

***INTERNATIONAL CYANIDE  
MANAGEMENT INSTITUTE***

***Transportation Summary***

***RE-Certification Audit Report***

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

**Mauritania**

**10<sup>th</sup> to 16<sup>th</sup> May-2023**

**Submitted to:**

**International Cyanide Management Institute**

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**OPERATION DETAILS**

Name of Operation: Societe Generale de Consignation et  
d'Entreprises Maritimes (SOGECO )

Name of Operation Owner: Societe Generale de Consignation et  
d'Entreprises Maritimes (SOGECO )

Name of Operation Operator: SOGECO

Name of Responsible Manager: ABDEL AZIZ Mohamedou Mohamed (AGL) QSE  
Cyanide operations manager

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**1-Location detail and description of operation:**

Societe Generale de Consignation et d'Entreprises Maritimes (SOGECO)  
SOGECO is a Logistics, <http://www.sogecosa.com/> freight forwarding and transport Company  
Operating in Mauritania.

It is responsible to transport 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.

SOGECO was incorporated in 1972 and since then has served multinational companies with operations in Mauritania.

SOGECO is ISO 9001 -2005 and ISO9001 -2015 certified company

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 which are no more in use, SOGECO invested in a new fleet of trucks 36 units Actros, 16 of which are cyanide dedicated with only 13 allowed to go on a single convoy at any given time . SOGECO undertakes maintenance on these vehicles at its workshop in Nouakchott. SOGECO does not subcontract any of the cyanide handling or transport.

SOGECO has gradually expanded list of services over the years and developed an extensive network of contacts as they are the exclusive agent for Antrak Australia [www.antrak.com.au](http://www.antrak.com.au)  
Bolloré Group: [www.AGL.com](http://www.AGL.com) , Delmas: [www.delmas.com](http://www.delmas.com) ,  
SDVOilfield: [www.sdvoilfield.com](http://www.sdvoilfield.com) SDV: All Africa.com [www.allafrica.com/mauritania](http://www.allafrica.com/mauritania)  
Fed-ex : [www.fedex.com](http://www.fedex.com) Saga Air : [www.sagactl.com](http://www.sagactl.com).

SOGECO Mauritania 's main operations located 1765 rue 22-002Commune du Ksar 10km away from port of Nouakchott.

The cyanide is shipped as solid briquettes in a solid sealed standard 20-foot steel inter-modal 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 bulk bag enclosed in plastic (bag in bag). The total loaded weight of each packed shipping container is approximately 24,000 kg.

Cyanide is received at the port of Nouakchott by sea in containers, each of which holds 20 boxes of one ton of solid cyanide briquettes.

The containers are offloaded at the ports by a stevedoring company.

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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 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 .a total of 355km from port to TMS warehouse .

A due diligence audit was done by Golder 2021 for Orica as part of the ICMI audited supply chain of the cyanide producers and consignors bringing the cyanide into Mauritania .

For the purposes of Cyanide Code transportation compliance, SOGECO Mauritania's Code responsibilities commence on collection of the containers from the port.

The audit covers road transport exclusively from the port of Nouakchott to Tasiast mine site (Kinross).

Containers are delivered from the Quays to the port Container Depot where they are loaded directly onto trucks.

SOGECO Cyanide Code responsibilities commence once they take the containers from the port area.

SOGECO Services clears the consignment and SOGECO vehicles collect the containers with the documentation and manage them under a Transport procedure (jointly agreed between the mine, and SOGECO Mauritania).

The containers of cyanide, are then transported in escorted convoy by SOGECO and a Mauritania customs and other government officials to the mine sites. There is neither storage nor interim storage during the delivery journey.

Each truck has a driver, who is accompanied by a safety officer or other staff member.

The escort officer manages the communications between the trucks, the escort vehicles and the convoy manager, and monitors the driver.

The convoy includes a convoy manager, assistant convoy manager, a cyanide first aider / paramedic, a mechanic, cyanide emergency response equipment for spills and releases and cynokit or medical equipment to treat cyanide exposures (splashes, skin exposures, inhalations and ingestion).

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**2-Acronyms:**

RA= Risk Assessment

ER= Emergency Response

HSE= Health Safety & Environment

SGS= Societe General De Surveillance

UMOEA= Union Economique et Monétaire Ouest Africaine

BIVAC= Bureau Veritas

HF= High Frequency

BL= Bill of Landing

**3- Transit and Storage**

The scope of the audit do not cover interim storage or storage

SOGECO operation is to transport from port to mine site within west Africa

SOGECO trucks occasionally passes through the yard just to fuel and do final check before departure

**4- Attendees and Interviewees**

Name	Position	Contact
Mohammed Ibrahim Hamdi	Convoy manger	22688285
Ahmad foude	expedition	22760080
Mohamedou Mohamed Abdul Aziz	Director HSEQ	22906044
salem sidi sule	driver	22800661
Sidi Mohammed Lavdhal	Workshop manger	
Fode Amadou	mechanic	
sidi mohammad	Operation manager	
Amadou Soumare	vulcanizer	

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**5- Auditor's Finding**

This operation is

**X in full compliance**

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

with the International Cyanide Management Code.

**This operation has not experienced any compliance issues or significant cyanide incidents during the previous three-year audit cycle.**


Audit Company: Crown Transport & Logistics  
 Audit Team Leader: Ghassan Hussein IRCA#01197931 PRINCIPAL AUDITOR  
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 Associate Auditor : Ziad Hussein- IRCA#6136738  
 Email: ziadhusseini127@gmail.com.  
 Name and Signature of Lead & Technical Transport Auditor:

Name Ghassan Hussein  Signature  
 Date 6-6-2023



I attest that I meet the criteria for knowledge, experience and conflict of interest for a Cyanide Code Certification Audit Lead Auditor, 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 Certification Auditors. I attest that this Summary Audit Report accurately describes the findings of the certification audit. I further attest that the certification audit was conducted in a professional manner in accordance with the International Cyanide Management Code Cyanide Transportation Verification Protocol and using standard and accepted practices for health, safety and environmental audits.

Date of audit: 10-5-2023 to 16-5- 2023

  
 Ghassan Hussein  
 Lead Auditor Date-6-6-2023



**SUMMARY AUDIT REPORT  
SOGECO 10<sup>th</sup> to 16<sup>th</sup> May-2023**

**1. TRANSPORT:** *Transport cyanide in a manner that minimizes the Transport Practice 1.1: Select cyanide transport routes to minimize the potential for accidents and releases.*

**X in full compliance**

The operation is  in substantial compliance **with Transport Practice 1.1**  
 not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

Road risk assessment available, the new risk assessment includes detailed route,-rest stops - road hazards such - population densities - CUSTOMS barriers - road construction, traffic congestion - standard caution - cattle crossing -children - bridges - water bodies -dangerous gases etc. .

Population concentrations and built-up areas are identified, as concentrations of children or school ,car/taxi parks ,pedestrian activity, cyclists and animals.

SOGECO transports cyanide by road; a distance of approximately 355 km. the only route is the Nouadhibou Road (N-2) to the Tasiast road junction, a distance of 305 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 risky route for the transport of cyanide.

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, 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 Manager 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.

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 / storm.

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## SUMMARY AUDIT REPORT SOGECO 10<sup>th</sup> to 16<sup>th</sup> May-2023

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 January.

Convoys are restricted to daylight driving.

The only exception permitted is when there is a late departure caused by loading 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 for overnight rest.

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 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 Mayor of Nouakchott 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 permanent 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 employed permanently 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 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.

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The road is mostly tarred The untarred is managed with a maximum speed of 50 km per hour for a 50km distance.

There are multiple sections of the route have, high risk section

Mitigation measures such as reduced speed, convoy management, added attention, police blocking road to facilitate and control the convoy and stopping for condition checking have been identified.

Further medium risks were also identified with specific types of mitigation, specifically during passage where the convoy leader informs the convoy of the area and the extra attention needed to pass through.

further the GOLDER auditor did a due diligence on Nouachot port submitted to ICMI on Tasia certification.

these are road risk assessments between port and TMLSA mine site, the selection of road procedure referencing the risk assessment plan describes the road risk assessment & route selection based on the level of risk.

Routes selected and approved by  
civil protection / ministry of interior  
ministry of transport,  
ministry of environment

are referred to procedure standard operating procedure and the document from the ministry of environment.

The Road Risk Assessment risk assessment plan highlighting black spots, warnings of hazards and other possible risks

The Road Risk Assessment risk assessment plan, use specified routes due to the fact that the convoys need to be escorted by government authorities.

Sogeco has the needed procedure for the route selection and they have road risk assessment for any route that they use to transport cyanide

all routes are approved by the authority

the route assessment captured the following

1-accident include roll over

2-pitch & grade

3-population density

4-gutters and water bodies

5-infrastructure(black point , bridges etc.)

the journey plan has date of departure, where it is going, final destination, trip distance, loading and discharge order, truck number and BL number.

also the journey plan dedicated section for comment, for change of route, condition and emergency numbers as well.

though the emergency response plan is carried along with the emergency numbers the same numbers are repeated with the journey plan

Sogeco does evaluation of roads, surveys, route risk assessment and also an update on the road changing conditions as it changes.

Road Survey is a set of directions providing details on when and how often to conduct a road survey, it includes the risk assessment, who is responsible, preparation of the material and convoy, identify the points that will be identified, link to hazard map and updating the risk assessment per procedure

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The Road risk assessment procedure identifies steps to be taken in the assessment of transport routes and identifies personnel responsible for undertaking each step.

The Escort Commander is responsible for identifying and responding to unforeseen risks during transport and perform an update on the road hazard, changing risks. Those updates are inserted into the road risk assessment.

journey plan and road risk assessment indicates where were authorized rest & stop points to be used along transport routes.

The RRA incorporates detailed route and rest stops and further identifies road hazards such as slippery roads, bridges fore, population densities, Police barriers, road construction, cyclists, traffic congestion, standard caution, heavy rain, cattle crossing, children, bridges etc.

The areas with high risk levels are identified and addressed in the road risk assessment.

Every 5 years the Survey team do a complete Road risk assessment for the roads that Sogeco uses to transport cyanide, which is a different undertaking than the yearly review or assessment or the journey plan

The survey team also meet and discuss issues or concerns with the client, authority and drivers.

A risk assessment is then undertaken of the proposed route.

This includes implementing controls to reduce potential risks to a defined acceptable level before the route can be utilized.

If controls cannot be implemented to achieve this, an alternative route must be found for consistency purposes of the Survey.

Transport management plan, it ensures that the route has been analysed in order to minimize the potential and impacts for accidents and releases.

Each delivery is undertaken via convoy.

convoy formation:

3 pilot car ,land rover,

1 convoy manager

1 assistant convoy manager

4 safety officers

1 paramedic,

1 mechanic

1 auto electrician,

13 drivers

1 EPA officer,

1 Customs officer

2 Gendarmerie escort

1 officer from the ministry of transport

2 fire service personnel.

the new RRA identify 2 category of Hazard

1- temporary (like accident , diversion)

2-permanent hazard

and the permanent hazard is divided into 3 category

short term hazard from a month to a year (eg side rad erosion)

medium term from 1 to 5 years (eg water trench )

long term (5 to 10 years like bridges and other )

However, if the hazard is not permanent, it is inserted during the review -

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the feedback procedure mission report

The feedback document addresses

road accidents,

road conditions,

population,

side erosion,

poor visibility

area time of transit,

where delay came from and possible solution to expedite the delivery if any of the  
aforementioned are encountered.

Route risk assessments are currently reviewed yearly.

the RRA and TMP and the ERP shows that Sogeco has identified the risks and the measures it  
has taken to address.

the OBC tracking addresses the driver log and work hours and risks area

Sogeco have authorization letters from ministry of Health and public safety respectively.

Ministry for Health and the Public Health.

Sogeco seeks input from stakeholders and applicable governmental agencies as necessary in the  
selection of routes and development of risk management measures.

- The community is consulted and involved limiting their role to crowd control and not to use  
any water during emergency until approved by the authority.

Sogeco have discussion with all communities along the transport route as mean creating  
awareness and creating a dialogue between the 2 parties using a flyer.

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

**X in full compliance with**

The operation is  in substantial compliance **with Transport Practice 1.2**  
 not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

The training matrix identifies the minimum training requirements for escort personnel and convoy drivers:

Formation « sensibilisation » cyanure (incl. masques/filtres/EPI)

Conduite défensive camion-Defensive driving (Bivac)

Conduite véhicule d'escorte

Formation premiers secours-First aid

Formation incendie (utilisation extincteurs)-fire fighting

Formation matières dangereuses (hazmats)-cyanide awareness

Exercices d'intervention d'urgence cyanure-Emergency response cyanide include Roles and responsibilities

Exercices utilisation EPI et masques-Responding to accidents to incidents

Cyanide Emergency Response Scenario Training (Mock Drill) Annually

Reference procedure standard operating procedure MAN.HSE.01 CYANIDE TRANSPORT MANAGEMENT PLAN, PLAN DE GESTION DU TRANSPORT DE CYANURE

SOGECO drivers are required to hold a Class E driver's license. This classification includes Class C1 which is required for driving heavy goods vehicles including articulated vehicles carrying dangerous goods. There is currently no requirement in Mauritania for drivers to hold a dangerous goods license.

However, all personnel that participate in the cyanide convoys are required by SOGECO to complete annual cyanide awareness training. This annual training is undertaken by the HSEQ Manager and is based on Power Point training materials on the SOGECO Cyanide Transport and Emergency Response Plan /PLAN D'INTERVENTION D'URGENCE.

Videos on cyanide properties, hazards and first aid that were provided by Cyanco.

The cyanide awareness training is attended by Convoy Managers, drivers, Civil Protection firefighters, and the permanent medic as confirmed in training records

all the convoy personnel are trained include external responders.

3 pilot car ,land rover,

1 convoy manager

1 assistant convoy manager

4 safety officers

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1 paramedic,  
1 mechanic  
1 auto electrician,  
13 drivers  
1 EPA officer,  
1 Customs officer  
2 Gendarmerie escort  
1 officer from the ministry of transport  
2 fire service personnel.

The Matrix shows the attendees of the annual training done. Drivers and Convoy manager have been trained to perform their jobs in a manner that minimizes the potential for cyanide releases and exposures.

This process is complemented with structured training.

The cyanide awareness training module is produced by a cyanide manufacture (CYANCO ).

The module contains information on product awareness and emergency response actions.

Prior to each convoy, a module of the cyanide awareness training is used as a refresher.

Emergency simulations drill are carried out at least 1 time per year where specific aspects of the emergency plan are evaluated.

The training matrix and records were reviewed to confirm training had scheduled and conducted.

Then the one passes the test to become a driver, the process is explained into the instruction Recruitment Records are maintained.

If the new driver doesn't pass the test the follow up of the retesting is recorded.



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*Transport Practice 1.3: Ensure that transport equipment is suitable for the cyanide shipment.*

**X in full compliance with**

The operation is  in substantial compliance **with Transport Practice 1.3**

not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

Sogeco has 36 truck with 16 being cyanide specific trucks that comply with Mauritanian regulation ,

Sogeco has a software called Maximo that encompasses fleet management and maintenance application, nevertheless any complicated repairs are sent to the agent

further Sogeco uses third party inspection using SGS done annually and a visit from MOT(ministry of transport once a year for roadworthy certificates for their trucks, apart from this most repairs and maintenance are done by the Workshop department .

in case of minor brake down on road the convoy mechanics manage the problems for any major Sogeco workshop will send the needed team and support .

for major repair Sogeco workshop will mobilize its equipment to location for repair or replace the equipment accordingly.

Brake testing and other inspections are undertaken by workshop department.

The on-board computer on the truck and the maintenance software Maximo dictates the maintenance frequencies, form and type of service required.

Specific truck minor maintenance records were sampled and checked.

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*Transport Practice 1.4: Develop and implement a safety program for transport of cyanide.*

**X in full compliance with**

The operation is  in substantial compliance **with Transport Practice 1.4**  
 not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

The transport producer standard operating procedure and TMP explains how the transport is undertaken.

Additional packaging consists of plastic lined wooden boxes packed into 20 feet containers and sealed.

The integrity of the boxes and containers can only be compromised if they are damaged during handling or moisture/dust /liquids enter the containers or the boxes, in case of an accident on road.

The container is sealed by the producer and only opened at the mine.

The cargo is escorted by armed customs official to mine site because the cargo is exempt from duty so no one is allowed to open the container.

as well as the fact that the container is inspected by third party at Terminals before it leaves the port

there is visual inspection on all seal and containers at every rest stop and is sighted in the standard operating procedure standard operating procedure and TMP and container checklist Sogeco has procedures to ensure that the cyanide is transported in a manner that maintains the integrity of the producer's packaging.

also it outlines the containers must be inspected before loading in order to ensure that proper labels and seal are in place.

Container is not opened for loading or offloading so it stays intact till it reaches the site.

The Bill of Lading is stamped by the Port Authority indicating the containers have been delivered undamaged with the same seal installed by the producers.

The container is also checked by the Mine upon arrival at the mine site based on the delivery order signed.

Furthermore, a Container Interchange Report is completed and jointly signed by the shipper's representatives and the cyanide transporter's representatives to agree on any damage that may be sighted on the container.

also there is a transport checklist for the container integrity procedure, signed by the driver and the convoy manager and the mine upon delivery.

The Vehicle Trip Checklist is completed and signed at the mine confirming the condition, on delivery of the container and a section reports on container seal, labelling and general container condition.

Placards are used to identify cyanide shipment, as required by international standards.

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**SUMMARY AUDIT REPORT  
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The ERP and TMP outlines the requirement for placarding to be placed on the 4 sides of the sea containers used in the transport of cyanide.

As a control measure, the cyanide is trucked in convoy under the escort of persons who have received training in cyanide emergency response and dangerous goods training.

Cyanide to have the following markings:

- Number UNO: 1689
- Principal class: 6 Poison
- Group packing: 1
- Exact designation of the dispatched product: sodium cyanide, Solid.

The shipping container containing the IBC's is marked with Hazchem labels on all sides further preventive maintenance procedures referred to in the TMP includes inspection sheets, escort vehicle checklists, observation sheet, truck checklist and container checklist

Training matrix & and training plan

including defensive driving and assessment plan.

Check list before departure truck checklist and container checklist

Maintenance procedure.

TMP allows

Convoys move from 6 am to 18.00, after 18.00 the convoy stops the regulation clearly state convoy cannot travel between 18:00 and 06:00 without prior written permission and accompanying HSE measures in place.

Interviews and convoy documentation confirmed limitations on hours are in place.

maximum driving hours on duty in any 24 hour period (8 hours );

driving hours from 6am to 6 pm

normal situation maximum period of continuous driving (2 hours) with 15 minutes break ;

abnormal situation maximum period of continuous driving (4 hours) with 30 minutes break

minimum daily rest time 180 minutes.

availability is 12hrs /day

maximum weekly driving hours (48),

working week to be a maximum of 6 consecutive days.

SOGECO conducts vehicle maintenance on the Actros trucks in house and employs 25 mechanics at their maintenance works yard. The vehicles are maintained on a preventative maintenance program recommended by Actros that is based on kilometres driven and timeframe. Maintenance is entered into the Maximo preventative maintenance system software, maintained by the Maintenance Planner. The Maintenance Planner is responsible for deciding what maintenance is to be undertaken.

Cyanide boxes come from the producers in 20ft containers and the containers are not opened.

The box sizes are such that the boxes fit tightly in the container and do not move.

The cargo is secured using twist locks , container side support or shifting prevention guard also

Sogeco are using steel chain to lash the cyanide containers only.

Procedures by which transportation can be modified or suspended if conditions such as

**MODIFY BASED ON BELOW**

1-severe weather

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2-civil unrest are encountered.

SUSPEND

1-end user refuses to collect

2-supplier refuses to supply

The use of drugs and alcohol is prohibited in Mauritania and is not allowed, there are no bars or pubs to serve alcohol in the country.

Such products are not allowed to enter the country from a religious, social and legal perspective. the cyanide delivery is made within the Mauritanian territory where the Mauritanian law applies.

the TMP commits to training staff HSE matters, misuse of drugs and alcohol and preventative actions relating to drug and alcohol.

There is a briefing before every trip on the use of alcohol and drugs and this is also a part of the risk assessment of the pre-trip inspection clearly stating alcohol and drugs are prohibited.

the recruitment policy includes use of drugs and alcohol on the company premises or whilst driving and the consequences of positive test results that leads to immediate termination.

The driver also signs that he accepts the company laws and regulation.

The company do not accept nor tolerate any positive results during working hours.

Records are maintained and were inspected for relevant parts of this element as indicated adjacent for each finding.

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*Transport Practice 1.5: Follow international standards for transportation of cyanide by sea and air.*

**X in full compliance with**

The operation is  in substantial compliance **to Transport Practice 1.5**  
 not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

Sogeco are not responsible nor contracted to manage cyanide consignment by sea the scope of this audit is only land transport from port to destination..

Sogeco is not involved in managing sea nor ensuring compliance with IMO and IMDG

Sogeco is responsible for cyanide, land transport only.

Sogeco does not manage the loading, unloading or DE stuffing of containers. or stevedoring .

however this requirement is covered by the due diligence done by diligence done by ICMC AUDITORS Owen Warren FOR GOLDBER 2021 and it is visible on the container on all the 4 sides the following

1- 1689 placard

2-marine pollutant placard

3-class 6 toxic placard

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*Transport Practice 1.6: Track cyanide shipments to prevent losses during transport.*

**X in full compliance with**

The operation is  in substantial compliance **with Transport Practice 1.6**  
 not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

The TMP - Plan de GESTION DES TRANSPORTS indicates Sogeco uses the following as mean of communication

- 1-cell phone to communicate directly with the Sogeco office and emergency responders.
- 2-Vehicles are equipped with GPS tracking monitored by Sogeco.
- 3-talkie walkie used to communicate within the convoy.
- 4-mobile phone & satellite phone to communicate with head office

Sogeco has a 1 cell & 1 satellite phones that goes on every convoy.  
Communication with vehicles in the cyanide convoy is undertaken using mobile phones, and short-wave radio.  
Vehicle tracking system

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 Actros trucks are equipped with GPS tracking ,  
also each driver is provided with a cell phone with a free SOGECO account number.  
The Convoy Manager and assistant are supplied with cell and satellite phones to communicate with base.  
the satellite phone is carried by the Convoy Manager as backup in case there is no coverage on the GSM cell phone network.  
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.

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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.

The Convoy Manager 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. 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 Manager 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.

Convoy managers have all the appropriate telephone numbers to communicate with Sogeco head office and appropriate emergency responders and emergency services during trip communication is based on the communication procedure in the ER plan.

The convoy manager is obliged to call Sogeco every 120 minutes or at every rest point.

The Sogeco head office manages all associated communications with the mine and the cyanide producer.

Emergency contact list in the ER plan, where protocol of communication is part of the procedure Where no reception exists, the convoy commander calls before and after the reception black spot communication to head office is done by phone and communication with vehicle is done via talkie walkie only critical cases he uses the Satellite phone to make the needed calls.

All prime movers and escort vehicles are equipped with tracking which is monitored at the Sogeco depot.

talkie walkie , headlights and horns are used to communicate incidents between vehicles in the same convoy.

The closed nature of the convoy allows trucks experiencing troubles to communicate with at least one escort vehicle and this vehicle communicates with the other.

In the event of a problem with one truck, the entire convoy stops.

All communication equipment are tested prior to departure of convoy.

There is also a continuous use contact with the radio communication company for the servicing of the equipment and immediate replacement for mobile phones is in continuous use seen inspection report for communication equipment and radio checklist

Sogeco implement chain of custody processes to prevent loss of cyanide during shipment.

The Bill of Lading is stamped by the Port Authority indicating the containers have been delivered undamaged with the seal intact.

The container weights are also detailed on the Bill of Lading.

A scanner is used at the Port to verify that the correct container has been placed on the selected trailer.

The container seal are checked by the mine upon arrival at the mine site to confirm.



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Sogeco uses convoys as a means of managing the risks of road transportation, responding to emergencies and to prevent product loss.

Sogeco manages the supply custody using the TMP

The cyanide from the port of entry to destination is under the control and the responsibility of the authority due to the dangerous nature of the cargo.

Sogeco transports and delivers cyanide only in sealed containers

Shipping records indicating the amount of cyanide in transit and Material Safety Data Sheets (MSDS) are available during transport.

The delivery documentation notes the container numbers, weights and seal numbers.

The ERP and TMP are also carried on the convoy along with an MSDS for cyanide and a list of emergency contacts between the port and site.

Sogeco implement chain of custody processes to prevent loss of cyanide during shipment.

The Bill of Lading is stamped by the Port Authority indicating the containers have been delivered undamaged with the seal intact.

The container weights are also detailed on the Bill of Lading.

The declared weight of the container is appearing on the delivery note.

The container seal are checked by the Mine upon arrival at the mine site.

The cyanide from the port of entry to destination is under the control and the responsibility of the authority due to the dangerous nature of the cargo.

CYANCO MSDS sighted and placed in vehicles.

Sogeco retain all records for 5 years

**2. INTERIM STORAGE: Design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent releases and exposures.**

*Transport Practice 2.1: Store cyanide in a manner that minimizes the potential for accidental releases.*

**X in full compliance with**

The operation is  in substantial compliance **to Transport Practice 2.1**

not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

Within the scope of this audit, there are no trans-shipping depots or Interim storage sites, as defined in the audit protocol.

Following collection from the Port, the containers are sent to client site.

N/A There are no situations where interim storage occurs

since the cargo is under the authority custody and the authority doesn't allow the cargo to park or be sent anywhere apart from the approved route.

Sogeco does not manage the loading, unloading or DE stuffing of containers. or stevedoring .

however this requirement is covered by the due diligence done by diligence done by ICMC AUDITORS Owen Warren FOR GOLDER 2021 placarding is visible on the container on all the 4 sides the following

1- 1689 placard

2-marine pollutant placard

3-class 6 toxic placard

4- last convoy vehicle has banner indicating dangerous goods

There is a procedure that prohibits eating or drinking near the cyanide TMP Sogeco- Plan de GESTION DES TRANSPORTS.

Shipping records indicating the amount of cyanide in transit and Material Safety Data Sheets (MSDS) are available during transport.

The delivery documentation notes the container numbers, weights and seal numbers.

The ERP PLAN D'INTERVENTION D'URGENCE and TMP Plan de GESTION DES TRANSPORTS are also carried on the convoy along with an MSDS for cyanide and a list of emergency contacts between the port and site.

Sogeco implement chain of custody processes to prevent loss of cyanide during shipment.

**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.*

**X in full compliance with**

The operation is  in substantial compliance **with Transport Practice 3.1**

not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

Sogeco Emergency Response Plan covers different scenarios, all the scenarios that are in the emergency response plan are addressed as drills (they implement the scenario in a drill case )

The ER PLAN gets updated:

1. drill where there was variation in the implementation or accident
2. The yearly review or procedural yearly review
3. Or in case there is a change in the law or the regulations

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

As all cyanide deliveries are made in convoy, the accompanying Emergency Response Team will implement the Emergency Response Plan unless more support is needed.

Then they will report to head office or external responders whose responsibilities and obligations are stated in the Plan.

These also describe at what level each of these external responders should be called on.

In case of an emergency truck breakdown the escorting team will repair the vehicle

Currently, the only form of cyanide that is transported is solid cyanide briquettes.

Sogeco prepared to respond, manage and recover from any realistically foreseeable emergency associated with Sogeco transport operation.

The Plan considers all aspects of road transport only, since sea air and railway are not part of the scope.

the due diligence done by ICMC AUDITORS Owen Warren FOR GOLDBER 2021 to ensure the supply chain

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Sogeco only uses Flatbed trailers to transport containers containing boxes of cyanide briquettes in sea worthy containers. They do not use tanks.

Sogeco trucks carry 1 x20 ft container per truck.

The weight of cyanide briquettes in a 20 foot container is 23 tons gross weight.

Furthermore, the trucks are actually owned by Sogeco .

The weight of the container, empty, is 2.3 tons and the weight of the cyanide, 20 tons, and the weight of the trailer is 6 tons. The weight of the truck is 8.1 tons so the total is  $2.3+20+6+8.3=36.6$  tons.

The Mauritanian regulations allow 10 tons per axle and the truck trailer is minimum 6 axels - total 66 tons

Sogeco has 16 cyanide specific trucks Actros & trailers that comply with Mauritanian regulation

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 HCN gas generation. A permanent 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 50 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 each trailer is equipped with 200 litres water tanks.

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

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capability of two Civil Protection fire fighters, and a permanent medic. Two gendarmes also accompany the convoy. The Civil Protection fire fighters will provide first response to secure the scene and retrieve casualties. The permanent 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 clean-up /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 permanent medic. The ERP includes a list of hospital contact information.

the company does third party inspection using SGS done annually and a visit from MOT(ministry of transport) once a year apart from this all repairs and maintenance are done by the agent as the trucks are still under warranty

in case of brake down on road the convoy mechanics manage the problem until they reach mine site

Brake testing and other inspections are undertaken by the company itself.

The on-board computer on the truck and the Maximo software dictates the maintenance frequencies, form and type of service required.

ERP describes the drills and exercises to be performed for Sogeco and operations and propose a long-term planning schedule when these should occur.

Also external responders are detailed as there are 4 government escorts, gendarmerie EPA , ministry of transport and customs.

As all cyanide deliveries are made in convoy, the accompanying Emergency Response Team will implement the Emergency Response Plan unless more support is needed and then they will report to head office or external responders whose responsibilities and obligations are stated in that plan which also describes what level each of the external responders should called upon.

Drills are done in conjunction with

police

EPA

gendarmerie

Customs

Ministry of transport

members mentioned above are part of the drills and evaluation

where roles and responsibilities are discussed per stakeholder

All the scenarios that will be responded to by the convoy's own dedicated emergency response team and the government officials on the convoy will take over the government communication and external responders.

Any outside additional assistance would be requested or coordinated through the Ministry of Security

Sogeco has developed a list of roles and responsibility attached to the critical tasks

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for each party or person involved in the ER in case of an emergency for both Internal or external responders

The possibility of using outside medical responders has been addressed by the communication with the two clinics Ibn Sina and AL Chiva

There are many medical facilities however only 3 facilities are capable to handle cyanide poisoning 2 medical facilities in Nouakchott 1 at Chai Chami it is an infirmary and is not equipped to deal with extensive injuries or poisoning, as the rest of the country is just desert and there are mostly only small clinics which are inadequate to deal with cyanide cases.

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*Transport Practice 3.2: Designate appropriate response personnel and commit necessary resources for emergency response.*

**X in full compliance with**

The operation is  in substantial compliance **with Transport Practice 3.2**  
 not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

sogeco has a training Matrix -the Matrix controls all the traing and staff to be trained , much emphasis is put on this system to ensure no staff goes oon the convoy without been trained .

All personnel involved in the handling and transport of cyanide are required to complete cyanide awareness training and emergency response training

Sogeco has developed a list of training required for convoy personnel.

Conduite défensive camion-Defensive driving (Bivac)

Conduite véhicule d'escorte

Formation premiers secours-First aid

Formation incendie (utilisation extincteurs)-fire fighting

Formation matières dangereuses (hazmats)-cyanide awareness

Exercices d'intervention d'urgence cyanure-Emergency response cyanide include Roles and responsibilities

Exercices utilisation EPI et masques-Responding to accidents to incidents

Cyanide Emergency Response Scenario Training (Mock Drill) Annually

All personnel involved in the handling and transport of cyanide complete cyanide awareness training and emergency response training.

The TMP indicates the training and competency needs of all jobs and includes emergency response.

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training done by the supplier or the HSEQ manager for safety, health and environment

Reference emergency response plan and standard operating procedure

Details the mechanisms for handling and managing chemicals and dangerous goods

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 Manager is responsible for overseeing the implementation of the ERP, calling the emergency numbers, coordinating the clean-up and decontamination activities. The permanent medic is responsible for first aid response and patient decontamination.

The ERP - identifies the roles of outside responders and medical facilities procedures

The mine site primarily provides logistical support in the event of an emergency (crane, security etc.) in case the incident is close to the mine.

The roles of the gendarmerie, Fire Brigade and Hospitals are in accordance with their duties

In the event of an emergency, gendarmerie are responsible for security of product and the military for crowd control

Sogeco provides emergency response training for appropriate personnel that are involved in the convoy.

**ER TEAM**

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3 pilot car ,land rover,  
1 convoy manager  
1 assistant convoy manager  
4 safety officers  
1 paramedic,  
1 mechanic  
1 auto electrician,  
13 drivers  
1 EPA officer,  
1 Customs officer  
2 Gendarmerie escort  
1 officer from the ministry of transport  
2 fire service personnel.

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 medical kit, including a CyanoKit (hydroxocobalamin), is maintained and retained by the permanent 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



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driving procedures, cyanide, PPE, health and safety and incident response, are reviewed and discussed.

the 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.

Generally Emergency simulations are carried out 2 time per year where specific aspects of the emergency plan are evaluated however only one is required by procedure.

External agencies including gendarmerie, fireman, hospital etc. are also involved with incident scenario training simulations once per year.

The communities have not been allocated a major role during an emergency only crowd control and disseminate information not to use water until approved by authority, however the communities are informed and trained and consulted with all details.

The majority of scenarios will be responded to by the convoy's own dedicated emergency response team.

Any outside additional assistance would be requested or coordinated through the Ministry of defence

The possibility of using outside medical responders has been considered and a communication through letters and CYANCO brochures

the ERP define the type of response and the external involvement based on the significance of the incident

tier 1 is within the company capabilities

tier 2 is national involve Maurtnia government

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Records of this training are kept for future reference.

Discussions with escort team members and a review of training records confirmed that they had attended the cyanide awareness and emergency response training.

Also the TMP states that involvement and training of stakeholders in case of emergency.

Personnel are trained on the CYANCO training module and CYANCO presentation.

Convoy team members are trained in emergency response.

Sogeco has a checklist for emergency equipment that is available during transport.

Checklists include the presence of equipment required and also check the state (good/ bad) of equipment.

According to the TMP escort vehicles must be equipped with the appropriate equipment and thoroughly checked before the start of the convoy.

The procedure also states the equipment needed per convoy.

The equipment is checked per trip and test are done per inspection.

Sogeco carry along

1-OXYVIVA for oxygen

2-cyanco antidot kit

3-HCN detector

4-Full face mask and canister

5-tyvec suits

6-gloves

7 Boots

8-genral first aid box

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Sogeco has procedures to inspect emergency response equipment and assure its availability when required.

The ERP outlines the requirement to check emergency response equipment prior to each convoy departure.

The convoy cannot leave unless all equipment is available and in appropriate condition.

Copies of checklists were sited and personnel interviewed confirmed checks occurred.

Convoy equipment is checked and tested before the convoy moves.

TMP contains a checklist that is completed prior convoy departure to ensure appropriate safety equipment is given.

The HCN detector is also tested and sent to the manufacturer when due for calibration every 12 months when it's not possible, new HCN detector is both when due for calibration.



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*Transport Practice 3.3: Develop procedures for internal and external emergency notification and reporting.*

**X in full compliance with**

The operation is  in substantial compliance **with Transport Practice 3.3**  
 not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

the HSEQ manger is the responsible for all external notifications as documented in the ERP.

The Convoy Manager is responsible for calling the HSEQ Manager in the event of an accident and the HSEQ Manager 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.

ER plan contain an Emergency contact list and Incident notification procedure contains contact information .

also sighted a communication with the gendarmerie and with the medical service facility using the MSDS for discussion.

Further, the Minister of Transport, Not all communities are directly consulted but where relevant, communities are involved through discussions and meetings as refered to in the document from the local governor stating that Sogecoare using a meeting and discussion with the locals to make the population aware of cynide and to take their opinion on the use of the route. also Sogecogot approval from the ministry of environment for the selection and use of their routes

including 2 clinics Chiva and Ibn Sina

the local governor in consultation with the local community approved the transport;

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The convoy manager will communicate with the base who will regulate communications to interested and affected parties including client and other bodies that need to be communicated with.

The communication is contained in the ER plan sighted by the auditor.

The ERP is updated annually when all procedures are due for update Or in case of emergency.

reference procedure emergency response plan

the ERP indicates the contacts that are relevant during an emergency with their appropriate work position.

The ERP and TMP contain procedures and current contact information for notifying the shipper.

The receiver/consignee, outside response providers, and medical facilities during an emergency.

The ERP and Emergency contact list includes a contact list of all the staff companies that must be contacted before each voyage is undertaken.

This includes supplier, shipping line, Stevedores, clearing agent, government agencies, and client and Sogeco representatives.

A flow diagram is included in the ERP that outlines the conveying of information in the event of a cyanide incident during transport.

In the event of an emergency incident, it is the Convoy manager who contacts Sogeco and Sogeco contacts the required stakeholders outlined in the flow diagram.

Also Sogeco management inform ICMI of the following incidents

- a) Human exposure that requires an action by an emergency response team, such as decontamination or treatment. ;
- b) release which enters natural surface waters, ;
- c) A transport incident requiring emergency response for cyanide release;
- d) Events of multiple wildlife fatalities where cyanide is known or believed to be the cause of death
- e) Theft of cyanide.

Sogeco has systems in place to ensure that internal and external emergency notification and reporting procedures are kept current.

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The ERP requires a review of the Contacts List prior to the convoy departure and yearly .

This ensures that the list is kept up to date.

The TMP designates the responsibility of the Health Safety Security and Environment Officer / Convoy Leader to ensure that contact numbers are checked and validated prior to departure.

Updated annually when all procedures are due for update.



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*Transport Practice 3.4: Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.*

**X in full compliance with**

The operation is  in substantial compliance **with Transport Practice 3.4**  
 not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

The ERP and TMP contain procedures for remediation such as recovery or neutralization of solutions or solids, decontamination of soils

or other contaminated media and management and/or disposal of spill clean-up debris.

In the event of a spill, all cleaning will be carried out by Sogeco personnel are first required to contain the spill

or discharge as soon as possible to avoid greater contamination of the site.

Residual cyanide will be recovered and neutralized according to the procedures for neutralization which were established by the manufacturer.

Recovery and treatment of Spills goes with the following steps :

Recovery of Solids;

Neutralization or removal of soils;

Treatment and or disposal of soils;

reclamation of Sodium Cyanide;

Transport of contaminated material;

Neutralization; and

Water Resource Treatment.

Sogeco has emphasis in the ERP not to use chemical in water bodies.

All debris and waste are sent to the mine for disposal since it contains cyanide.

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Both the ERP and TMP have statements prohibiting the use of chemical such as sodium hypochlorite, ferrous sulfate or hydrogen peroxide for the treatment of cyanide discharged to surface moving or underground water.

the ER plan roles and responsibility section state "if any spill occurs Sogeco and the authority will notify affected communities not to use or drink water until is safe to do so".

the potential of cyanide spill between Nouakchott and the mine is extremely rare.

due to the average annual rainfall in the region is less than 140mm.

However; infrequent precipitation events may occur during the rainy season which could result a small surface water ponding.

The ERP addresses the use of neutralization chemicals for decontamination of soils and equipment. The instruction details the preparation and use of sodium hypochlorite solution and its application. The instruction also prohibits the use of chemical products (sodium

hypochlorite and ferrous sulphate) where there is surface water. Cyanide waste resulting from cleanup and decontamination of a spill will be placed in sealed plastic bags and containers and transported to the Tasiast mine site for disposal.

Residual cyanide will be recovered and neutralized according to the procedures for neutralization which were established by the manufacturer.

Recovery and treatment of Spills; Recovery of Solids; Neutralization or removal of soils;

Treatment and or disposal of soils; reclamation of Sodium Cyanide; Transport of contaminated material;

Neutralization; and Water Resource Treatment.

Not to use chemical in water bodies.

All debris and waste are sent to the mine for disposal since it contains cyanide.

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*Transport Practice 3.5: Periodically evaluate response procedures and capabilities and revise them as needed.*

**X in full compliance with**

The operation is  in substantial compliance **with Transport Practice 3.5**  
 not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

Sogeco reviews all procedures include ER plan every year.  
also the management reviews were all recorded.  
Incidents are reviewed especially emergency situation .  
The internal audit evaluates the effectiveness of the system.

SOGECO conducts 2 drills annually that simulate potential transport related emergency events.  
Records of the drills are documented and evaluated and learning are deduced and added to the ER plan if needed .

the procedure for documenting emergency drills and a record was available for a simulation conducted and the simulation involved an incident in which a truck rolled over, damaging the shipping container and spilling cyanide.

The simulation evaluated the general conclusion was that the simulation went well but there is a room for improvement.

Sogeco has provisions for periodically reviewing and evaluating the adequacy of its plans.  
Sogeco has systems in place to ensure that internal and external emergency notification and reporting procedures are kept current

The ERP requires a review of the Contacts List prior to the convoy departure.

This ensures that the list is kept up to date.

The ERP has had yearly revision since its development.

Yearly review of the road risk assessment are identified and review of the procedures are updated yearly.

generally the ER plan is reviewed on the following basis

- 1- After an accident or a drill to add the learning points
- 2- The yearly review or procedural yearly review
- 3- in case there is a change in the law or the regulations

Sogeco conducts at least 2 mock drill per year, cyanide 's mock drill is a as part of the cyanide awareness training.

Drills could be done with client or external responders.

As discussed in Section 3.2.1, emergency simulations are carried out 2 per year where specific aspects of the emergency plan are evaluated.

A training simulation involving external responders is conducted at least once per year.

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the drill is done by Sogeco in order to have the escort team to react effectively and professionally in the case of a cyanide incident in workshop.

Evaluation of the Mock drill was done by Dept HSE manager

No cyanide incidents have been reported to date.

In addition the ERP contains the requirement that it is to be reviewed and implemented.

Sogeco has systems in place to ensure that internal and external emergency notification and reporting procedures are kept current.

The ERP requires a review of the contacts list prior to the convoy departure.

This ensures that the list is kept up to date.

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