

February 2010

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 Head Office (Tema) Heavy Industrial Area, Opposite Tema Lube Oil P.O. Box BT 582, Tema GHANA

REPORT

Report Number: 097643433 002 R Rev0

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Record of Issue

Company	Client Contact	Version	Date Issued	Method of Delivery
ICMI	Norm Greenwald	097643433 002 R Rev 0	16 March 2010	Electronic and Hard Copies
Allship Logistics Limited	Terrance Schultz	097643433 002 R Rev 0	16 March 2010	Electronic and Hard Copies



February 2010 Report No. 097643433 002 R Rev0



1.0 SUMMARY AUDIT REPORT FOR CYANIDE TRANSPORTATION OPERATIONS

Name of Transportation Facility:

Name of Facility Owner:

Allships Logistics Limited.

Allships Logistics Limited.

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

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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	
Allships Logistics is:	in substantial compliance with	The International Cyanide Management Code
	not in compliance with	00.00
Audit Company:	Golder Associates	
Audit Team Leader:	Edward Clerk, CEnvP (1	12), RABQSA (020778)
Email:	eclerk@golder.com.au	

Name and Signatures of Other Auditors:

Name	Position	Signature	Date
Edward Clerk	Lead Auditor and Technical Specialist	l. lhl	17 February 2010

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

17 February 2010

Signature of Lead Auditor

Date



Name of Facility



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 minimand releases.	nise the potential for accidents
	☑ in full compliance with	
The operation is	in substantial compliance with	Transport Practice 1.1
	not in compliance with	

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

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The operation is	in substantial compliance with	Transport Practice 1.2
	not in compliance with	
Summarise the basis fo	r this Finding/Deficiencies Identified:	
	LIANCE with Standard of Practice 1.2 requipment can perform their jobs with minim	
Allship Transport Officer r checked monthly. The G	ivers that have appropriate training and velocations a file detailing the licence details hanaian Police also carry out checks of lice or penalties if not appropriately licensed.	of all company drivers and this is
There is no requirement in	n Ghana for drivers to be licensed for dang	gerous goods transport.
	d implemented a training scheme for its dri dertake the following training that minimise	•
 Defensive driver trai 	ning;	
Cyanide awareness	including emergency response scenarios;	
Convoy managemer	nt; and	
Emergency respons	e scenario training (mock drills).	
Convoy escort personnel emergency response.	are also trained in basic fire fighting and e	vacuation training, and cyanide
Planned pre-start training transport cyanide.	and licence checks provide reassurance t	hat untrained drivers will not be used to
Allship does not subcontr	act any of its cyanide transport operations	within the scope of this audit.
Transport Practice 1.3:	Ensure that transport equipment is s	suitable for the cyanide shipment.
	oxtimes in full compliance with	
The operation is	in substantial compliance with	Transport Practice 1.3
	not in compliance with	
Summarise the basis fo	r this Finding/Deficiencies Identified:	
Allship is in FULL COMPI	IANCE with Standard of Practice 1.3 requ	iring that transport equipment is suitable

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

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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.

Authority representative and	u tile Alistilp's Driver.		
Transport Practice 1.4:	Develop and implement a safety program for transport of cyanide.		
	$oxed{\boxtimes}$ in full compliance with		
The operation is	in substantial compliance with	Transport Practice 1.4	
	not in compliance with		
Summarise the basis for t	this Finding/Deficiencies Identified:		
Allship is in FULL COMPLIA implement a safety progran	ANCE with Standard of Practice 1.4 requestrians of cyanide.	iiring the operation develop and	
	ensure that the cyanide is transported in a These comprise checks at the port, route		
containers are labelled in a required by local regulation	ccordance with the International Maritime s or international standards. As a contro persons who have received training in c	who have systems in place to ensure their e Dangerous Goods (IMDG) Code and as of measure, the cyanide will be trucked in yanide emergency response and	
Allship has implemented a	safety program for cyanide transport that	t includes:	
Vehicle inspections;			
Preventative maintena	ance;		
Limitations on operato	or or drivers' hours;		
Procedures to prevent	t loads from shifting;		
Procedures to modify encountered; and	or suspend transport if conditions such a	s severe weather or civil unrest are	
Drug abuse prevention	n.		
Allship does not subcontrac	ct any of its cyanide transport operations	within the scope of this audit.	
Transport Practice 1.5:	Follow international standards for air.	transportation of cyanide by sea and	
	$oxed{\boxtimes}$ in full compliance with		
The operation is	in substantial compliance with	Transport Practice 1.5	
	not in compliance with		
Summarise the basis for	this Finding/Deficiencies Identified:		

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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.		
	oxtimes in full compliance with		
The operation is	in substantial compliance with	Transport Practice 1.6	
	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.

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PRINCIPLE 2 - INTERIM STORAGE

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

sites to prevent releas	se and exposure	s.				
Transport Practice 2.1:	Store cyanide in releases.	a manner th	at minimis	es the poter	ntial for ac	cidental:
	⊠ in full complian	ce with				
The operation is	in substantial co	mpliance with		Transport Pr	actice 2.1	
	not in complianc	e with				
Summarise the basis for the	nis Finding/Deficier	ncies Identifie	d:			
Standard of Practice 2.1 req and interim storage sites to						depots
Within the scope of this audit audit protocol. Storage may clearance and carrier releas containers are collected from stage is cyanide removed from	occur at the Ports of es are performed. Conthe Ports of Takora	f Takoradi and Ince formalities Idi and Tema a	Tema while are comple and taken in	formalities su ete, it is propo- convoy to the	uch as custo sed that the mine site.	oms cyanide
PRINCIPLE 3 – EM	ERGENCY RE	SPONSE				
Protect communities a response strategies a		ment throug	jh the dev	/elopment	of emerg	ency
Transport Practice 3.1:	Prepare detailed releases.	Emergency	Response	Plans for	potential	cyanide
	⊠ in full complian	ce with				
The operation is	in substantial co	mpliance with	•	Transport Pr	actice 3.1	
	not in complianc	e with				
Summarise the basis for the	nis Finding/Deficier	ncies Identifie	d:			
Allship is in FULL COMPLIA Emergency Response Plans			requiring the	e operation pr	epare detai	led
Allship has developed detail cyanide transportation. The TMP.						
The Route Selection and Repart of the route and risk asswithin the Emergency Responsible the physical and characteristics and transport vehicles and transport	sessment process. Tonse Plan. The scenemical nature of cya	he identification arios are appro	on of credible opriate for the	e scenarios ar ne selected ro	re then addroute and they	ressed y
The Emergency Response Femergency situation.	Plan includes descrip	tions of respor	nse actions,	as appropriat	e for the ant	ticipated

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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 presources for emergency response.	personnel and commit necessary
	oxtimes in full compliance with	
The operation is	in substantial compliance with	Transport Practice 3.2
	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.

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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 extereporting.	ernal emergency notification and
	⊠ in full compliance with	
The operation is	in substantial compliance with	Transport Practice 3.3
	not in compliance with	
Summarise the basis for t	his Finding/Deficiencies Identified:	
•	NNCE with Standard of Practice 3.3 requiring the ency notification and reporting.	nat they develop procedures for
	Plan contains procedures and current contact nee, outside response providers, and medical	, ,
The emergency contact flow kept in each vehicle.	v chart and emergency contact details are also	detailed on laminated cards and
the completion of the journe	gency Response Plan and TMP to be reviewe y and driver debriefing where necessary. This tion and reporting procedures.	
Transport Practice 3.4:	Develop procedures for remediation of additional hazards of cyanide treatment.	of releases that recognise the
	⊠ in full compliance with	
The operation is	in substantial compliance with	Transport Practice 3.4
	not in compliance with	
Summarise the basis for t	his Finding/Deficiencies Identified:	
•	NCE with Standard of Practice 3.4 requiring the recognise the additional hazards of cyanide to	
	emediation, such as recovery or neutralisation other contaminated media and management a	
	remediation, such as recovery or neutralisation other contaminated media and management a	

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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

This is communicated to Drivers and the Escort team personnel in the annual Cyanide Awareness Training.

debris. The procedure is contained in the Emergency Reponses Plan.

to treat cyanide that has been released into surface water.

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Transport Practice 3.5:	Periodically evaluate response pro them as needed.	cedures and capabilities and revise
	oxtimes in full compliance with	
The operation is	in substantial compliance with	Transport Practice 3.5
	☐ not in compliance with	
Commence the besid for	this Finding/Deficionaica Identified.	

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.

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Report Signature Page

GOLDER ASSOCIATES PTY LTD

Edward Clerk

l.lhl

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

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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.

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