

P.O Box 67562 Nairobi Kenya

# ICMI RE CERTIFICATION – SUMMARY REPORT

#### 1.0 INTRODUCTION

#### 1.1 Operational information.

Name of Transport facility : Bolloré Transport & Logistics, Senegal

Name of facility owner : Bolloré Transport & Logistics, Senegal

Name of facility operator. : Bolloré Transport & Logistics, Senegal

Name of responsible manager : Khadidiatou Sakho DIOP

Chef du service QHSE

Address : Bolloré Transport & Logistics

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#### 1.2 **Description of Operation**

#### 1.2.1 Company Profile.

Present throughout the world, Bolloré Logistics the logistics branch of the Bolloré Group, is the leading carrier in North/South exchanges, and among the top 5 European freight forwarding groups.

Present in Senegal since 1926, Bolloré Transport Logistics Senegal relies on a large network throughout the continent of Africa, the continent's first integrated network.

The Bolloré Transport Logistics Senegal network in Africa contributes to the development of trade with the rest of the World, operating in conjunction with transit divisions and shipping lines.

Bolloré Transport Logistics Senegal (BTLS) is one of the links in this integrated network, with the ability to provide the service of adequate transportation.

In addition to Bollore Senegal's national headquarters located in Dakar, the company is present in towns such as Diamniadio, Kaolack, and Potou all in Senegal. The organization leverages its competent collaborators and modern equipment to offer tailor-made and end-to-end logistics supply chain solutions to both local and international clients.

Bolloré Transport & Logistics Senegal has a broad range of capabilities and experienced staff to handle both general and project cargo with specific expertise in a number of sectors such as mining, humanitarian aid, FMCG, telecommunications, oil & gas, and healthcare.

The company is engaged in freight forwarding and cyanide transportation to mining companies in Senegal and Mali. Samsung C & T has contracted BTLS to conduct clearing and transportation of sodium cyanide from the port of Dakar, Senegal to Mako Mining in Senegal and Resolute Syama mine, B2 Gold Fekola mine and AnglogoldAshanti Sadiola mines all in Mali.

#### 1.2.2 Audit scope.

2

The audit covers the road transportation of cyanide from the port of Dakar, Senegal to mining sites in that country as well as in Mali. The International Cyanide transportation protocols was used as guidelines in conducting the recertification audit.

#### 1.3 **Sodium Cyanide Transportation.**

Bollore Transport & Logistics, Senegal (BTLS) has a contract agreement with Samsung C & T to transport sodium cyanide from the port of Dakar, Senegal to mining companies in Senegal and Mali. The supplier (Samsung C&T), ships containers of sodium cyanide to Dakar port, Senegal.

Solid briquettes cyanide are packed in bulker bags with polyethylene lining and the encased in plywood boxes weighing 1mt of product. The IBC's are loaded into 20ft shipping containers. The containers are offloaded from vessels upon arrival at the DP World terminal in the port of Senegal. DP World subscribes to the International Dangerous Goods Code (IMDG Code). BTLS then commences the process of custom clearance and transportation the containers to the following designated mine site destinations namely Mako, B2 Fekola, Resolute Syama and Anglogold Ashanti Sadiola mines distance of 679Km, 892Km, 1815Km and 847Km respectively.



P.O Box 67562 Nairobi Kenya

The routes to the mine site destinations through towns are as follows.

Port Autonome de Dakar---- Fatick---- Kaolack-----Kaffrine------ Koungheul----- Koumpenntoum-----Tambacounda------Mako mine site:

Port Autonome de Dakar --- Fatick - Tambacounda---Kenieba--Fekola Gold mine

Port Autonome de Dakar---- Fatick---- Tambacounda----- Kidira---- Kayes------ Sadiola mine

Port Autonome de Dakar -----M'bour---Tambacounda----Bamako---- Ouelessebougou----Zegoua---Syama mine

BTLS responsibilities starts when the containers are loaded at DP World terminal and the vehicles leaves the port. Customs clearance documentation process is commenced by BTLS prior to arrival of vessels at the port. Vehicles with the right configurations and capacities are sent to the port to pick the containers. The trucks move in convoy with escort by contracted companies which are AICES and Arcane Security.



P.O Box 67562 Nairobi Kenya

# **SUMMARY AUDIT REPORT AUDITORS' FINDINGS**

Bollore Transport & Logistics is:		
	in full compliance with	
[	in substantial compliance with	
]	not in compliance with	
THE INTERNATIONAL CYANIDE MANAGEMENT CODE		
Audit Team Leader:	stor Solutions Limited - Kenya Kuldip Singh Degon, Lead Auditor Kuldip@isIglobal.net	
NAME OF OTHER AUDITORS		
Benjamin Amoo- Mensah – Technical Auditor: Transportation.		
DATES OF AUDIT		
The Re-certification audit of the Bollore Transport & Logistics, Senegal was conducted 07 <sup>th</sup> & 8 <sup>th</sup> November 2022		
I attest that I meet the criteria for knowledge, experience, and conflict of interest for Cyanide Code Verification 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 Verification Auditors.  I attest that this Summary Audit Report accurately describes the findings of the certification audit. I further attest that the verification 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.		
	Specialist Signature	<u>08<sup>th</sup> November2022</u> Date
BolloreTransport & Logistics. Audited Company	Lead Auditor Signature	<u>08<sup>th</sup> November 2022</u> Date

Signature of Lead Auditor



P.O Box 67562 Nairobi Kenya

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

**Transport Practice 1.1**: Select cyanide transport routes to minimize the potential for accidents and releases.

The operation is X in full compliance with Transport Practice 1.1

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

Bollore Transport and Logistics Senegal has a process of selecting transportation route for cyanide. BTLS has a procedure titled "Conducting and Using Route Survey" (Reallsation et Utilisation d'un Road Survey) procedure No. BLX-AFR-HSE-PRO-0017 revision 8 dated 28th October 20022 which outlines the process of selecting transport routes to minimize any potential accident and releases.

The following was taken into account: - Distance, Number of towns and villages, Schools, Proximity to rivers and water. Road sealed or unsealed, Bridges and roads suitable for vehicles and vehicle weights, Suitable and secure overweight areas, Pitch and grade of road and road conditions for wet and fog conditions.

The procedure No. BLX-AFR-HES-PRO-0017 revision 8 also details the methodology for carrying route assessment of a particular selected transport route. The procedure details the required information to look out for, practical tools, required equipment needed in order to carry out the following;

Quality route survey

5

- Identify operation and HSE risk and issues on the road
- Implement corrective and control measures
- Inform everyone involved of the hazard and control measures
- Ensure that the procedure is updated.

Clause 5.1.3 of the same procedure No. BLX-AFR-HSE-PRO-0017 revision 8 refers to population density along the route that will be followed namely villages and towns.

The procedure addresses the road condition of selected transport route. The pages 4 of 6 of the procedure addresses pitchand grade of the road and its condition, the presence of rivers, water reservoirs along the routes and fog.

BTLS has a procedure to evaluate the risks the selected transport routes. Clause 5.2.1 (Definition of control and drafting of the Transport Management Plan) of procedure "Conducting and Using a Road Survey" document number BLX-AFR-HSE-PRO-0017 Revision 8 refers to evaluation of the risks identified on the selected routes. It details the various hazards and addresses the measures to manage the identified risks. The document "Rapport De Road - Survey document N°: BLX-COR-HSE-F-0010 revision 0001 mentions the type of risks on the cyanide transportation routes from Dakar port to Mako mine, Dakar port to Resolute Syama mine, Dakar port - Fekola mine and Dakar port to Anglogold Ashanti Sadiola mines.

It was evident from records that, route surveys and Route Risk Assessments(RRA's) have been conducted for Dakar to Fekola mine(a distance of 879Km) Dakar to Syama mine(distance of 1887Km), Dakar to MaKo mine (distance of 679Km) and Dakar to Anglogold Sadiola (a distance of 929Km)

A designated team conducts the road surveys and the RRA's. A team which is constituted undertakes the route surveys and RRA's. The team consists of the Logistics Manager, QHSE Manager and the Convoy Leader. A team leader is appointed which is usually the QHSE Manager to supervise the RRA. Its role is to ensure that the Road



P.O Box 67562 Nairobi Kenya

survey is conducted, all risk on the road captured, risks evaluated and control measure put in place to minimize or eliminate risks in accordance with the company's Risk Assessment procedure, document # BLX-AFR-HSE-PRO-0005 Rev. 07.

The transporter has a process for periodically re-evaluating the transport routes and also obtaining feedback on the road conditions. The routes are reviewed twice annually and as and when necessary. Route survey procedure number BLX-AFR-HSS-PRO-0017 revision 8 stipulates that the route to all the mines namely Fekola Mine, Resolute are Syama mine, AnglogoldAshanti Sadiola mine and Mako mine must be re-evaluated twice annually or as when necessary. The routes to the aforementioned mines were re-evaluated in 2020, 2021 and 2022. Records were verified and noted.

As per the route survey procedure, the route from the port of Dakar, Senegal to the various mine site destinations are reviewed and updated for reasons listed below.

- Before the resumption of operations (delivery of cyanide)
- Following a break of operation for more than 3 months or following an unusual events (Climatic conditions and political situation),
- Following significant changes on the route(road, environment)
- Following a significant change in operations.
- The route survey is reviewed at least twice a year considering at least one review during the dry season and one review during the rainy season.

The Transport Management Plan No. BLX-HSE-MAN-I-0001 revision 8 also makes provision for re-evaluating the cyanide transportation route. Bollore Senegal's procedure requires that feedback on the road condition are given by the convoy leader any time the convoy returns from a trip. Convoy Leader's comments on the road condition are documented on a report form titled "Convoy Leader's feedback report" document number BLX-AFR=HSE-F-0576 rev 01. ("FICHE DE MISE A JOUR LORS DES MISSIONS"). Copies of the feedback reports dated 31/5/22(trip to Syama mine), 12/04/22(trip to Mako mine) and 13/4/22(trip to Fekola mine) were noted. Samples of feedback reports for 2020, 2021 and 2022 were also verified and noted.

It is evident that the identified hazards(risks) on the routes have been assessed. Pictures have been taken and used in doing the risk assessment and control measures put in place. The Convoy leader controls the speed of the convoy throughout a journey in minimizing any likely risks on the road. In Pages 9 to 11 of 15 document "Rapport De Road- Survey" document number BLX-COR-HSE-F-0010 Revision 01 dated 12/9/22 route risk assessment has taken into account the road surface and its conditions, sharp curves, narrow bridges and steep hills. RRA have been conducted for the roads to Mako, Syama, Sadiola and Fekola mines. RRA document number BLX-AFR-HSE-F-0505 Revision 05 was sighted and noted.

Prior to the arrival of consignment of cyanide at the port of Dakar, Senegal, BTLS applies for a permit from the Ministre De L'Environment Et Du Developpement Durable (Ministry of Environment and Sustainable Development). This a government agency which issues permission letters for the transportation of cyanide. The agency is notified by BTLS anytime shipment of cyanide arrives. The ministry is responsible for issuing permits for every convoy. Copies of these permits(letters) granted by the Ministre De L'Environment Et Du Developpement dated 23rd March 2022, 28th April 2022 and 18th September 2022 were verified.

The Ministry of Environment is responsible for community consultation. Stakeholders namely, Civil Protection Authority, Gendarmes, Brigade Nationale de Supeurs - Pompiers(National Fire Brigade) along the transport route have been duly notified. . In Mali, consultation with government agency such as Ministre de Environment, Bamako, Mali and Malian military and Civil Protection Agency have been done through Bollore's subsidiary office in Mali. Records of documents showing signatures acknowledging of their knowledge and roles and responsibilities when an incident occurs were sighted.



P.O Box 67562 Nairobi Kenya

Bollore Transport and Logistics, Senegal employs the use of convoys and escorts in delivering cyanide to all the mine site destinations. Clause 15.5 TMP(Transport par route) document number BLX-HSE-MAN-0001 Revision 05 mentions that deliveries of cyanide to mine site are done with escorts.

A Convoy Leader and his team goes with each consignment. An external escort company have been appointed to conduct escort duties on behalf of Bollore Senegal. A convoy consists of a maximum of four(4) trucks. Each truck in a convoy carries 2x20ft containers.

Convoy Leader leads the convoy and sets the pace. The escort team consists of one (1) Convoy Leader, One(1) nurse and two(2) escort team members. When entering Mali, the convoy is joined by members of the Malian Civil Protection Services and the military till the convoy gets to the mines in Mali. Clause 13.1 Organization"" on pages 10 & 11 of Transport Management Plan No. BLX-HSE-MAN-0001 revision 7 dated 18/04/22 refers to the composition of the convoy. The escort is outsourced to two escort companies. Bollore Senegal has contracted two escort companies to do the escorting of all cyanide convoys. These companies are Arcane Security and AICES SA which are dangerous goods escorting companies. Convoy Leaders and vehicles are provided by Arcane Security and AICES SA. Each company provides one(1) escort vehicle and four (4) escort team consisting of one (1) Convoy Leader, One(1) nurse and two(2) escort team members. The companies are used alternatively for the escorts. The agreements with the escort companies are renewed annually.

The escort companies use the ER Plan of Bollore Senegal and they are expected to abide by the details of the plan as per the contract agreements. The escort companies provide a qualified trainer who organizes refresher training for the staff under the supervision of Bollore Senegal's training department. AICES and Arcane have all been granted permit by the Senegal's Ministry of Environment to escort dangerous goods which includes sodium cyanide. Letters from the ministry mandating them to provide escort services for hazardous chemicals are dated 20th March 2009 and 7th June 2017 for AICES and Arcane Security respectively. Permits were noted.

The company have entered into a contract agreement with two (2) sub-contractors who Escort the cyanide to the mines that the company serves. The companies provides escorting for Bollore Senegal in accordance with Bollore Senegal's Emergency response procedures. The contract agreement signed and dated on 19th August 2019 stipulates that the escorts companies are expected to provide escorting duties under Bollore Senegal's standards and procedure.



P.O Box 67562 Nairobi Kenya

**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.

The operation is **X in full compliance with** Transport Practice 1.2

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

Bollore Transport and Logistics, Senegal uses trained and qualified and licensed employees in operating its vehicles and all other activities related to transportation of cyanide. The company has a recruitment procedure (no. BLX-COR-HRE-PRO-0003 Revision 0001) to guide them in employing drivers and all other staff.

The process entails the following;

- Issuing of job offer via advertisement
- Selection of candidates
- Interviewing of selected candidates
- Selected drivers are offered appointment letters to commence work

Drivers go through a selection process which includes validity checks on driver's license, driving experience and qualifications. Drivers are to meet suitable criteria which includes valid drivers' license, driving record, previous employment and checks on their criminal records. Drivers require category CE licence to drive trucks. Validity of driver's licenses is 10 years.

Drivers undergo theoretical and practical Cyanide awareness training, Defensive driving, Basic First Aid, Use of PPE, Fire prevention, HSE induction training and Emergency response training. The transporter has a Training matrix number BLX-AFR-HRE -F-0001 revision 001 and this was noted. The Training matrix details the above training programs, dates that a particular training was organized, and the names of drivers and other staff when they were trained and dates of their next training.

Records of Training Attendance registers dated 16/06/20, 02/02/21 and 05/04/2022 were verified and duly noted. Tools box meetings are held prior to departure of the trucks. Toolbox meeting form (document. no. BLX-AFR-HSE-F-0526 Revision 06) and Pre-Job briefing( form no. BLX-AFR-HSE-F-0571 Revision 1) are completed prior to each departure of convoy. Records of Tools box meetings held on 6th January, 2021, 12th April 2022 and 14th August 2022 were noted. Drivers driving in convoy are under strict supervision of convoy leader who manages the convoy.

The drivers local licences and their international driver's license are inspected during vehicle pre-departure checks. New drivers are trained before they drive trucks. The same licenses are valid to be used in Mali and allows the drivers to drive in the whole of the West African region Drivers mates(assistants) being part of the convoys and are trained on cyanide awareness / ER response and the responsibilities spelt out to them. Drivers mates will assist to move bystanders upwind away from the incident site. Training records of drivers, drivers assistants and escort personnel were sighted by auditors. All records of Training records and contents of training were verified.

Personnel operating all vehicles and other equipment are trained to perform their work to minimize potential releases and exposures. Refresher training are conducted once per year during September / October of each year. Training matrix number BLX-AFR-HRE -F-0001 revision 01 has been updated in 2020, 2021 and 2022.

Drivers undergo the following mandatory training programs:

Defensive driving done Annually



P.O Box 67562 Nairobi Kenya

- Hazardous Chemical(Cyanide Awareness) -training Annually
- Convoy Management training Annually
- Fire Fighting Training Annually
- Emergency Response training Annually

Training records of some selected drivers and escort team were noted. Selected drivers interviewed were found to be knowledgeable in cyanide awareness, defensive driving and other training that they have attended. Training Certificates dated 19/8/2022 for team members of AICES and Arcane Security sighted.

Bollore Senegal conducts training for its own drivers based on their training matrix. The companies which are subcontracted to do the escorting AICES and Arcane Security also have their own respective training programs for the escort teams under strict supervision by BTLS training department. Records of proof of training from both companies are kept on record by BTLS.



P.O Box 67562 Nairobi Kenya

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

The operation is in full compliance with Transport Practice 1.3

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

Bollore Senegal uses vehicles designed and maintained to transport sodium cyanide. The TMP (doc no. BLX-HSE-MAN-0001 Revision 06) specifies the design of trucks used for the transportation of cyanide. The company has records documenting the load-bearing capacities of its transport equipment and their maximum operating weights. The company uses truck specifications 6 x 4 truck tractors units of HP 350 equipped with GPS tracking system. The brands of vehicles used are Renault and Scania vehicles. The weights of truck tractor unit is approximately 6.8 tons. The trailers utilized are 3 axles and 4 axles trailers. Three (3) axle trailer weighs 6 ton whilst the four (4) axle trailer weighs 8 tons. A 1x20ft container full load of cyanide weighs 23.2 tons and two containers are loaded on each truck with total weight of 46.4tons. The total weight of the truck tractor unit plus the trailer weight and two containers is approximately 61.2 ton for 4 axle trailer. The allowable weight limit in Senegal 72 tons for 6x4 vehicles with 4 axles whilst for 6x4 vehicles with 3 axles the maximum allowable weight limit is 64.4 tons.

The cyanide loads carried are within the truck & trailer design per-axle load limits as per Senegal and Mali Weight Restrictions

The company has an approved vehicle maintenance procedure (no. BLX-AFR-SEN-MAI-PRO-001). Maintenance on vehicles are done as per the manufacturers specification and in accordance with the company's maintenance procedure. Both Preventive Maintenance and Corrective Maintenance are carried out on all vehicles at the company's workshop. Problems on vehicles picked up during inspections are attended to immediately. A process of carrying out maintenance is detailed in a flow chart.

BTLS has 25 vehicles available to transport cyanide. These vehicles are allocated for deliveries to the various mine site destinations. Four combinations per convoy allowed. The vehicles are under the management of BTLS. Maintenance records of the vehicles were noted.

The trucks with their loads are weighed by Afrique Pesage (government weighbridges located in the outskirt of Dakar. Trucks are stopped and weighed at three (3) different weighing bridge stations along the transportation route to the mine sites to ensure that they are within weight limits. Weighbridge tickets F042053/2022, F04254/2022 and F042056/2022 for vehicle numbers DK-1808-BC, DK-9378-AH and AA-614-AZ respectively were sighted. The weighing bridge tickets show the axle loads of the trucks. Weighing bridge tickets show that the trucks are within permissible axle regulations. The weights of the containers are also specified in the Bill of Ladings (BL's) document that are received from the supplier. Samples of BL's numbers i.e., HLCUSEL220752698, CATU255536-0, TCLU301370-9 and HLBU103734-8 have the net and gross weight of the product on them. This also serves as a guide to ensure that the correct trucks with the correct load capacities are used for doing deliveries to avoid overloading. There is no evidence of overloading on the selected weighing tickets. The total weight per axle is within the permissible axle load of 11.5tons/axles or 72tons per 6x4 truck specification as per Senegal and Mali regulations.

Bollore Senegal does not subcontract the transportation. The provision of vehicles for the transportation of shipment to the mine site is sole responsibility of BTLS.

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

The operation is X in full compliance with Transport Practice 1.4

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

Sodium cyanide from the supplier (Samsung) is packaged in PVC Bulka bags with a polyethylene lining and encased in plywood boxes (IBC's). A total of twenty (20) boxes of sodium cyanide are packed in a 1x20ft container. The containers are inspected by the Convoy leader prior to the departure of the convoy. Containers are loaded by DP World terminal which is a company contracted by the Senegal Port Authority. DP World handles and manages cyanide shipments arriving at the port including all other hazardous cargo. Checks on the shipment are also done by the convoy leader along the route till the convoy reaches the mine site. The details of the checks are recorded on the form Checklist d'Inspection Container doc. No. BLX-SEN-HSE-F-0002. The form shows the condition of the container prior to departure to each mine sites. Samples of checklist dated on 13/04/22 and 12/04/22 were verified. DP World Dakar Terminal also issues EIR tickets covering each container. Port issues an EIR Ticket to confirm the state of the container prior to loading. The EIR ticket details the container numbers, nature of cargo and damages (if any) on the container. The condition of the containers at the time of loading is stated on the ticket. EIR tickets issued by DP World, predeparture Checklist and Delivery notes noted.

Prior to loading at the port, the driver of the vehicle and the convoy leader checks to confirm that the cyanide containers are intact, undamaged and the seal numbers correspond with that on the Senegal customs documentation and completes a pre-departure checklist. During designated rest stops and every morning before the convoy continues its journey, the convoy leader inspects the truck tractor unit, trailers and freight containers. The port authority in Senegal and DP World Dakar terminal, also carries out inspection of the containers in the presence of the driver and personnel from Bollore's clearing department. Clause 8 of Transport Management Plan specifies that the driver and the convoy leader should ensure that the placards namely toxic 6 labels, marine pollutant labels and UN number are on the containers. The checklist form titled "Transport of Containerized cargo" also specifies the checks to be done on the containers and this includes seals, correct labeling and general container condition. The delivery notes are signed off and stamped by mine site personnel on arrival at the mine to show that the containers have been received in good condition. Delivery notes SNDKRC000005578-003, SNDKRC0000077605--004 and SNDKRC000077608-010 which are signed and stamped by Syama mine were verified.

Clause 15.4 of the Transport Management Plan, No. BLX-HSE-MAN-0005 rev 6 refers to the placards that should be displayed on the container. UN number 1689, diamond shaped toxic 6 labels and marine pollutant placard are clearly affixed on the containers. These were verified on the trucks and containers of cyanide.

The procedure requires that placards should be on all 4 sides of the containers. Placards displayed on containers inspected by the convoy leader and the driver before containers are loaded onto the trailers and allowed to leave the port premises.

Prior to loading at the port the driver of the vehicle and convoy leader check to confirm that the cyanide containers are intact, not damaged and the seal numbers correspond with that on the customs documentation. During rest stops and every morning before departure, the convoy leader checks truck tractor, trailers and freight



P.O Box 67562 Nairobi Kenya

containers. The port authority in Senegal, DP World Dakar terminal, also carries out inspection of the containers in the presence of the driver and a personnel from Bollore's clearing department.

BTLS has implemented a safety program for cyanide transportation. This includes inspection of vehicles, preventive maintenance program, limitation of driving hours and procedures to prevent load from shifting. The vehicles are inspected prior to entering the port to load. The Transport Management Plan (document #BLX-HSE-MAN-0001Rev 005 states that inspections are carried out on the trucks prior to the vehicles departing from the port of Dakar, Senegal to the respective mine sites. Convoy Leader does pre-trip checks on truck tractor unit and trailer of the trucks before leaving the port and findings are noted on the Vehicle inspection Checklist ("Checklist d'inspection Camion" No. BLX-AFR-HSE-F-0521 rev 08).

Before departure from the stopping locations that the convoy spent the night ,the convoy leader conducts inspections on the vehicles to ensure that they have not developed any defects in the course of the journey. A checklist "Controle Technique rap Etape pendant ant de Trajet" (No. BLX-AFR-HSE-F-0538 rev 01) is completed during the inspection. Any defects which are identified as result of the inspections are attended to immediately before vehicle are allowed to depart or continue their journey. Inspection records for vehicles were verified and noted.

The operation has a maintenance program that they follow to maintain their fleet of trucks. BTLS has a maintenance procedure number BLX-AFR-SEN-MAI-PRO-001 which outlines both preventive and corrective maintenance processes. Clause 6.2(Commentairs) of the procedure stipulates that maintenance works on vehicles are categorized into A, B and C.

- Gamme A: Vehicles are serviced at 250hrs or 5000Km.
- Gamme B: Serviced at 500hrs or 10,000Km
- Gammme C: Serviced at 750hrs or 15,000Km

**BOLLORE TRANSPORT & LOGISTICS, SENEGAL** 

Name of Operation

Maintenance is done with software called "Maximo". Each time the trucks are fueled the number of hours of each truck has done are input into the Maximo system. A sticker is put on the screen of the trucks with the date of servicing and the next servicing date. The maintenance workshop generates a report called "Planning Des Operations De Maintenance Preventive" which indicates which vehicles are due for servicing and which are not. This document is sent by the Workshop manager to all departments including the Logistics Department. The software prompts the workshop manager when any truck is due for routine maintenance.

The Maximo system generates a work order for preventative maintenance. After servicing of vehicle, a checklist is completed. The checklist forms titled Plan de maintenance Preventive Camion Tracteur (document No. BLX-SEN-MAI-F-010 for Gamme A, document no. BLX-SEN-NAI-F-009.for Gamme B and BLX-SEN-MAI-F-008 for Gamme C are appropriately completed. For corrective maintenance, whenever a fault is identified during pre-departure inspections, a work order is raised by the Logistics Supervisor on the Maximo system to the workshop for the fault to be rectified. A work order form is printed from the computerized system and works on the truck is executed and the exact job done is written on the form. The form is signed off by the mechanic who performed the job and countersigned by the workshop manager. The Maximo system was verified during the audit to find out how it works. Work orders "Intervention No. OT910382 dated 31/10/22 and OT908620 dated 26/07/22 were sighted and noted. Bollore Senegal has a tyre maintenance program. Tyres are checked every morning by the company's vulcanizers and also by the Tyre agents (CFAO Ltd) in-country. Every morning, a technician from CFAO comes and also check all vehicle tyres and sends a report to the Workshop Manager. At a minimum tread depth of 3mm a tyre is changed. No retreated tyres are used on the vehicles. The company has an agreement with CFAO Ltd (a supplier of tyres) to provide tyre maintenance services. The contract agreement is signed on 12th January 2019.

BTLS has implemented a program to check driver's fatigue. The operation has a procedure titled "General Driving Rules" (ReglesGenerales Des Transport Afrique) document number BLX-AFR-HSE-POL-0001 revision 3 dated 13/12/21 which states that drivers are to drive a maximum of 10hrs/day. Furthermore, it states that a driver is to



P.O Box 67562 Nairobi Kenya

drive maximum of 2 hours on a laterite road and 3 hours on a asphalt road and take 30 minutes rest intervals between driving hours. The TMP also specifies maximum driving hours per day is 10 hours. Driving start at 06H00 and stops at the latest 17:00. No driving is permitted at night. Rule 7 of the driving rules mentions that all the ICMC regulations regarding transportation of cyanide should strictly be adhered to. The operations has developed a journey plan form (Feuille De Route doc. number BLX-AFR-HSE-F-0574 Revision 01) which is completed by the Convoy leader anytime the convoy stops for the drivers to take rest. The time of departure and the time they stopped are noted on the journey plan. The journey plan is signed off by the Convoy leader and the Logistics Supervisor cross checks and counter sign the same form upon the return of the convoy back to their base in Dakar. Proof of driving hours logged on Doc No. BLX-AFR-HSE-F-0574 rev 1 "Feuille de Route" was noted. Copies of journey plans to Fekola mine, dated 03/10/22, Syama mine dated 05/10/22 and Sadiola mine dated 11/06/22 also were noted.

To prevent loads from shifting, all containers are secured by twist locks on trailers. Each container loaded on trucks are firmly fitted with four (4) twist locks on the trailers. During preventive maintenance, twist locks are inspected and serviced. Checking of twist locks are included in the pre-trip checklist ("Checklist d' inspection Camion" No. BLX-AFR-HSE-E-0521 rev. 8). The Vehicle pre-departure checks makes provisions for the inspection of the twist locks. Clause 15 of the TMP (BLX-HSE-MAN-001 Rev 06) states that it is the responsibility of the Convoy leader to check the twist locks prior to the departure of the vehicles. The twist locks are checked each morning before the trucks continue their journey. Checks are also done during stops for brief rests.

Clause 14 of the TMP stipulates that in case of severe weather conditions, riots or civil unrest, military uprising and collapse of a bridge the convoy will stop at an appropriate place until the situation is brought under control. The Convoy leader will only resume the convoy movement when the weather or civil unrest are over. The TMP states that the Convoy leader communicates with the mine and his head office on the decision to continue the journey or not after suspension of the journey.

Bollore Senegal has a Drug & alcohol policy No. BLX-COR-HSE-POL-0002 revision 3 dated 13th December 2021. Alcohol and the use of other drugs are prohibited during working hours. Alcohol tests are carried out randomly on the drivers and escort team by the Convoy leader prior to departure of the convoy. Alcohol test checklist (document No. BLX-SEN-HSE-F-0001) is completed with the names of drivers and the results obtained. Breathalyzer (Drivaid Brand) is used to carry out the test. Samples of Alcohol test reports dated 02/05/21, 03/06/22 and 04/09/22 were noted.

The operation has a procedure "Structure et Maitrise des Documents" No. BLX- AFR-QUA-PRO-0002 revision 8 noted. As per clause 5.8 of the document, records namely maintenance records and checklists are to be kept for a minimum of 3 years and all other documents be kept for a minimum period of 5 years. The QHSE Department is responsible for the implementation of this procedure. Records have appropriately been retained.

Bollore Senegal does not contract any of the above aspect of their business.



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

The operation is **X** in full compliance with Transport Practice 1.5

Summarize the basis for this Finding/Deficiencies Identified:

Not applicable to this operation as no shipment of cyanide is done by sea.



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

The operation is X in full compliance with Transport Practice 1.6

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

Bollore Transport and Logistics, Senegal has implemented a process to enable them track the cyanide shipments to prevent losses during transport.

Communication is via the use of mobile phones, Walkie talkies, Satellite phone and emails. The communication equipment are used by the convoy leader to communicate with the head office, mining operation and outside emergency responders. These communication equipment have been listed on the pre-departure checklist and to be checked during pre-departure inspection. Two way radios are used to communicate within themselves whilst in convoy. The convoy leader is in charge of the communication equipment and ensures that they are fully charged and in good condition at all times. The Convoy Leader is in possession of a list of all the telephone numbers of the emergency responders along the route in the ER plan. Drivers have their own private cellular phones. In addition, communication with the mine and the supplier is via emails as well as WhatsApp.

The Logistics Department and the QHSE department are responsible for communicating with the supplier and the mine. Pre-alerts are sent to the mine copies to the supplier 24hrs via emails before the convoy departs Dakar port. Emails are send to the mines twice/day until the convoy reaches the mine sites. Copies of emails were sighted by auditors.

Communication equipment are inspected by the Convoy leader and drivers prior to departure from the port. The findings of the inspections are recorded on pre-trip checklists ("Inventaire Material de Communication" doc No. BLX- AFR-HSE-F-0581 revision 01. The checklist specifies whether a particular communication device is fully charged and is in good condition. The checklist which is completed by the Convoy leader is signed off by him. The communication equipment which are checked are the cellular mobile phones, chargers, batteries of the radios, Satellite phone and the Walkie Talkies. GPS tracking system are installed in all the vehicles. The GPS is monitored by Georis group monitors the vehicle 24/7 and generate report to the Logistics and QHSE Managers of Bollore Senegal. Georis group is the company which installed the GPS system on the trucks and also provides monitoring and tracking services for Bollore Senegal. In the head office in Dakar, the GPS is monitored by the Technical Director. Copies of GPS reports for 2022 were verified.

During RRA's conducted on route, no blackout areas were identified on any of the routes in Senegal except in Mali area. Blackout areas are in some portions of the roads within Mali. The cell phones used by the convoy crew are roaming phones and can pick up signal of any network service provider within both Senegal and some parts of Mali. In blackout areas in Mali, a Satellite phone is used to communicate in those areas. Different cell phone network service providers are used as back up.

The TMP mentions in Clause 10(GPS Tracking System) that GPS is monitored 24/7. The GPS covers Senegal and any part in West Africa. The GPS system has been integrated between the service provider and Bollore office in Dakar, Senegal. Emails are sent each day to the mines notifying them of the progress of the convoy till they reach their destination. Any deviation from the route are quickly communicated to the Technical Manager by Georis Group though the Technical manager also monitors the GPS. The convoy leader contacts the home base twice a day.

The transporter has implemented inventory controls and chain of custody documentation to prevent loss of cyanide shipment. Shipping documents such as Bill of Ladings, packing list, Customs documents and MSDS are sent

June



P.O Box 67562 Nairobi Kenya

by Samsung(supplier) to Bollore Senegal prior to the arrival of a vessel. Proof of delivery notes and DP World's Terminal Interchange which show the conditions of each containers at time of loading and the required permit from the department of Environmental Affairs accompanies the consignment to the mines. The Senegal Ministry of Environment sends copies of permits(letters) to its branch offices along the transportation route to notify them of the specific number of cyanide containers being transported. This is a means to track the shipment on the road. The documents are checked by Senegalese Customs at customs check points along the road. At both the Senegal and Mali sides of the border the Customs officials finally check all shipping documents and Delivery notes covering the shipment. At the mine site, the mines personnel receives and sign all the requisite documents as proof of delivery. At night stops, the escorts assistants patrol the area around the parked vehicles to prevent anyone tempering with the containers. At various rest stop places, the Convoy leader further checks whether each container is intact. As per clause 8 of TMP, two escort assistance does patrolling around the trucks during the night till morning when the convoy stops for the night. All documents were verified and noted.

Shipping documents such as Bill of Lading, Packing List, and Transit Authorisation document showing the quantity of cyanide being transported are always in the custody of the convoy leader. A document called "Authorisation Provisoire D'enlevement" is issued by Senegalese Customs detailing the quantity of containers moving out of the port. Senegal DP World a service provider to the port of Senegal, which is responsible for the containers in the port, submits a notification to BTLS about their shipment upon arrival of a vessel. Shipping documents show clearly the total weight and quantity of cyanide for every shipment. Each shipment is accompanied by MSDS from the manufacturer. The MSDS kept in the cabin of the trucks. Shipping records were verified and noted by auditors.

Both Bollore Senegal and the provider of the GPS system(Georis) monitors the GPS tracking system. The monitoring is done as per BTLS procedures. The monitoring of the GPS by Georis(dealer in GPS) is part of the services they offer.

June



P.O Box 67562 Nairobi Kenya

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.

The operation is X in full compliance with Transport Practice 2.1

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

Bollore Transport & Logistics is in full compliance with Transport Practice 2.1, based on the finding that the transport operation does not store any cyanide. Bollore Transport & Logistics does not have a cyanide transshipment depot or interim storage of Sodium Cyanide.

Within the scope of this audit, there are no transhipment depots or interim storage sites as defined in the audit protocol.

The operation is considered to be in full compliance due to this Transport Practice not being applicable.



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**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.

The operation is X in full compliance with Transport Practice 3.1

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

The transporter has developed an Emergency Response Plan (ERP) that guides responses to potential cyanide emergencies.

Bollore Transport and Logistics, Senegal has an Emergency Response Plan (Plan de Response D''Urgence) procedure number BLX-HSE-MAN-0002 revision 7 dated 27/7/22.

#### The ERP outlines:

- Various possible incidents and its handling.
- Risk Analysis of an incident
- Spill Contingency plans and response action plans
- Communications with outside emergency responders
- Scenarios of possible cyanide incidents
- Roles and responsibilities of all stakeholder involved in emergency response

In the case of remote site incidents, arrangements have been made in the ERP to establish contact with local emergency responders along the route to assist in responding to the incident.

The ERP was found to be appropriate for the selected transportation routes. The ERP mentions the method of transport is by road. Transport of cyanide is done only by road. Deliveries of cyanide are made by road using truck tractors and flatbed trailers. The method of transport has been considered in clause 4 of the ER Plan which covers the transportation of cyanide by road. Depending on the time the convoy exits the port, the containers once loaded onto the trailers, are escorted directly to the mine or parked for few hours at the companies' yard(depot) and dispatched from there to the mine site. Freight containers aren't off-loaded at the depot and the truck tractor not decoupled from the trailer.

The plan is appropriate for selected transport route. Route Risk Assessment (RRA) has been conducted on the road from the port of Dakar, Senegal and the mine site destinations. Sodium cyanide is transported by road to four mining companies in Senegal and Mali. The mining companies are Mako mine in Senegal and Sadiola, Fekola and Syama mines in Mali. All aspects of transport infrastructure which includes bridges, hospitals, markets, asphalts road, curves and slopes have been considered in the ERP. The ERP was reviewed by auditors and found to have covered all aspects of the road infrastructure.

For Sadiola mine, the route is: Dakar – Mbour – Fatick – Kaolack – Tambacounda – Goudiri – Kidira – Kayes – Sadiola, i.e., about four days on the road over 815 km.

For Mako mine, the route is: Dakar – Mbour – Fatick – Kaolack – Tambacounda – Mako, about two days on the road.

For Fekola mine, the route is: Dakar – Mbour – Fatick – Kaolack – Tambacounda – Kédougou – Moussala – Fekola mine, about three days on the road.

June

Date



P.O Box 67562 Nairobi Kenya

For Mako mine, the route is: Dakar – Mbour – Fatick – Kaolack – Tambacouda – Mako, about two days on the road.

The ERP addresses the Physical and chemical properties of the cyanide. The physical and chemical composition of sodium cyanide is detailed in the ER Plan number BLX-HSE-MAN-0002 revision 7 dated 27/7/22. It is also described in the Transport Management Plan (BLX-HSE-MAN-0001). Product MSDS from the supplier (Samsung) also describes the physical and chemical properties of the cyanide. Sodium cyanide is described as white solid briquettes. The ERP states the results of reactions when on contact with acids and other incompatible chemicals and when exposed to moisture. The plan mentions the type of placards on cyanide shipments, namely UN No. 1689, Class 6 and Marine Pollutant. Clause 4 of ERP is allocated to the product description and packaging and method of transport.

The Emergency Plan derived from the Route Risk Assessments that were conducted took into consideration all aspects of transport infrastructure. On development of the Emergency Response Plan the actual conditions of roadways, water sources, market, bridges, slopes, sharp curves, untarred and tarred roads, hills etc. were taken into account. The plan was developed only for the transportation of cyanide by road.

The ERP addresses the design of transport vehicles. The company uses 6 x 4 truck tractors of HP 350 equipped with GPS tracking system. The brands of vehicles used are Renault and Scania vehicles. The weights of truck tractor is 6.8 tons. The trailers utilized are 3 axles and 4 axles. Three axle trailer weighs 6 tons. Four axle trailer weighs 8 tons. Loaded container weighs about 23 tons and two containers are loaded per trailer. Total weight of truck tractor and trailer plus two loaded containers is approximately 60.6 tons. Trailers are equipped with four (4) manually operated twist locks with which the containers are stabilized onto the framework of the trailers. Auditor reviewed the Plan and confirmed that it has appropriately considered the design of the transport vehicle.

The ERP outlines various scenario of anticipated emergency situations. The ERP describes the various response actions of each of the scenarios.

The plan considers the following nine (9) incident scenarios during transportation of cyanide by road. These are the following incidents.

- Roll over of a vehicle on the ground without a spill but injury to the driver
- Roll over with no spill but many other vehicles involved in the accident
- Roll over of vehicle with container damaged resulting in a spill on the ground
- Roll over of vehicle resulting damaged container with a spill on the ground and there is a person poisoned by inhalation.
- Roll over into a river
- Collision of vehicle with a motor bike resulting in an injury
- **Critical Climate Conditions**
- Driver kidnapping
- Civil unrest and attack on the convoy

The various response actions have been spelt out in each of the incidents in the ERP.



P.O Box 67562 Nairobi Kenya

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

The operation is **X in full compliance with** Transport Practice 3.2

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

Clause 18 (Responsibilite pour les casd'interventions of d'urgence) of the ERP outlines the roles and responsibilities of outside responders and medical facilities. The overall coordination of an incident is the responsibility of the Convoy leader. The convoy leader is responsible for calling all the outside responders to the accident scene. The nurse is responsible for administering oxygen to a possible cyanide victim. Clean-up of spills is the responsibility of all the escort team. The police will direct traffic and secure the area from a distance to prevent people from entering the incident scene with the assistance of the drivers.

The logistics department of Bollore Senegal is responsible for communicating with the mining company and providing equipment for recovery of damaged container. The hospital is responsible for treatment of a cyanide poisoned person. Fire Service will assist the escort team in carrying out their responsibility and well handling any fire incident. The mine will receive the container involved in the incident and use the product appropriately. The Ambulance will transport poisoned or injured persons to the hospital. The Ministry of Environment in both Senegal and Mali will be responsible for providing technical advice to the local community. These responsibilities of each respondent were duly noted.

The company's Training matrix specifies annual ER training for all its staff including drivers and clearing staff. The escort companies are trained by qualified external trainer under the supervision of BTLS training department. In addition, the escort companies AICES and Arcane Security also provides their own internal ER training. Training attendance records Doc. "BLX-AFR-HSE-F-0526 revision 6 have been appropriately completed as evidence that training programs are carried out. Proof of drivers training for 2021 and 2022 were verified and noted.

Training attendance records for the escort companies dated 10/08/21 17/8/22 and 19/8/22 were duly noted. Cyanide awareness training module were scrutinized and noted. The contents of the training are how to respond to cyanide poisoned person, handling spills and decontamination, mechanism of cyanide poisoning, various responsibilities of the escort team and ER responders among others.

Clause 13 of page 17 to 31 the ERP describes specific ER scenarios with the response duties and responsibilities. Emergency Responders and AICES or Arcane Security will attend to possible cyanide incident. External responders are the Senegalese Police, Ambulance members, Fire Department, Civil Protection Agency and Mine site teams. The emergency responders in Mali also provide support similar to their counterparts in Senegal. The police accompany the convoy when it reaches the Malian side of the border right to the mine site. The Malian Ambulance stabilizes a patient and conveys him/her to the hospital for treatment. The nurse is a qualified personnel whose role is to administer 100% oxygen to and the cyanide antidote if necessary to a cyanide poisoned person. The nurse is trained to do administer the cyanide antidote. He then accompanies the patient in the Ambulance to the nearest hospital. At the hospital further treatment is offered by the doctor if necessary. The Ambulance continues with the administration of 100% oxygen to stabilize the patient and convey him/her to the nearest hospital. The fire department plays similar role as the counterparts in Senegal

The Convoy leader (from either AICES or Arcane Security will take the initial steps to cordon of the incident site prevent people(bystanders) from entering the area. Each of the external responders have been notified on their roles and responsibilities. The overall coordination of an incident is the responsibility of AICES and Arcane Security. Specific response duties and responsibilities of personnel in case of a cyanide incident were noted.



P.O Box 67562 Nairobi Kenya

The transporter has an inventory checklist (Inventory of all emergency equipment) document no. BLX-AFR-HSE-F-0577 revision 02. The quantities of each of the escort equipment are listed including PPE's, cleaning equipment, HCN gas detector and Oxygen among others listed below. As per the contract agreement, the escort companies are to have all the recommended escort equipment in accordance with Bollore Senegal's escort equipment inventory checklist. During interviews with AICES and Arcane Security convoy leaders it was clear that the equipment accompanies the convoy during the transportation of the cyanide, and they are conversant with their use. The following escort equipment were displayed for inspection by the two escort companies.

- Full face respirators and canisters (ABEKP3 type)
- HCN gas detector
- Tyvek overall
- PVC gloves (ABEKP3 type)
- Full oxygen cylinder
- First Aid Kit
- Rubber boots
- Shovels
- Brooms
- Cones
- Reflector tape
- Ferrous sulphate (50kg bag)
- Cyanide antidote kits(Hydroxycobalamine).
- Spray pack
- Empty sacs
- Caution tape
- Tapaulin

All the equipment are kept in lockable boxes and goes with every convoy. The escort equipment were verified.

The emergency equipment as per Emergency Response Equipment List are available and ready for use should it be required. The emergency response equipment includes the required personal protective equipment. The PPE's includes chemicals suits, full face gas masks, respirators with the appropriate canisters (ABEKP3 type), PVC gloves and Disposal Tyvek overalls. Arcane and AICES have adequate PPE's and other equipment to use in escorting activities. The ER equipment are inspected regularly, and any obsolete ones are immediately replaced with new ones.

The ERP does list the response equipment that should be available during transport. The emergency response equipment includes the required personal protective equipment. The PPE's includes chemicals suits, full face gas masks, respirators with the appropriate canisters (ABEKP3 type), PVC gloves and Disposal Tyvek overalls. The escort equipment is inspected prior to departure with the convoy and an escort equipment checklist (document no. BLX-AFR-HSE-F-0577 revision 02) completed after the inspection. The quantity and condition of the equipment is checked during pre-departure inspection. It is the convoy leader's responsibility to ensure that all emergency equipment is checked and are up to manufacturers' specification prior to convoy departure. The HCN Gas Monitors have been calibrated as per manufacturers specifications. The Antidote is stored as per manufacturers and within expiry dates. The equipment are also inspected when not in use to ensure availability anytime there is a convoy. The ER equipment are inspected regularly, and any obsolete ones are immediately replaced with new ones. The Oxygen cylinder is regularly checked.

BTLS has subcontracted the escort of the convoy to AICES and Arcane Security. Arcane and AICES have adequate PPE's and other equipment to use in escorting activities. The emergency equipment as per Emergency Response Equipment List are available and ready for use should it be required. The emergency response equipment includes the required personal protective equipment. The PPE's includes chemicals suits, full face gas masks, respirators



P.O Box 67562 Nairobi Kenya

with the appropriate canisters (ABEKP3 type), PVC gloves and Disposal Tyvek overalls. The contract agreement between BTLS and the escorting company has clearly specified the roles and responsibilities. In addition to escorting the convoy to mine sites, the escort companies are to attend to any cyanide incident appropriately as per BTLS emergency response procedures.



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

The operation is X in full compliance with Transport Practice 3.3

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

The operation has a procedure for current contact for notifying the shipper, regulatory agency and outside responders. Emergency Response Plan number BLX-HSE-MAN revision 0002 details the emergency contact phone numbers of all outside responders and other stakeholders including the mines who will be contacted in case of an incident. The list of contact phone numbers includes hospitals, Ambulance, Police, Fire Service, Ministry of Environment in Senegal & Mali and the mines. It also includes the contact cell phone numbers of the Logistics Manager, QHSE Manager and the Technical Director and other staff of BTLS. The list of telephone numbers is contained in the ERP document which the convoy leader travels with it during the journey.

The QHSE Manager is responsible for ensuring that internal and external contact phone numbers and emails are kept current. The ERP mentions that the ER contact numbers are reviewed and confirmed annually. Also, clause 7.2 of the TMP states that the internal and external emergency notification reporting procedures will be reviewed annually and as when necessary. During each route survey annually, the contact phone numbers are checked to ascertain whether they are still valid. Any changes in the contact phone numbers are amended immediately..

The operation has a procedure for notifying ICMI in case of any significant cyanide incident. Clause 5.10 (Notification des incidents significatifs) of the ERP describes-significant incidents as follows;

- Human exposure that requires action by an emergency response team, such as decontamination or treatment.
- An unauthorized discharge that enters natural surface waters, on or off site.
- An unauthorized release that occurs off-site or migrates off-site.
- An on-site release requiring the intervention of an emergency response team.
- A transport incident requiring an emergency response in the event of a release of cyanide.
- A multiple wildlife death event where cyanide is known or credibly suspected to be the cause of death.
- Theft of Cyanide

The procedure states that ICMI will be notified when any of the above incidents occur. No significant cyanide incidents have been recorded since the company's recertification in the past 3 years.



P.O Box 67562 Nairobi Kenya

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

The operation is X in full compliance with Transport Practice 3.4

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

The ERP details procedures for remediation of releases.

Clause 7.0 of the ERP document number BLX-HSE-MAN-0002 revision 7 dated 27/7/22 addresses the following recovery and neutralization processes.

- Neutralization of contaminated soil and decontamination
- Recovery of solid or solution
- Treatment and/or disposal of excavated soil
- Treatment and/or disposal of recovered cyanide.
- Recovery of sodium cyanide material
- Neutralization and/or disposal or recovered solution
- Neutralization of soil and /or water insitu
- Recovery and treatment of ground water

The ER plan contains detailed descriptions of different methods of neutralization including a discussion on the main treatment chemicals such as ferrous sulphate monohydrate and sodium hypochlorite and the need to be cautious in its usage.

BTLS and its escort subcontractors' team will undertake containment, neutralization and cleanup of spills and may be assisted by the mining customer depending on the location of the incident under the supervision of the Ministry of Environment of both Senegal and Mali. Recovered materials/impacted soil would be transported to the mine site for management and proper disposal.

The Emergency response procedure prohibits the use of neutralizing chemicals in treating cyanide that has been released into surface water. Clause 8 of the ERP No. BLX-HSE-MAN-0002 rev 6 prohibits the use of sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide that has been released into surface water.



P.O Box 67562 Nairobi Kenya

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

The operation is **X in full compliance with** Transport Practice 3.5

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

Provision has been made for periodically reviewing and evaluating the ERP as well as in the TMP. Clause 7 on page 5 of 17 of the TMP makes provision for annual reviewing of all transport related procedures. The evaluation of the Transport Emergency procedures is required at least once per year after a mock drill was held, after major changes in structures on the roads, change in contact phone number of outside responders, changes to the transport equipment used, lessons learned from accidents / incidents, new identified risks on routes after conducting annual route survey. When significant or critical changes have been observed or reported, the contents of the TMP/ERP and the relevant working documents and forms will be reviewed.

Documents were noted and found to be up to date. The Emergency Plan No. BLX-HSE-MAN-0002 was revised on 20/7/21 and 27/7/22.

Mock drills are performed annually. BTLS training matrix indicates that mock drills are part of the training programs. Mock drills were held on 12/12/21, 08/04/22 and 6/5/22. Attendance registers of each of these drills have been compiled and kept on file for record purposes. The mock drills involve the escort companies and Bollore drivers as well as the external emergency responder such as the Senegalese Fire Brigade and police. Mock drill report dated 6/8/22 and 23/04/22 were sighted and noted by auditors. The report narrates the scenario of an accident involving a cyanide truck resulting in a spill and possible poisoned person involved. It discusses the actions taken and the lapses in the mock drill Lesson learned are used to review the ERP.

Mock drills are evaluated, and corrective action plans put in place to correct any lapses. The corrective action plans and are used to revise the emergency response procedures. The review process of the ERP mentions that the responsible people are required to coordinate to review at least annually, after a mock drill was held, after major changes in the road condition, change in outside responders, changes to the transport equipment used, lessons learned from accidents / incidents, new identified risks on route and/or after conducting annual route survey. These responsible are the QHSE Manager and the Logistics Manager

June

**BOLLORE TRANSPORT & LOGISTICS, SENEGAL**