Transport Re-Certification Audit. 

Summary Audit Report.

Report submitted to:-
1400 I Street, NW, Suite 550
Washington. DC 20005
Unites Sates of America.

Report of:-
Allship Logistics Limited
P.O. Box BT 582
Heavy Industrial area
Opposite Tema Lube Oil
Tema.
Ghana.
1.0 INTRODUCTION

1.1 Operational information.

Name of transportation facility : Allship Logistics Limited
Name of facility owner : Allship Logistics Limited
Name of facility operator. : Allship Logistics Limited
Name of responsible manager : Robert Kutin
Address : Allship Logistics Limited
Head Office (Tema)
Heavy Industrial area
Opposite Tema Lube Oil
P.O. Box BT 582

State / Province : Tema
Country. : Ghana
Telephone. : 0303-205627 or m37
Fax. : 0303-206482
E-mail. : Robkutin@hotmail.com

1.2 Audit scope.
The scope of this audit covers the road transportation of cyanide from the Port of Takoradi in Ghana to customers mine sites and Allship Logistics Warehouse within Ghana. Cyanide is unloaded and stored at the Allship Logistics owned and operated warehouse facility which is situated along the transport route to mines sites. The warehousing of cyanide at the Allship warehouse is addressed within a separate ICMI audit report.

1.3 Description of operations.
Allship Logistics is a wholly owned Ghanaian entity that was established during 1990 to provide freight forwarding and logistics services. The Company’s Head Office is located in Tema, with branches in Accra, Takoradi, Tarkwa, Paga and Burkina Faso.

Since the establishment of the Company it has provided services to companies in the mining heavy industrialized sector, Government organizations as well as private organizations.

Allship Logistics has a 1.8 hectare truck yard and 3.4 hectare warehouse facility at its Head Office in Tema. It also has a 0.8 hectare truck yard in its branch office in Takoradi and a 0.5 hectare yard with a cyanide warehouse facility located in Dompim-Pepesa situated near Takoradi. The cyanide storage warehouse size is 65.50 meters by 24.50 meters with ridge height roof of 9.50 meters Takoradi is a port situated in the Western region of Ghana

Allship Logistics Limited is a Network Partner with Röhlig-Grinrod (Pty) Ltd which is an airfreight, sea freight and project logistics service provider situated in Sub-Saharan Africa, operating internationally and into Africa.

The company is a member of International Federation of Freight Forwarders Association (FIATA) and Ghana Institute of Freight Forwarders (GIFF).
Allship Logistics Ltd has a 4.5 acre truck yard and a 34000 square meter warehouse facility at its Head Office in Tema. It also has a 2.0 acre truck yard and a 5000 square meter warehouse facility at its branch office in Takoradi.

Tacotel is a Company operating as the sole handler of containerised import and export cargo in and out of the Port of Takoradi. The sea freight containers, loaded with cyanide, are loaded by this Company onto the Allship trailers.

Allship Logistics have a 0.5 hectare yard situated in Dompim – Pepesa onto which a 1605 square meter cyanide storage warehouse facility (size of 65.5 meters by 24.5 meters) with a ridge height roof of 9.5 meters, is built. Dompim – Pepesa is about 88 kilometers from Takoradi which is in the Western Region of Ghana and approximately 171 kilometer west of Accra. The cyanide storage warehouse was constructed and completed in 2011. The warehouse has a capacity of 2000 x 1 ton boxes of cyanide and is secured with lockable steel doors. The warehouse area has a security service presence manned 24/7.

1.4 Road transportation

Allship Logistics Ltd transports cyanide manufactured by Orica (PTY) Ltd which is certified by ICMI. The cyanide (solid) from Orica is packaged into wooden intermediate bulk containers (IBC’s) which are packed into shipping freight containers that is to be transported by sea to port of Takoradi in Ghana. A maximum of 20 IBCs are packed into a freight container with a maximum gross mass of 24.2 tonnes.

The cyanide (solid) is packaged into intermediate bulk containers (IBC’s) which are packed into a shipping freight containers to be transported by sea to ports of Tema and Takoradi in Ghana. A maximum of 20 IBCs are packed into a freight container. A combination of a loaded trailer plus a freight container has a maximum gross mass of 24.2 ton. Before arrival, Allship ensures that the shipping documentation is in order and the goods are cleared to allow prompt handling of the product through the ports. Upon arrival at the ports, the loading of the containers is performed by the port stevedores.

Allship collects the containers and transport them to customer mine sites using the following routes:

- TACOTEL terminal in the Port of Takoradi – Agona – Nseum – Bonsaso – Dompim warehouse facility.
- Dompim warehouse facility – Perseus Mining site
- TACOTEL terminal in the Port of Takoradi – Agona – Nseum – Adamus Mine site

1.5 Transit Storage.

Within the scope of this audit there are no trans-shipping depots or interim storage sites, as defined in the audit protocol. Storage in transit does occur at the ports of Tema and Takoradi while formalities such as customs clearance are performed.

Once formalities are completed, the cyanide will be collected and transported to the customer mine sites or the Allship warehouse in Dompim.

Allship’s cyanide warehouse is located at Tarkwa Road, Dompim, a town with approximately 10000 people and situated approximately 30 kilometers south-west of Tarkwa. Most cyanide is delivered by ship to the port at Takoradi and some cyanide been delivered via the Tema port.

At the warehouse the cyanide, packed in one ton polypropylene lined timber boxes are destuffed from the sea freight containers the warehouse from the shipping freight containers and stored on concrete flooring in the warehouse. This kept there until required by the mine site Perseus Mining.

Upon request by the mine, the cyanide boxes are removed from the warehouse using a forklift and packed into a shipping freight container, then locked and sealed for road transport to the mine site.
The storage of this cyanide has been audited as part of a separate cyanide warehouse audit using the *Cyanide Production Verification Protocol*.

### 1.6 Auditor’s Findings and Attestation.

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<tr>
<th>Allship’s Logistics Ltd is</th>
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<th>The International Cyanide Management Code.</th>
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<td>Tommie Muller South Africa</td>
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<td>Audit Team Leader</td>
<td>Tommie Muller</td>
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<tr>
<td>E-mail address</td>
<td><a href="mailto:tommieb.muller@gmail.com">tommieb.muller@gmail.com</a></td>
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Since the time of the previous audit three years ago to date of this audit, Allship Logistics Ltd has experienced no cyanide related incidents or compliance problems reported / recorded.

#### Name and signature of Auditors

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<th>Name</th>
<th>Position</th>
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<th>Date</th>
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<tbody>
<tr>
<td>Tommie Muller</td>
<td>Lead Auditor</td>
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<td>21/2/2020</td>
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### 1.7 Dates of Audit.

The recertification audit of the Allship Logistics Transport Division was conducted 20th to 22nd November 2019.

I attest that I meet the criteria for knowledge, experience and conflict of interest for Code Verification Audit Team Leader, established by the International Cyanide Management Institute and that all members of the audit team meet the applicable criteria established by the International Cyanide Management Institute for Code Verification Auditors.

I attest that this Summary Audit Report accurately describes the findings of the verification audit. I further attest that the verification audit was conducted in a professional manner in accordance with the International Cyanide Management Code Cyanide Transport Verification Protocol and using standard and accepted practices for health, safety and environmental audits.
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.

X in full compliance with
The operation is □ in substantial compliance with Transport Practice 1.1
□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Allship Logistics have implemented a procedure for the selection of primary transport routes to identify potential accidents or the potential impacts of accidents and releases. This procedure requires that all possible routes from the Ports in Ghana to the end user must be evaluated. Three Route Risk Assessments (RRAs) were conducted namely (1) Port in Takoradi to Allship warehouse in Dompim, (2) Allship warehouse to Perseus mine site and (3) port of Takoradi to Adamus mine site. RRAs on primary route (main road) were conducted and observations have been documented.

Route selection procedure spells out the steps that are to be followed when conducting a RRA. Feedback on road conditions received from Convoy leader after each trip.

An off-dock terminal, Tacotel, is tasked to receive, store and deliver import and export containers to cherish clients at the port of Takoradi. Tacotel is responsible for the loading of freight containers onto Company’s trailers.

Procedure “Transport Management Plan” has been developed on routes to the mine, situated in Ghana. This plan outlines the process for the development and subsequent annual review of the detail captured in the route risk assessments. Procedure was approved by Allship Logistics Management and Orica.

During the RRAs on the selected routes, various potential hazard types such as the condition of the road surface, the pitch of the road, potholes, trees, stray animals, traffic on the roads and through towns, pedestrians, fog, smoke, sand, rail tracks, population density, rivers, bridges, sand storms, etc. have been evaluated and noted in the assessment documents. Recommended preventative actions to mitigate or eradicate the risks on selected routes are included in RRA assessment documents. RRA procedure found to be in place, appropriate and approved.

The routes were reviewed in consultation with the Ghana Environmental Protection Agency Ghana Highway Authority and Orica Mining Services (supplier). Once a year Orica conducted audits on Allship and review the documented Transport Management Plan (TMP).

External responders along the routes were met and advised of their roles to be played and/or mutual aid during an emergency response during an emergency situation. Responders e.g. the Regional Commander of the Ghana Police Service, Takoradi local hospitals, EPA (local community), Ghana Fire Services and Ghana Health Services were met. The EPA consults with the community on issues that may affect them.

During these meetings Allship Logistics sought their inputs regarding routes that may be followed. Proof of such visits was noted. Product SDS handed to each of the emergency services.

The Company has implemented a procedure requiring the route surveys be revised at least on an annual basis and has a process of obtaining feedback during debriefing session on route conditions after each convoy. This forms part of the Convoy Leader’s responsibilities.

Procedure “Route Risk Assessments” compiled and implemented. The Route Risk Assessment Procedure outlines the category of risks to be identification during the conducting of a route assessment. This procedure
then guides the development of prevention measures which mitigate these risks. Identified risks on the road are discussed with the drivers during tools box meetings.

The Performing Road Survey procedure requires routes to assessed and risks identified along the route be noted and management measures to be documented within a Transport Management Plan. Allship Logistics has developed a Transport Management Plan for routes the transporter will be followed to the mines.

Procedure requires regularly evaluation and re-evaluation of the risks on the primary route that the cyanide consignment will travel on. Procedure states that the process for selecting transport routes and conducting of RRAs is re-evaluated on at least annually.

The transporter has a process for providing feedback on route conditions during the journey and after each convoy. Upon returning to the Tema depot the Convoy leader attends a debriefing session to discuss the journey and complete the journey feedback form.

Further procedure requires that the identified risks be captured and managed.

A Convoy Management Procedure requires the use of one escort with four (4) trucks each carrying one container of cyanide. A maximum of eight (8) trucks per convoy will be allowed but the two convoy vehicles are required. The maximum speed to be travelled on tar and dirt roads is also specified in this procedure.

Inputs seeked from the Regional Commander of the Ghana Police Service, fire services, ambulance staff, the hospitals and Ghana Environmental Protection Agency (EPA) who represents the community in the selection of routes and development of risk management measures.

Procedure and management measures were approved by Company Management of which copies were forwarded to Consignor.

There is only one practical transportation route whilst Allship Logistics went through a selection and risk assessment process. The route was approved by the EPA for use for the transportation of cyanide. The Transporter’s Emergency Response Plan (ERP) stipulates the roles and responsibilities required from the stakeholders, regulatory bodies and emergency services was handed to them. Acknowledgement received from the external emergency services stating that they have received the ERP.

The EPA issued a permit to Allship Logistics for the transportation of cyanide.

The EPA is mandated to consult with the community on the issue of cyanide transport through their area.

**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**
- ❌ in substantial compliance with
- ❌ not in compliance with

Transport Practice 1.2

Summarize the basis for this Finding/Deficiencies Identified:

Allship Logistics Management requires that personnel operating cyanide handling and transport equipment to perform their jobs with minimum risk to themselves, the communities and the environment. The Transport
Company has a recruitment policy and procedures that specifies the process of selecting a driver for employment.

The transporter has a process of employment selection which includes road test, written examination, valid license category checks, employment reference checks, driving records, driver's qualifications, drivers health, eyesight, possession of a National Drivers license to drive trucks and fitness to drive confirmed by Human Resources (HR) Manager.

Allship Logistics only uses trained and competent operators to drive its delivery trucks. Allship Logistics has dedicated own employed drivers that have appropriate training and valid vehicle licences to transport cyanide. Personnel operating cyanide handling and transport equipment have also been trained to perform their jobs in a manner that minimises the potential for cyanide releases and exposures.

Training matrix captured the following training requirements for drivers to be trained in: - Cyanide awareness including loading and off-loading of cyanide, Company's Transport Management Plan (TMP), outcome of the Route Risk Assessment, Convoy management, Defensive driving techniques, Company Emergency Response Plan, Mock drills, Incident / accident management, basic first aid, basic fire fighting, driver fitness, driver's competence and attitudes, driver's knowledge of the local rules of the road or highway codes.

Company has a system onto which presented training is captured. Drivers also attend toolbox meeting prior to each departure.

Learner convoy leader drives along with competent convoy leader. New drivers go through induction training before embarking on a journey. A new driver drives with an old driver for his first trip to acquaint himself with the road condition.

Validity of driver's licenses are checked before vehicle pre-departure checks plus his/her international driver's license.

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

The operation is X in full compliance with Transport Practice 1.3

in substantial compliance with

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Allship Logistics Management requires that transport equipment is suitable for cyanide shipment.

Allship Logistics have a policy only to use transport equipment that is designed and maintained to operate within the cyanide loads it will be handling. Transport equipment consists of diesel operated MAN 480 horse power (HP) truck tractors (prime mover) and double axel flat deck trailers. Both prime movers and trailers are purchased to a design specification appropriate for the transport of loaded sea freight containers by road. Technical specifications including truck tractor power, axle loadings and other parameters as set by the manufacturer specifications to ensure that the loads are within the legal capacities of the public roads.

Transporter has a Vehicle Maintenance Procedure supported by manufacturer's specifications requires that vehicles are serviced in accordance to these requirements. Maintenance on vehicles is done as per the manufacturer's specification and in accordance with the Company's Vehicles Maintenance Procedure. Transporter's Vehicle Maintenance Procedure requires that truck tractors and trailers are serviced at 10 000 km maintenance service intervals.

Only new tyres used on vehicles dedicated for the transportation of cyanide. Minimum of 4 mm tread depth allowed. Transporter does not allow recapped tyres to be used on cyanide transport vehicles.
Adequate dry chemical powder fire extinguishers fitted to truck tractor and trailer. Fire extinguishers found to have been serviced in accordance with the National requirements of at least once every 6 months by an external service provider.

Transporter has procedure in place to prevent overloading of the transport vehicle being used for handling cyanide. Transporter transports one container on a single 2-axel trailer. Trailer configuration is allowed to be loaded with a mass of 40 ton. Each 2 axel trailer loaded with 1 x 6 meters (20 ft) loaded container with sodium cyanide with a mass of approx 24.2 ton. Trailer configuration allows a load with a mass of 40 ton.

Tacotel is a Company operating as the sole handler of containerised import and export cargo in and out of the Port of Takoradi. The sea freight containers loaded with cyanide, are loaded by this Company onto the Allship trailers. The Economic Community of West Africa State (ECOWAS) requires mass of 10.5 tons per trailer axle. Loaded trailer’s mass is 9.75 ton. No other load bearing equipment used by Allship Logistics for cyanide transport.

Allship Logistics have procedures (Loading and off-loading containers procedure) in place to prevent overloading of the transport vehicle being used for handling cyanide. Procedure requires that loaded vehicles be weighed at the Port of Takoradi weighbridge before allowed to depart. On the way from Port of Takoradi to mine site, vehicles in convoy have to pass over weigh bridges where officials can pull over a convoy to be weighed to determine whether vehicles aren’t overloaded. Copies of bill of ladings gets retained and filed with the documentation of that consignment.

Allship Logistics do not subcontract any of the cyanide handling or transport activities.

On the way to the consignee's facility each convoy vehicle has to pass over two other weigh bridges.

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

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Summarize the basis for this Finding/Deficiencies Identified:

Allship Logistics has a procedure to ensure that packaged Sodium Cyanide stacked in freight containers, is transported in a manner that maintains the integrity of the producer's packaging. A container handover procedure in use that requires the findings of the physical inspection conducted on the integrity of the packaging (container) to be documented. The inspection includes the checking of the seals on the doors.

Placards are used to identify the shipment as cyanide. A clause in the "Container Handover Procedure" in use that refers to the checking of the integrity and condition of the container prior to loading at the Port, to ensure that the seals are still intact, container seal numbers as at the port and container number corresponds with that on shipping documentation, split placards are visibly displayed on all four sides of the freight container and the physical condition of the container ensuring that it is fit to be transported. Checking of container twist locks on trailers prior to departure with consignment and during enroute.

Placards are used to identify the shipment as cyanide as required by International standards as well as the IMDG code and are conspicuously displayed on all four sides of a container. Placard (toxic 6 label) displayed on the front of the cabin of the truck tractor.

Allship Logistics – Tema Ghana
Name of facility
21st February 2020
Signature of Lead Auditor
Date
fatigue management policy is implemented that limits drivers driving hours and mandates rest periods. Driving hours are monitored via a GPS system and trip sheet. Driving with consignment of cyanide is only permitted during daytime, 06:00 to 18:00 and speed travelled is also specified for tar road and gravel road.

The TM Plan specifies that twist locks and container belts are used to stabilised the freight containers to the trailer and prevent it from shifting. Procedures are in place that specifies that twist locks and container belts be checked before vehicles leaves the depot. Findings on twist locks and container belts are recorded on a checklist. En-route during compulsory stops these load securement devices are also checked.

The checking of twist locks are included in the list of inspections that are to be checked during the conducting of preventative maintenance.

Procedure are in place to suspend the operations during to civil arrest, bad weather condition, road collapse, mudslides, etc. Procedure to be followed by convoy leader spelt out.

Drug and alcohol policy in use. Unannounced and random test are carried out on employees. Drivers are subjected to these tests before departure from depot. Testing for drugs and alcohol are captured in document "Medical Examination form" as a requirement in the recruitment process as well as during annual medical examinations. Calibrated breathalizer device is used for these tests.

Document "Control of Records" implemented and stipulate the retention period of commercial and other transport related documents. Clauses noted by auditor.

Allship Logistics does not sub-contracts any of its cyanide transport operations.

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

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Summarize the basis for this Finding/Deficiencies Identified:

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

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

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Summarize the basis for this Finding/Deficiencies Identified:

All vehicles have communications systems that include drivers and convoy leader’s own cell phones. Truck tractors are fitted with GPS tracking system and Company cell phones for the escort vehicles. System is manned 24/7.

A list of emergency contact numbers are incorporated in the Company’s Transport Management Plan (TMP) Ref. No. TR/SOP/04 rev no. 5 dated 1/10/2019 in the format of appendix G1, G2 and G3. Company’s
"Emergency Response Plan and Evacuation procedures" (ER Plan) Ref No. GEP4.11.1 dated Oct 2019, also reveals these contact numbers as per annexure G1 to G3 and G4.

Company's Transport Management Plan.
Appendix G1 – The contact information of personnel and facilities to call upon in the event of an incident e.g. Allship Logistics Ltd, Orica Mining services, Perseus Mines, Adamus Resources Ltd.


Appendix 1,2 and 3 were noted and found to be in order, up to date and appropriate.

Company’s Emergency Response Plan and Evacuation procedures (ER Plan).
Appendix G1: Emergency Responders for Warehouse e.g. safety officer, operators and cleaner.
Appendix G2: Emergency Call List incident Same detail as in TM Plan appendix 1.
Appendix G3: Medical Support and Emergency Equipment Contacts. Same detail as in TMP appendix G2.
Appendix G4: Emergency Contacts of other External Responders. Same detail as in TMP appendix G3.

Communication equipment is tested to ensure its availability and that it functions properly. All vehicles used for the transportation of cyanide have been fitted with GPS systems. Mobile phones are tested before vehicles are allowed to depart from depot and findings documented in pre-departure checklists.

Appendix F: “Emergency Communication Procedures” of the Company’s Transport Management Plan, spells out the procedure that is to be followed.

No communication blackout areas noted along the route. Cell phones have 100% coverage along the routes.

GPS tracing system is used to track and monitor the position and progress of the cyanide shipment.

Transporter has implemented inventory controls and or chain of custody documentation to prevent the loss of cyanide during shipment when it commences cyanide transportation activities. This is achieved through the use of waybills which are created based on the shipping documentation for each container. Document and MSDS accompany the container throughout delivery. The waybill is signed by the transporters clerk and the customer’s representative upon receipt. Upon signing the customer representative acknowledges that the consignment was received in good condition and unopened.

Allship Logistics maintains records that indicate the mass of the cyanide in transit when it commences the transportation of the product. This is achieved through the creation of a waybill which is based on the information provided in the shipping documentation. The waybills include a description of the goods including the freight containers detail and weight.

A product material safety data sheet accompanies each shipment to the end user. The product MSDS is incorporated in the Transport Emergency Response Plan and Evacuation Procedures Plan. A copy of the product MSDS been made available to the Convoy Leader before let onto the road. Proof thereof noted on a completed vehicle pre-trip checklist.

Allship Logistics does not sub-contracts any of its cyanide transport operations.
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 with Transport Practice 2.1
☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Questions 2.101 to 2.106 are not applicable to this transporter, as no cyanide trans-shipment or interim storage of Sodium Cyanide will not be done on the Transporter’s depot facility. Within the scope of this audit, there are no transhipment depots or interim storage sites as defined in the audit protocol.

No trans-shipping facilities or interim storage sites noted at the facility.

3. EMERGENCY RESPONSE: Protect communities and the environment through the development of emergency response strategies and capabilities

Transport Practice 3.1: Prepare detailed emergency response plans for potential cyanide releases.

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:

The transporter has developed an Emergency Response Plan (ERP) that guides responses to potential cyanide emergencies. The ERP and the Transport Management Plan (TMP) are specific to the transportation routes used by Allship Logistics.

Sodium Cyanide, in briquette form, is transported by road stacked in 6 meter sea freight containers. No product is transported by rail or air. Sodium Cyanide enters Ghana through the port of TEMA or the port of Takoradi.

The transporter has developed detailed documents to cover emergency response for potential cyanide releases for cyanide transportation within Ghana. The scope of this plan is to provide information to all role players (in and external responders) with regards to each responder’s role and responsibility who will be involved in the primary stage of an emergency situation. A list of Emergency Contact numbers is included into the plan. The information is contained within route specific Emergency Response Plan and a Transport Management Plan.

The Transport Management Plan and Emergency Response Plan are based on road transportation of solid sodium over the routes to the two end users Adamus Resources mine and Perseus mine and the Allship Logistics Warehouse in Dompim. The ERP was found to be appropriate for the transportation of cyanide by road transportation on the selected roads.

Allship Logistics – Tema Ghana

Name of facility

Signature of Lead Auditor

21st February 2020

Date
The procedure describes the processes in addressing each of the above mentioned scenarios. The ERP has roles and responsibilities of each external responders such as the Ghanaian police, Fire Service, Ambulance, mining company, Orica(supplier), medical facilities, escort leader. The ERP also enumerates the various cyanide neutralization processes in handling spills and decontamination.

Categories of Sodium Cyanide Emergency Scenarios during transport:

- Handling wet Sodium cyanide (handling sodium cyanide in bags/boxes that are wet).
- Rollover of cyanide container with spill on dry ground.
- Roll over of shipping container resulting in injury and product spill on dry ground.
- Roll over of container without spill on dry ground.
- Roll over of cyanide container into water body.

The ER Plan was designed and reveals the descriptions for the response to anticipated emergency situations in the transportation of cyanide by road that have been identified during the conducting of the route risk assessment process. This plan describes the sequence of events during a road transport incident. The route risk assessments included consideration of the road transport infrastructure as outlined in 1.1 above. External responders identified in the documents, are aware of their role in an emergency. The contents of the ER Procedure were found to be appropriate for the activities it is been designed for as it address issues particularly for the road transportation of the sodium cyanide.

The product MSDS available at the transport facility as received from Orica the producer / consignor of the cyanide. The product MSDS accompanied each shipment to either the end user or warehouse.

Both the transporter’s ER Plan and the TM Plan details the physical and chemical properties of sodium cyanide. ERP and TMP focuses on the transportation of sodium cyanide by road. No transportation of this product is done by rail or water.

The ER Plan refers to the horsepower of the truck tractors. Truck tractors with a 359 horsepower (HP) engines are used for single and those with 480 horsepower (HP) engines to pull double axel trailers. Flat bed trailers are fitted with four (4) manually operated twist locks utilised to stabilise the container to the trailer framework. Add to the twist locks, container straps are also fitted around the container. Trailers with dimensions of 12.8m x 2.4 meter are utilised for the transportation of the containers loaded with sodium cyanide. Only one (1) 6 meter container loaded onto a trailer. Dimension of a 6 meter container is 6.1 x 2.3 m. Trailers are built in accordance to manufacturer’s specifications. The design of a trailer is appropriate for the load of a 1x20ft container loaded with sodium cyanide.

The Transport Emergency Response Plan details the roles and responsibilities of outside emergency responders and medical facilities in the event of an emergency situation. External stakeholders include emergency response organisations and government authorities / departments. External responders identified in the documents, are aware of their roles during an emergency.

Emergency contact telephone numbers for internal and external emergency entities are provided in both the ER Plan as well as the TM Plan.

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

◉ not in compliance with

Transport Practice 3.2
Summarize the basis for this Finding/Deficiencies Identified:

Allship Logistics provide emergency response training to appropriate employees as specified in the ER Plan. The cyanide awareness training is provided once per year. All the transporter's cyanide drivers, the Convoy Leaders and the hazchem providers have been fully trained. Cyanide awareness and cyanide transport procedures have been presented by an external service provider. Training for the external Emergency Responders on route was presented by transporter's Safety Officer. External Emergency Responders attended a mock drill as part of the refresher training. Last mock drill was held on 1st November 2019.

The training records were reviewed and discussions with transporter's drivers and the escort team confirmed that they have completed the training.

The Emergency Response Plan identifies the specific emergency response duties and responsibilities of personnel for the five scenarios. Descriptions of the specific emergency response duties and responsibilities clearly documented.

Allship Logistics maintains a list of available emergency response equipment needed during the transhipment of cyanide on the transport route. The safety equipment and PPE is checked on a monthly basis and prior to departure of each convoy to ensure applicability, availability and functionality. Used or outdated equipment gets replaced immediately. HCN gas monitoring device is available and Convoy Leaders have been trained in the use of such equipment. Calibration certificate noted to be still valid.

It is required from the Escort Leader to keep the Logistics Manager updated of the progress either on the movement of the consignment or emergency situation. Logistics Manager will keep MD informed. The Safety Officer as the escort leader contacts the external emergency responders when required.

The required roles and the responsibilities of the External Emergency Responders and that of the Allship Logistics employees who will attend to a cyanide incident / accident, are stipulated in the Allship Logistics Ltd "Emergency Response Plan and Evacuation Procedures".

Transporter does not use subcontractors for the transportation of cyanide.

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

<table>
<thead>
<tr>
<th>X in full compliance with</th>
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<tr>
<td>☑ in substantial compliance with Transport Practice 3.3</td>
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<tr>
<td>☐ not in compliance with</td>
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Summarize the basis for this Finding/Deficiencies Identified:

Appendices G1-G4 of the Emergency Response Plan and TM Plan, in appendix G3 reveals the list of all the relevant and current emergency contact agencies. The Safety Office being the Convoy Leader is responsible for ensuring that the list of emergency contact numbers is updated.

The Transport Management Plan and Emergency Response Plans contain procedures and current contact information for notifying the shipper, the receiver/consignee, outside response providers, and medical facilities of an emergency.

Both these plans contain a list of all the emergency contact numbers. A similar list of numbers is kept in the Convoy Leader's vehicle and call-out procedure stipulated in both plans.

Systems are in place to ensure the internal and external emergency notification and reporting procedures and contact telephone numbers are kept current.

Allship Logistics – Tema Ghana
Name of facility
21st February 2020
Signature of Lead Auditor
Date

21st February 2020
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Date
The Company’s Safety Officer is tasked with:

- Keeping up the reporting of internal and external emergency reporting procedures;
- The reporting all incidents, near-misses, emergencies during the transport of all chemicals including sodium cyanide to regulatory authorities;
- To receive correspondence from clients, regulatory authorities and local communities;
- List of Emergency Responders telephone numbers e.g. the Ghana Police, Local Fire Services, Hospitals, Ambulances, EAP and that of Allship’s Logistics Ltd to be kept current.

**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:

Transporter has procedures titled “Recovery of solid Sodium Cyanide Material” and “Neutrallisation and or disposal of excavated soil” available. The initial clean-up and rehabilitation process of an effected area is the responsibility of the Convoy Leader. To attend to larger spills is the responsibility of the Safety Officer to take the initial response and call in outside responders to assist.

Allship Logistics has entered into a joint venture agreement between them and the Consignee of the consignment with regards to the cleanup and disposal of contaminated soil/product. The contaminated soil / product will be removed to the mine site where the waste will be disposed.

The Transport Emergency Plan, clause 3.5.1 prohibits the use of sodium hypochlorite, ferrous sulphate and hydrogen peroxide to treat cyanide that has been released into surface water e.g. dams or rivers. Ferrous Sulfate is used to locate traces of cyanide remains after clean-up have been done and to neutralize residues of solid sodium cyanide(powder) is required. Some Ferrous Sulfate in small quantity kept in the escort vehicle as part of the escort equipment.

No Sodium Hypochlorite, Ferrous Sulfate and/or Hydrogen Peroxide is kept on the Transporter’s premises.

**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:

The Emergency Response Plan and the Transport Management Plan states that all emergency response documentation be reviewed and updated. Periodically reviewing and evaluating of the plans is based on the outcome of the yearly mock drills, when significant or critical changes have been observed or recommendations made after a transport incident investigation. Transport working documents and forms reviewed periodically as and when required.
Refresher training presented in cyanide awareness and procedures noted done annually. Company’s TM Plan refers. ER Plan requires the conducting of emergency mock drills which is found to have been done annually. Drills are evaluated to determine if response time, the procedures are adequate, equipment is appropriate and if personnel are still acquainted with the emergency requirements. Mock drill review meetings held and shortfalls noted.

The mock drills that were held simulated transport related cyanide incidents where “Rollover of Cyanide Container with product been spilt”. The drill included external emergency responders (police ambulance staff) attended the mock drill exercise. Latest mock drill was held on 1st November 2019.

The training records were reviewed and discussions with Allship Logistics drivers and the Convoy Leaders confirmed that they have attended training sessions.

Non-conformances noted during the last drill were noted and attended to. Drill was repeated and found to have been more successful. Records of mock drill reports depicts that mock drills were repeated to ensure the rectification of any non-conformities.

Since the previous audit was conducted up to the time that this audit was conducted, no cyanide related incidents reported / recorded

End of report.

Allship Logistics – Tema Ghana

Name of facility

Signature of Lead Auditor

21st February 2020

Date