container the solid cyanide is packaged in 1,000 kg 'bag-in-box' plywood intermediate bulk containers (IBC); 20 IBCs per shipping container. The cyanide briquettes in each IBC are packed in nylon supersacks enclosed in plastic (bag in bag). The total loaded weight of each packed shipping container is approximately 24,000 kg.

The containers are unloaded onto the Port of Nouakchott using shipboard cranes owned and operated by the Ocean shipping company. After the integrity of the containers and the shipping documentation are checked by SOGECO the Port of Nouakchott loads the containers onto awaiting trucks owned by Kinross but driven and maintained by SOGECO. The road used by the cyanide convoy is the asphalt paved N-2 highway for the first 305 km to the Tasiast mine junction. From here the road is unpaved compacted gravel base for the final 50 km to the mine. The route is shown in Figure 1.

In May 2016 SOGECO signed a new general transport contract with TMLSA which included transport of cyanide between the Port of Nouakchott and the mine. As part of the contract SOGECO received fifteen TMLSA owned MAN tractor/trailers dedicated for hauling cyanide and other goods for TMLSA. SOGECO undertakes light maintenance on these vehicles at its workshop in Nouakchott. Heavy maintenance is undertaken at the MAN dealership workshop in Nouakchott. SOGECO does not subcontract any of the cyanide handling or transport.



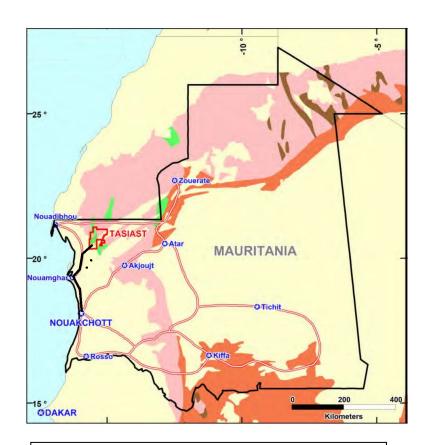


Figure 1: Cyanide transportation route between Port of Nouakchott and the Tasiast Mine.

SUMMARY AUDIT REPORT

Auditors' Finding

The operation is: ■ in full compliance

in substantial compliance

not in compliance

SOGECO has not experienced any ICMC compliance issues during the previous three-year audit cycle.

Audit Company: Ramboll Canada, Inc.

100 Park Royal, Suite 200 West Vancouver, BC V7T 1A2

Audit Team Leader and Technical Auditor: John Lambert

e-mail: <u>Jlambert@ramboll.com</u>

Date(s) of Audit: 18 October 2018 and 21 October 2018

I attest that I meet the criteria for knowledge, experience and conflict of interest for Code Verification Audit Team Leader, established by the International Cyanide Management Institute and that all members of the audit team meet the applicable criteria established by the *International Cyanide Management Institute* for Code Verification Auditors. I attest that this Summary Audit Report accurately describes the findings of the verification audit. I further attest that the verification audit was conducted in a professional manner in accordance with the *International Cyanide Management Code Transportation Verification Protocol* and using standard and accepted practices for health, safety and environmental audits.

SOGECO Mauritania Name of Transporter

Signature of Lead Auditor

8 February 2019 Date

Page 3 of 15

SUMMARY AUDIT FINDINGS REPORT

1. TRANSPORT: Transport cyanide in a manner that minimizes the potential for accidents and releases.

<u>Transport Practice 1.1</u>: Select cyanide transport routes to minimize the potential for accidents and releases.

■ in full compliance with Transport Practice 1.1

The operation is

in substantial compliance with not in compliance with

Summarize the basis for this Findings/Deficiencies Identified:

The Port of Nouakchott continues to be the entry port for all cyanide transported to Tasiast. SOGECO transports cyanide by road; a distance of approximately 355 km. Route options are limited to a few alternatives between the Port and the northern limits of Nouakchott, a distance of about 25 km. Beyond this the only route is the Nouadhibou Road (N-2) to the Tasiast road junction, a distance of 280 km and then an unpaved gravel road running northeast to the mine site, a distance of approximately 50 km.

SOGECO used a risk assessment procedure to select the least hazardous route for the transport of cyanide. Of three viable routes between the Port of Nouakchott and the northern limits of Nouakchott the preferred route was selected as houses along the route are set back from the road, and the route avoids a busy roundabout junction, a hospital and schools that are present on the alternates. Other considerations included low hanging electric cables that cross the roads in the City. This originally selected route continues to be the preferred route and has been used for all but one cyanide transport in the past three years, when one of the other viable routes was used because the preferred route was temporarily encumbered. The landscape is generally flat desert, and outside of Nouakchott settlements are few and generally small and/or nomadic. Primary hazards include occasional wandering animals and pedestrians and, along the northern part of the route, blowing sand and dunes. Potholes are a potential hazard on the unpaved road to the Tasiast mine. There are no open water bodies along the route.

Hazards along the route are documented on a road risk assessment form that is carried with each convoy. The form identifies traffic controls and hazards at marked distances along the route and presents actions required by the driver to minimize the hazard. The hazard assessment is re-evaluated annually. Convoy Supervisor updates the form as necessary during each convoy to incorporate new or temporary hazards (animals, temporary settlements, potholes, sand drifts etc.) that may arise along the route.

SOGECO Mauritania Name of Transporter

Signature of Lead Auditor

8 February 2019 Date

Page 4 of 15

Weather conditions are checked prior to a convoy departure. The convoy departure could be delayed if cross winds exceed about 60 km/hr or there is a risk of dust storm. The convoy will not travel during rain.

SOGECO's Cyanide Transport Management Plan is used to manage risk. The Plan includes requirements for equipment specification and maintenance, pre-departure equipment inspections, employee training, and rules of the road for cyanide convoy, and is supplemented by several working documents and instructions. The Plan is reviewed annually and was last updated in September 2018.

Convoys are restricted to daylight driving. The only exception permitted is when there is a late departure caused by unloading delays at the Port. In such occurrences the convoy will drive out of Nouakchott after dark to a temporary overnight rest stop to avoid having to park the convoy in a populated area over night. The Ministry of Environment Authorization limits the size of a convoy to 13 shipping containers. Speed restrictions are defined through populated areas, on bends, on unpaved road and during inclement weather. Each tractor/trailer is equipped with a Global Positioning System (GPS), and vehicle location and speed are monitored by SOGECO's logistics department using a Naviafleet GPS tracking system. The Plan also has requirements for periodic rest stops, vehicle/load checks, and security measures during overnight stops.

SOGECO has met with government and community officials, gendarmerie and clinics in Nouakchott, and in the settlements of Belewakhe and Chami and discussed cyanide transport and emergency response. Various government departments, including Ministry of Mines and Energy, Ministry of Environment, Ministry of Internal Affairs and Ministry of Transport are also involved with authorization for the transport of cyanide.

The cyanide is transported on convoys with gendarme security escort, Ministry of Environment representative, two Civil Protection fire-fighters and a contract medic. Each convoy is accompanied by three escort vehicles. Escort vehicles are equipped with walkie-talkie for communicating within the convoy and cell phones are used to communicate with the SOGECO logistics office. A satellite phone is also carried with the convoy in case the cellular network is not functioning. During overnight stops the convoy parks off the road in a remote unoccupied area. The area is taped-off and cyanide hazard signs are posted. The gendarmes are posted to ensure the trucks are secure during the night.

There is limited external emergency capability available in Nouakchott to provide assistance in the event of a medical emergency involving cyanide. At the north end of the route medical and emergency response assistance would be offered by the TMLSA. Although community clinics and hospitals have been made aware of the potential for a cyanide transport incident, SOGECO contracts a trained medic to accompany the cyanide escort in case of an emergency. The Civil Protection fire fighters that accompany the convoy are responsible for removing casualties from the scene and isolating the area. The gendarme that accompany the convoy control vehicle traffic at the scene and contact local gendarme and community leaders to

SOGECO Mauritania Name of Transporter

Signature of Lead Auditor

coordinate evacuation or other public control measures needed. SOGECO maintains an 80-tonne crane on standby during each convoy ready to respond to an emergency.

<u>Transport Practice 1.2</u>: Ensure that personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.

■ in full compliance with Transport Practice 1.2

The operation is

in substantial compliance with not in compliance with

Summarize the basis for this Findings/Deficiencies Identified:

SOGECO Group only uses trained, qualified drivers that hold Class E drivers licences for transport of cyanide. This classification includes Class C1 which in Mauritania is required for driving heavy goods vehicles including articulated vehicles carrying dangerous goods. Most of the drivers gained their training and experience in the military. SOGECO has implemented a cyanide transportation plan that includes rules of the road to enhance safe driving and minimize risk of accidents and potential cyanide releases and exposures. These rules are recapped during toolbox meetings that are held prior to each cyanide convoy. In 2018 drivers also completed a defensive driving course provided by an external trainer.

All personnel operating cyanide handling and transport equipment complete cyanide awareness training. Refresher training is provided annually by the Director of Health, Safety, Environment and Quality (HSEQ) and is based on training materials provided by Cyanco. The cyanide awareness refresher training is attended by convoy supervisors, drivers, Civil Protection firefighters, and contract medic. In addition to formal training, all convoy personnel attend toolbox meetings prior to departure of a convoy, in which topics, including convoy driving procedures, cyanide, personal protective equipment (PPE), health and safety and incident response, are reviewed and discussed.

Training and toolbox records were available for 2016, 2017 and 2018.

<u>Transport Practice 1.3</u>: Ensure that transport equipment is suitable for the cyanide shipment.

■ in full compliance with Transport Practice 1.3

The operation is

in substantial compliance with not in compliance with

Summarize the basis for this Findings/Deficiencies Identified:

The handling and loading of cyanide containers at the Port of Nouakchott is undertaken by Port personnel using a Terex stacker maintained by the Port. SOGECO's responsibility for the cyanide shipment starts after the container is accepted by SOGECO and loaded by the Port onto the tractor/trailer. Likewise, the containers are unloaded at the Tasiast mine using

SOGECO Mauritania Name of Transporter

Signature of Lead Auditor

equipment owned and maintained by TMLSA. SOGECO's responsibility for the cyanide shipment ends on arrival of the loaded tractor/trailer at the cyanide storage facility within the Tasiast mine site.

Under a contract between SOGECO and TMLSA signed on 1 May 2016, SOGECO leases a fleet of fifteen tractor/trailers owned by TMLSA for transport of cyanide between the Port of Nouakchott and the Tasiast mine. This fleet of vehicles is less than four years old. The tractors are manufactured by MAN in Germany and are rated at 480 horse power. The vehicles comprise eleven tractors with dedicated flatbed articulated trailers and four fixed bed units. The flat bed trailers are 3 axle units manufactured by Frenos Camino and rated load capacity of 60 Tonne (T). The fixed bed units are also rated to carry 60 T. SOGECO maintains an 80 T capacity Grove mobile crane on standby during cyanide convoys ready to respond to a transport emergency. Procedures limit the cyanide transport to only one container per vehicle. As the gross weight of each loaded container is approximately 24,000 kg, the maximum load carried is therefore well within the safe operating load for the flatbed and fixed trailers.

SOGECO conducts light vehicle maintenance on the MAN trucks in house and employs 25 mechanics at their maintenance works yard. The vehicles are maintained on a preventative maintenance program recommended by MAN that is based on kilometres driven. Maintenance is entered into the Maximo preventative maintenance system software, maintained by the Maintenance Planner. Heavy maintenance on MAN vehicles is undertaken at the MAN dealer workshop in Nouakchott. The Maintenance Planner is responsible for deciding what maintenance is to be undertaken by the dealership and what is undertaken in house. All work undertaken at the dealership is checked and approved by a SOGECO maintenance mechanic.

In addition to the preventative inspection and maintenance program, documented vehicle inspections are also undertaken immediately prior to a convoy by the Convoy Supervisor, driver and a mechanic from the maintenance department. Review of pre-convoy vehicle inspection records revealed they were not always being completed fully or if a deficiency was recorded insufficient information was being recorded to confirm that the issue had been corrected prior to the convoy's departure. Some records were also not being signed as required. Subsequent to the field component of the verification audit SOGECO reviewed their inspection program and retrained convoy supervisors and assistant supervisors on the necessity of strict application and completion of inspection forms.

Drivers are required to check their vehicles and the security of their loads prior to departure and at each rest stop. Checks are also undertaken by the Convoy Supervisor during a convoy.

<u>Transport Practice 1.4</u>: Develop and implement a safety program for transport of cyanide.

in full compliance with Transport Practice 1.4
in substantial compliance with

The operation is

SOGECO Mauritania Name of Transporter

Signature of Lead Auditor

8 February 2019 Date

Page 7 of 15

not in compliance with

Summarize the basis for this Findings/Deficiencies Identified:

TMLSA continues to be receive cyanide as solid briquettes packed in plywood 1,000 kg IBCs. These IBCs are packed and transported in 20-foot long shipping containers; 20 IBC boxes per container. Within each IBC, the briquettes are packed in nylon supersacks enclosed in plastic (bag in bag) to protect against moisture. The containers are packed at Cyanco's production facility in Houston, Texas, or Australia Gold Reagents' (AGR) facility in Kwinana, Western Australia. The AGR containers are received by Cyanco CIF (Cost, Insurance and Freight) at the Port of Nouakchott. Prior a container being accepted and loaded onto a trailer, SOGECO visually checks the structural integrity of the container and integrity of the seal as the container is unloaded at Port of Nouakchott.

The shipping container seals is not broken until the shipment reaches the mine site. The content of shipping each container is clearly identified on each side by "Poison" and UN 1689 placards and Marine Pollutant placards. The European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR) Hazard Identification Number 66 (highly toxic substance) and UN1689 number (cyanide) placards are placed on the front of the tractor and back of the trailer, and a Toxic 6.1 placard with toxic written in English and Arabic on the back of the trailer as required by local regulations or international regulations.

A documented safety program is in place to minimize the potential for accidents and records are maintained to document the program. As discussed in Transport Practice 1.3 documented inspections are conducted on cyanide transport vehicles immediately prior to departure of the convoy and all vehicles are maintained through a preventative maintenance program that is tracked using the Maximo preventative maintenance software. Written procedures are in place that prohibit drivers from driving more than 10 hrs a day and not more than 2 hrs continuously without a 15-minute break. Driving is restricted to daylight hours except under circumstances of a late departure necessitating the convoy to clear the populated area of Nouakchott before stopping overnight. Procedures require loads to be checked by drivers and the Convoy Supervisor prior to departure of the convoy and during rest stops to ensure that the load is secure.

Generally weather conditions are suitable for cyanide transport throughout the year; nevertheless, weather conditions are tracked prior to each departure. During inclement conditions such as high wind, a dust storm or precipitation, the convoy departure would be delayed, or the convoy would be halted at a convenient off-road location until conditions improve. Procedures are in place to address critical security conditions that creates a potential danger to members of the convoy or integrity of the cargo.

Because Mauritania has strict cultural and regulatory requirements that forbid the use of alcohol and drugs, SOGECO does not have a formal drug and alcohol prevention program. Nevertheless, the driver awareness training program includes instruction of the effects of

SOGECO Mauritania Name of Transporter

Signature of Lead Auditor

alcohol on driving ability. The alertness of drivers is assessed at the beginning of each shift, especially during Ramadan, to check that drivers are fit to drive.

<u>Transport Practice 1.5</u>: Follow international standards for transportation of cyanide by sea and air.

■ in full compliance with Transport Practice 1.5

The operation is

in substantial compliance with not in compliance with

Not Applicable. SOGECO does not transport cyanide by sea or air.

<u>Transport Practice 1.6</u>: Track cyanide shipments to prevent losses during transport.

in full compliance with Transport Practice 1.6

The operation is

in substantial compliance with not in compliance with

Summarize the basis for this Findings/Deficiencies Identified:

The escort vehicles are equipped with walkie-talkie radios during convoys. The radios are used only for communication within the convoy as the radio signals are not able to reach back to base. The MAN trucks are not equipped with radios, so each driver is provided with a cell phone with a free SOGECO account number. The Convoy Supervisor and assistant are equipped with cell phones to communicate with base. A satellite phone is also carried by the Convoy Supervisor as backup in case there is no coverage on the Global System for Mobile communications (GSM) cell phone network. All communication equipment is tested, and batteries charged prior to convoy departure. Chargers are also carried with the convoy in case they are needed. The Civil Protection fire-fighters and gendarme also carry their own cell phones for reporting back to their departments as needed.

Administrative, communication and electronic systems are in place to track the progress of cyanide shipments. Prior to the marine delivery of a cyanide shipment to Nouakchott, Cyanco provides SOGECO and TMLSA a copy of the Bill of Lading that itemizes each cyanide shipping container in the consignment and providing information on the container number, contents, weight, and seal number. SOGECO generates a delivery slip containing this information which is carried with the convoy to Tasiast. On delivery of the consignment to Tasiast each container number and its seal number and integrity is checked. The SOGECO delivery slip is then signed and stamped by TMLSA as confirmation of product delivery. A government customs officer travels with the convoy to assure that the container seals are not tampered with on route.

SOGECO Mauritania Name of Transporter

Signature of Lead Auditor

The Convoy Supervisor is required to communicate with the logistics base at least every 2 hrs to report on progress of the convoy and potential issues encountered on route. As discussed above the convoy location and speed is also tracked on the Naviafleet GPS tracking system that reports to the Logistics Department.

The SOGECO delivery slip carried on the convoy by the Convoy Supervisor details the quantity of cyanide being transported. Manuals, documents and forms carried with each convoy include a Materials Safety Data Sheet (MSDS) for cyanide and instructions and precautions to follow in the event of a cyanide incident.

2. INTERIM STORAGE:

Design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent releases and exposures.

■ in full compliance with Transport Practice 2.1

The operation is

in substantial compliance with not in compliance with

Summarize the basis for this Findings/Deficiencies Identified:

Not applicable. SOGECO does not operate a trans-shipping depot or interim storage facility.

3. EMERGENCY RESPONSE:

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

Transport Practice 3.1:

Prepare detailed emergency response plans for potential cyanide releases.

■ in full compliance with Transport Practice 3.1

The operation is

in substantial compliance with not in compliance with

Summarize the basis for this Findings/Deficiencies Identified:

SOGECO has an emergency response plan (ERP). The ERP is reviewed annually and was last updated in September 2018. The Plan is supplemented by several instructions and working documents that include updated internal and external emergency contact lists, equipment checklists, and procedures for responding to emergency situations involving cyanide. The ERP was developed specifically for the transport by road of solid cyanide in briquette form, packed in 1,000 kg IBCs, and transported in 20-foot long sealed shipping containers, one container per truck, between the Port of Nouakchott and the Tasiast Mine. Although the ERP is specific to SOGECO's transport by road, SOGECO would also provide emergency response assistance

SOGECO Mauritania Name of Transporter

Signature of Lead Auditor

8 February 2019 Date

Page 10 of 15

at the Port and at the Tasiast mine if requested if an emergency occurred during the container transfer operation.

The ERP considers all aspects of the road transport infrastructure to effectively respond to potential incidents located in a remote desert area which is characteristic of the transport route outside of Nouakchott. In addition to being trained to handle dry cyanide spills, the convoy escort team also includes two Civil Protection fire fighters, experienced in the use of self-contained breathing apparatus (SCBA) to respond to situations involving actual/potential hydrogen cyanide (HCN) gas generation. A contract medic trained in cyanide poisoning and the application of cyanide antidote (hydroxocobalamin) also accompanies the convoy to provide fast response in an area remote from medical services. Freshwater is carried with the convoy for decontamination of casualties and/or equipment in the event of an emergency involving a cyanide release. Although, not critical in the first response to a cyanide incident, SOGECO retains an 80 T capacity mobile crane on standby during convoys ready to respond if lifting equipment is required.

The ERP does not provide details on the design of transport vehicles operated by SOGECO. However, vehicle specifications indicate that the 60 T load capacity of the trailers used is more than adequate to safely transport a full cyanide shipping container having a maximum gross weight of 24 T. SOGECO prohibits the loading of more than one container per trailer.

The ERP considers the following potential cyanide transport incidents:

- A vehicle accident in which the trailer has tipped-over but the shipping container remains intact and no spillage observed;
- An accident involving several vehicles, but the shipping container remains intact and no spillage observed; and
- A vehicle accident in which the trailer has tipped over, the shipping container has been damaged and spillage of cyanide has occurred.

The Plan addresses the roles and responsibilities of the drivers and escort team in the event of an accident. Actions addressed include securing the area of the accident, cordoning off the road and preventing access by the public; checking the area for potential HCN gas; recovering spilled cyanide, neutralizing cyanide residue, and disposing of cyanide waste. The plan includes requirements to cover spilled cyanide to prevent contact with rain if there is a potential for precipitation. The plan prohibits the use of neutralizing chemicals near a water body.

Because of limited resources in Mauritania the roles of outside responders in the event of an emergency is limited and SOGECO has assembled the resources and capability within the escort team to respond to all foreseeable types of cyanide transport incident. In addition to SOGECO's trained drivers and health and safety professionals the convoy escort team also includes the capability of two Civil Protection fire fighters, and a contract medic. Two gendarmes also accompany the convoy. The Civil Protection fire fighters will provide first

SOGECO Mauritania Name of Transporter

Signature of Lead Auditor

8 February 2019 Date

Page 11 of 15

response to secure the scene and retrieve casualties. The contract medic is trained in cyanide first aid. The role of the gendarmes is traffic control and notifying any necessary external responders or local community personnel as needed. The role of local community responders would generally be limited to evacuation and control of public. The assistance of local fire department and ambulance services may be available for incidents in and proximate to Nouakchott. The Plan also indicates that resources at the Tasiast Mine would be available to support SOGECO if an incident occurred in the vicinity of the mine. SOGECO has also arranged that the Tasiast mine would accept cyanide waste generated during incident cleanup/remediation activities. Hospitals have been notified of the potential for cyanide incidents and casualties would be taken there after initial first aid treatment by the contract medic. The ERP includes a list of hospital contact information.

<u>Transport Practice 3.2</u>: Designate appropriate response personnel and commit necessary resource, for emergency response.

in full compliance with Transport Practice 3.2
in substantial compliance with
not in compliance with

The operation is

Summarize the basis for this Findings/Deficiencies Identified:

All personnel involved in the handling and transport of cyanide complete cyanide awareness training and emergency response training. This training was initially provided in 2013 by the Civil Protection fire fighters and since that time the Director HSEQ has provided the training. This training follows Cyanco cyanide awareness materials and includes characteristic and hazards of cyanide, and emergency response and cyanide first aid. Drivers are also trained in fire-fighting, dangerous goods and general first aid.

The ERP provides descriptions of the roles and responsibilities in the event of an emergency. Although the SOGECO escort team members have been trained in the use of SCBA, the Civil Protection fire fighters would undertake the first responder role to secure and enter the scene, assess the situation, and retrieve possible casualties. The gendarmes are responsible for controlling traffic and communicating as required with local communities. The drivers are responsible to move upwind away from the scene and assist as requested. The Convoy Supervisor is responsible for overseeing the implementation of the ERP, calling the emergency numbers, coordinating the clean-up and decontamination activities. The contract medic is responsible for first aid response and patient decontamination.

SOGECO has the necessary equipment and supplies available to respond to all foreseeable transport emergencies. Emergency response equipment is inspected and checked prior to the departure of a convoy. The equipment is otherwise stored in a dedicated room in the logistics compound. Procedures and checklists are used to ensure all emergency response equipment and supplies are functioning and available if needed during the convoy. The emergency

SOGECO Mauritania Name of Transporter

Signature of Lead Auditor

8 February 2019 Date

Page 12 of 15

medical kit, including a CyanoKit (hydroxocobalamin), is maintained and retained by the contract medic.

In addition to formal training and refresher training as discussed above, all convoy personnel attend a tool box meeting prior to departure of a convoy in which topics, including convoy driving procedures, cyanide, PPE, health and safety and incident response, are reviewed and discussed.

As discussed above emergency response equipment is inspected prior to each convoy to ensure that it is in good working order and the inventory for the convoy is complete. Checks include ensuring batteries for radios, megaphone and phones are charged prior to departure; the SCBA equipment is charged and operational, fire-extinguishers are charged, and containers of water (for decontamination in the event of a cyanide release) are filled and carried with the convoy. Inspection records for each convoy are maintained. Review of preconvoy equipment inspection records revealed they were not always being completed fully or if a deficiency was recorded insufficient information was recorded to confirm that the issue had been corrected prior to the convoy's departure. Subsequent to the field component of the verification audit SOGECO reviewed their inspection program and retrained convoy supervisors on the strict application and completion of inspection forms to ensure that all listed emergency equipment and supplies are available on the convoy in event of an emergency.

<u>Transport Practice 3.3</u>: Develop procedures for internal and external emergency notification and reporting.

■ in full compliance with Transport Practice 3.3

The operation is

in substantial compliance with not in compliance with

Summarize the basis for this Findings/Deficiencies Identified:

The responsibilities for external notifications are documented in the ERP. The Convoy Supervisor is responsible for calling the Director HSEQ in the event of an accident and the Director HSEQ contacts SOGECO management, local authorities and TMLSA as appropriate for the type of emergency. The convoys are escorted by police and Civil Protection fire fighters who would notify external responders for additional assistance, if necessary.

SOGECO has a written procedure for management of change of documents. This procedure is part of SOGECO's ISO 9001 quality management system. SOGECO was certified to ISO 9001 in 2015 and was re-audited and awaiting recertification just prior to the field component of this 2018 ICMC verification audit for recertification. At minimum documents are reviewed annually and updated as required.

SOGECO Mauritania Name of Transporter

Signature of Lead Auditor

Transport Practice 3.4:

Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.

■ in full compliance with Transport Practice 3.4

The operation is

in substantial compliance with not in compliance with

Summarize the basis for this Findings/Deficiencies Identified:

The ERP and supporting instruction provide procedures to address the clean-up of a cyanide spills. Because of the arid climate (average annual rainfall in the region is less than 140mm) the potential for a cyanide spill near open water is extremely remote. However, infrequent precipitation events may occur during the rainy season in October which could result in ephemeral steam flow or surface water ponding.

Procedures address spill clean-up in both dry and wet conditions and include securing the accident area, donning PPE, testing the area for potential HCN gas, covering the spill with a tarpaulin in the event of possible rain, recovering cyanide into sealed bags or closed containers, neutralizing the area, and decontamination of equipment used in clean up. The procedures prohibit use of chemical products (sodium hypochlorite and ferrous sulphate) near surface water. SOGECO has an agreement with TMLSA that the mine will accept and dispose of the cyanide waste appropriately.

In the event of a spill the Civil Protection fire-fighters are responsible for first response and containing the spill. The Convoy Supervisor with support from the Assistant Convoy Supervisor is responsible for coordinating the clean-up and decontamination activities. The contract medic is responsible for emergency first aid and if required the administration of cyanide antidote. The gendarmes are responsible for directing traffic away from the spill. Drivers are responsible for ensuring public are kept a safe distance from the scene of the spill.

<u>Transport Practice 3.5</u>: Periodically evaluate response procedures and capabilities and revise them as needed.

in full compliance with Transport Practice 3.5

The operation is

in substantial compliance with not in compliance with

Summarize the basis for this Findings/Deficiencies Identified:

SOGECO conducts emergency response exercises annually that simulate potential transport related emergency events. Records of emergency response exercises undertaken in 2016 and 2017 only documented action plans developed following these exercises. These action plans called for increased practice to improve response time to don PPE, and more proficient

SOGECO Mauritania Name of Transporter

Signature of Lead Auditor

8 February 2019 Date

Page 14 of 15

response. In 2018 SOGECO developed a procedure for documenting emergency drills and a record was available for a simulation conducted on 15 August 2018. The simulation involved an incident in which a truck tipped over, damaging the shipping container and spilling cyanide. The simulation did not involve an injury but two onlookers that inhaled cyanide dust and became unconscious. The exercise was attended by SOGECO convoy drivers and supervisor and included the contract medic and two Civil Protection fire fighters. The simulation evaluated blocking traffic, securing the area, cyanide first aid response, communication and spill clean-up. The drill record included a description of the scenario, a log of the response, photographs, a critique and an action plan for implementing recommendations. The general conclusion was that the simulation went well although the response time to secure the site could be improved. The action plan included more exercises to improve response time.

On 6 June 2018 a table top exercise was conducted that simulated a convoy truck collision with another vehicle going the opposite direction on the highway. The convoy truck rolled 90 degrees on to the driver's side and injured and trapped the driver inside the cab of the truck. There was a loss of product onto the side of the road from one of the IBC boxes in the container. The table top response was enacted out by the Director HSEQ and Director General, Nouakchott Civil Protection. The simulation was observed and critiqued by representatives of Cyanco. Recommendations following the simulation included contacting Cyanco via the CHEMTREC international notification number for technical advice when making initial notifications and Obtaining the French translation of the Emergency Response Guide Book 2016 to allow for a better understanding of the directives provided in the guidebook for cyanide spills.

In keeping with SOGECO's document management system and as stated in the ERP, the ERP is reviewed annually and as needed to address gaps or deficiencies.

SOGECO Mauritania Name of Transporter

Signature of Lead Auditor