INTERNATIONAL CYANIDE MANAGEMENT CODE
CYANIDE TRANSPORTATION AUDIT

Allship Logistics Limited (International Freight Forwarders)
Tema, Ghana
Certification Audit
Summary Audit Report

Submitted to:
International Cyanide Management Institute
(ICMI)
888 16th Street, NW - Suite 303
Washington, DC  20006
UNITED STATES OF AMERICA

Allship Logistics Limited
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Heavy Industrial Area, Opposite Tema Lube Oil
P.O. Box BT 582, Tema
GHANA

Report Number: 097643433 002 R Rev0
Distribution:
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## Record of Issue

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<td>Terrance Schultz</td>
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1.0 SUMMARY AUDIT REPORT FOR CYANIDE TRANSPORTATION OPERATIONS

Name of Transportation Facility: Allships Logistics Limited.
Name of Facility Owner: Allships Logistics Limited.
Name of Facility Operator: Allships Logistics Limited.
Name of Responsible Manager: Terrance Schultz, General Manager, Allships Logistics Limited.
Address: Allship Logistics Limited
Head Office (Tema)
Heavy Industrial Area, Opposite Tema Lube Oil
P.O. Box BT 582, Tema
GHANA
State/Province: Tema
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E-Mail: TSchultz@all-ship.com

2.0 LOCATION DETAIL AND DESCRIPTION OF OPERATION:

2.1 Background

2.1.1 Allship Logistics Limited

Allship is a wholly owned Ghanaian entity that was established in 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 industrialised sectors, government organisations as well as private organisations.

Allship 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 and a 0.5 hectare warehouse facility at its branch office in Takoradi.

Allship Logistics Limited is a Network Partner with UTi, a worldwide Freight Forwarding and Logistics Company operating a network of over 400 offices in one hundred and twenty-eight (128) countries worldwide.

2.1.2 Sodium Cyanide Transportation

At the time of the audit, Allship were not actively engaged in the transportation of cyanide to a mine site but were planning to transport cyanide manufactured by Taekwang Industrial Co. Ltd (Taekwang):

- Goldfields Tarkwa Mine.

Taekwang package solid cyanide into in intermediate bulk containers (IBCs), which are in turn packed into a freight (shipping) container to be transported by sea to the Ports of Tema and Takoradi, Ghana. A maximum of 20 IBCs are packed into a freight container with a maximum gross weight of 28 tonnes.

Prior to the arrival in Ghana, Allship plan to ensure that the shipping documentation is in order and the goods are cleared to allow prompt handling of the product through the Port. Upon arrival at the Port, the off loading of all containers will be performed by the Port. Allship will collect the containers and transport the containers to Goldfields Tarkwa Mine.
2.1.3 Transit Storage

Within the scope of this audit, there are no proposed trans-shipping depots or interim storage sites, as defined in the audit protocol. Storage in transit will occur at the Ports of Tema and Takoradi while formalities such as customs clearance are performed. Once formalities are complete, the cyanide containers will be collected and transported to Goldfields Tarkwa Mine.

Allship do not propose to store or remove cyanide from the trucks or containers prior to unloading at customer mine sites.
SUMMARY AUDIT REPORT
AUDITORS FINDINGS

☑ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

Allships Logistics is: The International Cyanide Management Code

Audit Company: Golder Associates
Audit Team Leader: Edward Clerk, CEnvP (112), RABQSA (020778)
Email: eclerk@golder.com.au

Name and Signatures of Other Auditors:

<table>
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<th>Name</th>
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<tr>
<td>Edward Clerk</td>
<td>Lead Auditor and Technical Specialist</td>
<td>[Signature]</td>
<td>17 February 2010</td>
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Dates of Audit:
The Certification Audit was undertaken within three days (three person-days) between 26 and 28 January 2010.

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 Verification Protocol for Cyanide Transportation Operations and using standard and accepted practices for health, safety and environmental audits.

Allships Logistics limited  [Signature]  17 February 2010
Name of Facility  Signature of Lead Auditor  Date
PRINCIPLE 1 – TRANSPORT

Transport Cyanide in a manner that minimises the potential for accidents and releases.

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

- in full compliance with
- in substantial compliance with
- not in compliance with

The operation is

Summarise the basis for this Finding/Deficiencies Identified:

Allship logistics Limited (Allship) is in FULL COMPLIANCE with Transport Practice 1.1 requiring cyanide transport routes to be selected to minimise the potential for accidents and releases.

Allship has developed and implemented a Route Selection and Review Procedure to guide the selection of transport routes to minimise the potential for accidents and releases or the potential impacts of accidents and releases. The procedure prompts the persons undertaking the survey to consider a number of hazards including population density, infrastructure construction and condition, pitch and grade and prevalence and proximity of water bodies and fog.

Hazards identified during the route assessment and selection process are risk assessed using the method outlined in the Route Selection and Review Procedure. Once assessed, the Route Selection and Review Procedure then guides the development of prevention and/or protective measures which mitigate risks. The Route Selection and Review Procedure requires the resulting management measures to be documented within a transport management plan (TMP). Allship has developed a TMP for all proposed routes to cyanide transport customers.

Allship has a process for providing feedback on route conditions during the journey and after each convoy. Prior to departure for both the delivery and return trip a Journey Plan is prepared. Upon returning, the Convoy Leader and Drivers discuss the journey and complete the Journey Feedback Form. In addition to this feedback process, the Convoy Leader can provide updates to drivers of hazards as necessary along the route.

Allship seeks input from stakeholders and applicable governmental agencies as necessary in the selection of routes and development of risk management measures. The Route Selection and Review procedure requires the TMP to be issued to the stakeholders for comment.

In addition to convoys as a means of managing the risks of the road conditions and responding to emergencies, security measures are implemented including the use of locked and sealed containers, and constant monitoring of the progress of the convoy along the route using a GPS tracking system.

Allship has advised external responders, medical facilities of their roles during an emergency response. The Route Selection and Review procedure requires the TMP to be issued to the stakeholders for comment.

Allship does not subcontract any of its cyanide transport operations within the scope of this audit.

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.

- in full compliance with
The operation is [ ] in substantial compliance with  Transport Practice 1.2
[ ] not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

Allship is in FULL COMPLIANCE with Standard of Practice 1.2 requiring that personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.

Allship uses dedicated drivers that have appropriate training and vehicle licences to transport cyanide. The Allship Transport Officer maintains a file detailing the licence details of all company drivers and this is checked monthly. The Ghanaian Police also carry out checks of licenses along the route and drivers would be subject to fines or other penalties if not appropriately licensed.

There is no requirement in Ghana for drivers to be licensed for dangerous goods transport.

Allship has developed and implemented a training scheme for its drivers and escort personnel who are specifically required to undertake the following training that minimises the potential for cyanide releases and exposures:

- Defensive driver training;
- Cyanide awareness including emergency response scenarios;
- Convoy management; and
- Emergency response scenario training (mock drills).

Convoy escort personnel are also trained in basic fire fighting and evacuation training, and cyanide emergency response.

Planned pre-start training and licence checks provide reassurance that untrained drivers will not be used to transport cyanide.

Allship does not subcontract any of its cyanide transport operations within the scope of this audit.

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

☒ in full compliance with

The operation is [ ] in substantial compliance with  Transport Practice 1.3
[ ] not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

Allship is in FULL COMPLIANCE with Standard of Practice 1.3 requiring that transport equipment is suitable for cyanide shipment.

Allship only uses equipment designed and maintained to operate within the cyanide loads it will be handling. Allship has designated cyanide transport vehicles comprising six four-axel articulated vehicles with flatbed trailers and four six-axel articulated vehicles with low profile trailers.

The selection of trucks and trailers is done in consultation with the cyanide supplier.

Allship has implemented a maintenance program that is based on 10,000 km intervals as well as a defect report program. In addition to the workshop maintenance, the Convoy Leader and Drivers conduct an
inspection of all prime movers and trailers prior to departure. The inspections include checks on the structural integrity of the prime mover and trailer.

Allship have developed an Axle Load Procedure requiring all Allship trucks to be weighed to prevent overloading of the transport vehicle being used for handling cyanide. This is implemented at the Ports of Takoradi and Tema where all vehicles entering and leaving the Port are weighed by Ghana Highways Authority at a permanent weigh station. The weighbridge tickets are signed by both the Ghana Highways Authority representative and the Allship’s Driver.

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

☑ in full compliance with

The operation is ☐ in substantial compliance with ☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

Allship is in FULL COMPLIANCE with Standard of Practice 1.4 requiring the operation develop and implement a safety program for transport of cyanide.

Allship has procedures to ensure that the cyanide is transported in a manner that maintains the integrity of the producer’s packaging. These comprise checks at the port, route and checks and the mine site prior to unloading.

Allship will transport cyanide for Code certified cyanide producers, who have systems in place to ensure their containers are labelled in accordance with the International Maritime Dangerous Goods (IMDG) Code and as required by local regulations or international standards. As a control measure, the cyanide will be trucked in convoy under the escort of persons who have received training in cyanide emergency response and placarding through the Cyanide Awareness Course.

Allship has implemented a safety program for cyanide transport that includes:

- Vehicle inspections;
- Preventative maintenance;
- Limitations on operator or drivers’ hours;
- Procedures to prevent loads from shifting;
- Procedures to modify or suspend transport if conditions such as severe weather or civil unrest are encountered; and
- Drug abuse prevention.

Allship does not subcontract any of its cyanide transport operations within the scope of this audit.

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

☑ in full compliance with

The operation is ☐ in substantial compliance with ☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:
Standard of Practice 1.5 requiring the operation to follow international standards for transportation of cyanide by sea and air is NOT APPLICABLE to Allship.

Allship does not transport consignments of cyanide by sea or air within the scope of this audit. Consignments of cyanide proposed to be transported by Allship will arrive in Ghana via the Ports of Takoradi and Tema from Taekwang who is a Code certified cyanide producer. As such, Taekwang has systems in place to ensure its containers are labelled in accordance with the International Maritime Dangerous Goods (IMDG) Code and as required by local regulations or international standards.

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

☑ in full compliance with
☐ in substantial compliance with
☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

Allship is in FULL COMPLIANCE with Standard of Practice 1.6 requiring the operation track cyanide shipments to prevent losses during transport.

All vehicles have communications systems that include cell phones and a GPS tracking system.

The trucks in convoy maintain visibility of the truck behind and in front and communication between the Escort Vehicle and trucks is via cell phone. Communication between Allships and the mining operation is via the Fleet Manager at the Tema Depot for delays including vehicle breakdown and fires. The Convoy Manager will contact the mining operation in the event of an accident. These details are summarised in the Emergency Communication Procedure flowchart located in each convoy vehicle. Communication between Allships and the supplier is via the Allship Logistics Manager at the Tema Depot.

A MSDS, emergency contact flow chart and emergency contact details are detailed on laminated cards kept in each vehicle.

Communication equipment is tested as part of a pre-start check to ensure it functions properly. The GPS tracking system signal is used continuously and is transmitted from each truck throughout the trip.

The Allship Route Selection and Review Procedure requires an assessment of communication blackout areas as part of the route selection and route survey process. The cell phones issued to Drivers are post paid to the MTN service provider which has 100% coverage between Tema and the Tarkwa Goldfields Mine Site.

The GPS tracking system and Journey Plan is used to track the progress of cyanide shipments.

Allship have implemented inventory controls and/or chain of custody documentation to prevent loss of cyanide during shipment when it commences cyanide transportation activities. After the inspection of the containers at the Port, a Way-Bill is created by Allship for each container. The Way-Bill is signed by the Allship Delivery Clerk, Driver and Goldfields Ghana Limited representative upon receipt. Upon signing, the Goldfields Ghana Limited representative is acknowledging that the consignment was received in good condition and unopened.

Allship Shipping maintains records that would indicate the amount of cyanide in transit when it commences cyanide transportation activities. Material Safety Data Sheets are also available during transport.

Allship does not subcontract any of its cyanide transport operations within the scope of this audit.
PRINCIPLE 2 – INTERIM STORAGE
Design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent release and exposures.

Transport Practice 2.1: Store cyanide in a manner that minimises the potential for accidental releases.
☑ in full compliance with

☐ in substantial compliance with
☐ not in compliance with

Transport Practice 2.1

Summarise the basis for this Finding/Deficiencies Identified:

Standard of Practice 2.1 requiring transporters design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent release and exposures is NOT APPLICABLE to Allship.

Within the scope of this audit, there are no trans-shipping depots or interim storage sites, as defined in the audit protocol. Storage may occur at the Ports of Takoradi and Tema while formalities such as customs clearance and carrier releases are performed. Once formalities are complete, it is proposed that the cyanide containers are collected from the Ports of Takoradi and Tema and taken in convoy to the mine site. At no stage is cyanide removed from the trucks or containers prior to unloading at customer mine sites.

PRINCIPLE 3 – EMERGENCY RESPONSE
Protect communities and the environment through the development of emergency response strategies and capabilities

Transport Practice 3.1: Prepare detailed Emergency Response Plans for potential cyanide releases.
☑ in full compliance with

☐ in substantial compliance with
☐ not in compliance with

Transport Practice 3.1

Summarise the basis for this Finding/Deficiencies Identified:

Allship is in FULL COMPLIANCE with Standard of Practice 3.1 requiring the operation prepare detailed Emergency Response Plans for potential cyanide releases.

Allship has developed detailed documents to cover emergency response for potential cyanide releases for cyanide transportation. The information is contained within an Emergency Response Plan and route specific TMP.

The Route Selection and Review Procedure requires an assessment of potential emergency scenarios as part of the route and risk assessment process. The identification of credible scenarios are then addressed within the Emergency Response Plan. The scenarios are appropriate for the selected route and they consider the physical and chemical nature of cyanide as well as the method of transport, design of the transport vehicles and transport infrastructure.

The Emergency Response Plan includes descriptions of response actions, as appropriate for the anticipated emergency situation.
The Emergency Response Plan contains three emergency response guides to be followed in the event of an incident involving cyanide:

- Handling Wet Sodium Cyanide
- Sodium Spill to Waterway
- Roll-over of Shipping Container

The Emergency Response Plan identifies the roles of outside responders and medical facilities in the even of an emergency. The descriptions are consistent for the anticipated emergency situation.

Storage facility emergency response plans were not developed, as cyanide is not stored at an interim storage facility between the Ports of Tema and Takoradi and the mine site destinations.

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

- in full compliance with  
- in substantial compliance with  
- not in compliance with

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

Allship is in FULL COMPLIANCE with Standard of Practice 3.2 requiring they designate appropriate response personnel and commit necessary resources for emergency response.

Allship has developed and implemented a training scheme for its Drivers and Escorts. Drivers and Escort Personnel receive the following training:

- Defensive driver training;
- Cyanide awareness including emergency response scenarios;
- Convoy management; and
- Emergency response scenario training (mock drills).

Convoy escort personnel are also trained in basic fire fighting and evacuation training, and cyanide emergency response.

Planned pre-start training and licence checks provide reassurance that untrained drivers will not be used to transport cyanide.

The training matrix has scheduled the training annually and detailed that the following Mock Drills are planned for 2010:

- Rollover with out spill;  
- Rollover with spill; and
- Cyanide Spill to Waterway.

Descriptions of the specific emergency response duties and responsibilities for personnel are detailed within the Emergency Response Plan.
Allship maintains a list of all of the emergency response equipment that should be available during the transport route. The equipment is checked prior to departure.

Allship does not subcontract any of its cyanide transport operations within the scope of this audit.

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

- in full compliance with

The operation is
- in substantial compliance with
- not in compliance with

Transport Practice 3.3

Summarise the basis for this Finding/Deficiencies Identified:

Allship is in FULL COMPLIANCE with Standard of Practice 3.3 requiring that they develop procedures for internal and external emergency notification and reporting.

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

The emergency contact flow chart and emergency contact details are also detailed on laminated cards and kept in each vehicle.

The TMP requires the Emergency Response Plan and TMP to be reviewed following incidents and following the completion of the journey and driver debriefing where necessary. This includes reviewing internal and external emergency notification and reporting procedures.

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

- in full compliance with

The operation is
- in substantial compliance with
- not in compliance with

Transport Practice 3.4

Summarise the basis for this Finding/Deficiencies Identified:

Allship is in FULL COMPLIANCE with Standard of Practice 3.4 requiring that they develop procedures for remediation of releases that recognise the additional hazards of cyanide treatment.

Allship has procedures for remediation, such as recovery or neutralisation of solutions or solids, decontamination of soils or other contaminated media and management and/or disposal of spill clean-up debris.

Allship has a procedure for remediation, such as recovery or neutralisation of solutions or solids, decontamination of soils or other contaminated media and management and/or disposal of spill clean-up debris. The procedure is contained in the Emergency Responses Plan.

A copy of the Emergency Response Plan is kept in each of the convoy trucks and in the escort vehicle.

Allship prohibits the use of chemicals such as sodium hypochlorite, ferrous sulphate and hydrogen peroxide to treat cyanide that has been released into surface water.

This is communicated to Drivers and the Escort team personnel in the annual Cyanide Awareness Training.
Transport Practice 3.5: Periodically evaluate response procedures and capabilities and revise them as needed.

☒ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

Transport Practice 3.5

Summarise the basis for this Finding/Deficiencies Identified:

Allship is in FULL COMPLIANCE with Standard of Practice 3.5 requiring the operation periodically evaluate response procedures and capabilities and revise them as needed.

The Transport Management Plan contains provisions for periodically reviewing and evaluating the Plan’s adequacy and ensuring they are being implemented.

The TMP requires the Emergency Response Plan and TMP to be reviewed following incidents and following the completion of the journey and driver debriefing where necessary.

Allship has provisions for periodically conducting mock emergency drills and they are being implemented.

Allship has a procedure to evaluate the Emergency Response Plan after its implementation and revise it as needed. This has not yet occurred as Allship had not commenced cyanide transportation and had not had a cyanide accident or incident at the time of the audit.
Report Signature Page

GOLDER ASSOCIATES PTY LTD

Edward Clerk
ICMI Lead Auditor and Transport Specialist
Associate and Manager Mining Environmental Services Group

EWC/ST/ced

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APPENDIX A

Limitations
At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.