

Freight Forwarders Kenya Ltd, Mombasa, Kenya

Submitted to:

International Cyanide Management Institute (ICMI) 888 16th Street NW-Suite 303 Washington, DC 20006 United States of America Freight Forwarders Kenya Ltd Leslander House Shimanzi PO Box 90682 Mombasa 80100 Kenya

REPORT



Report Number.

11514150025.502/B.2

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1.0 SUMMARY AUDIT REPORT FOR TRANSPORTATION

Name of Cyanide Transportation Facility:

Freight Forwarders Kenya (FFK)

Name of Facility Owner:

Freight Forwarders Kenya Ltd

Name of Facility Operator:

Freight Forwarders Kenya Ltd

Name of Responsible Manager:

Hafiz Noormohamed, General Manager FFK Ltd

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2.0 LOCATION DETAIL AND DESCRIPTION OF OPERATION

2.1 Freight Forwarders Kenya Ltd

Freight Forwarders Kenya (FFK) Ltd was incorporated in 1973 following the amalgamation of three clearing and forwarding agents namely Kenya General Agency Ltd, Reynolds and Co Ltd and Wafco Ltd.

FFK became a Signatory to the Code in November 2007 and was certified as being fully compliant with the Code on 27 May 2008.

FFK is a member of the Kenya International Clearing, Forwarding and Warehousing Association and was a founder member of the Association's predecessor, the Kenya Clearing, Forwarding and Warehousing Association.

With over 30 years of experience, FFK has developed a network of subsidiaries and agents enabling the organisation to offer the following range of Clearing, Forwarding and Logistics services:

- Customs clearance;
- Marine services;
- Warehousing.
- Transportation;
- Procurement services;
- Communications; and
- Transportation.

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FFK has a close working relationship with Freight Forwarders Tanzania Limited (FFT) and both are part of Freight Forwarders Group (FFG).

Solid sodium cyanide transported by FFK is manufactured by Orica Australia Limited (Orica) and packaged in heavy duty plastic bags inside nylon bulk bags which are packaged into UN approved wooden boxes within 20 foot shipping containers. At the time of the audit, FFK delivered to one client site within Tanzania.

2.2 Freight Forwarders Group Ltd

The Freight Forwarders Group is a well established clearing, forwarding and logistics organisation that traces its roots back to 1932, making it one of the oldest Logistics firms in East Africa. The Group has developed and sustained a wide variety of logistics-related infrastructure in the region and has maintained a market leading presence for several decades. The Group includes the following entities:

- Freight Forwarders Kenya (FFK) Ltd;
- Freight Forwarders Tanzania (FFT) Ltd;
- Freight Forwarders East Africa Ltd;
- Transeast Uganda Ltd;
- Transeast Ltd;
- Multiport International Ltd;
- Allied Wharfage Ltd (AWL);
- Easytrans Ltd;
- Mainline Carriers Ltd (MCL); and
- Minetec Tanzania Ltd.

2.3 Allied Wharfage Ltd

Allied Wharfage Ltd (AWL) was formed in 1990 to provide warehousing and related services. AWL's interim storage facility is located off Magongo Road in the Changamwe district of Mombasa approximately seven kilometres (km) to the northwest of the Port of Mombasa and 11 km to the northwest of the city of Mombasa at coordinates -4.009887 +39.601057. The interim storage facility is close to the main Nairobi highway and Moi International airport. The facility covers an area of 7972 m² (1.97 acres) and is a roughly rectangular in shape with an entrance gate on the northern boundary. The interim storage facility holds bonded, transit and local cargos and is owned and managed by AWL, a wholly owned company of FFK.

Shipping containers containing cyanide are held in the interim storage facility while customs documents are obtained (as the cyanide shipments are delivered to North Mara mine, in Tanzania, the cargo is considered bonded cargo (tax free)). In addition, clearance has to be given from the mine that the last section of road is in good order as this section of road can be affected by heavy rains. Therefore the shipments can be held in AWL's facility for up to two weeks. The shipping containers are never opened and the cyanide is not repackaged in any way. There was no cyanide present at the time of the audit.

The cyanide containers are handled by a Terex reach stacker. Clearing and forwarding services for AWL are undertaken by its principal company FFK, while transportation is undertaken by its group associated company, Transeast Ltd.

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2.4 **Transeast Ltd**

Transeast Ltd (Transeast) is located immediately to the west of AWL's interim storage facility and shares the same access road. The entrance gate is on the northern boundary. The company specialises in the transport of regular containerised cargo, bulk cargo, out of gauge cargo and Dangerous Goods within the East and Central African region. Transeast is a subsidiary of FFK who is also its key customer.

Transeast transport all cyanide for FFK. They utilise a fleet of well maintained trucks with assorted trailers to move cargo from the Port of Mombasa to its various client destinations.

Table 1: Mine delivered to by FFK

Client	Mine	Supplier	Distance (km)	Travel time (days)
African Barrick Gold	North Mara Mine	Orica	1,079	5 (2 days at border)

Cyanide is transported from AWL's interim storage facility along the Mombasa to Nairobi highway and through the Isebania border point into Tanzania. From the border, the cyanide is transported to the mine customer for offloading.

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SUMMARY AUDIT REPORT Auditors Findings

		with	
Freight Forwarders Kenya is	: ☐ in substantial comp	liance with	The International Cyanide Management Code
	not in compliance w	vith	
No significant cyanide inciden period.	its or cyanide exposure	e incidents w	ere noted as occurring during the audit
Audit Company:	Golder Associates		
Audit Team Leader:	Sophie Wheeler, Lead	Auditor	
Email:	swheeler@golder.com		
Name of Other Audit	ors		
Auditor, Position		Signature	
Dale Haigh, Transportation Ted	chnical Specialist		Dale Hong L

Dates of Audit

The Recertification Transport Audit was undertaken within three days (three person-days) between 19 May and 21 May 2011.

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.

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Name of Facility

Signature of Lead Auditor

Date

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Signature of Lead Auditor





PRINCIPLE 1 – TRANSPORT

Transport Cyanide in a Manner that Minimizes the Potential for Accidents and Releases

Transport Practice 1.1:	Select cyanide routes to minimize the potential for accidents and releases				
	⊠ in full com	pliance with			
The operation is	in substant	ial compliance with	Transport Practice 1.1		
	not in comp	oliance with			
Summarise the basis for t	his Finding/De	ficiencies Identified:			
	ential for accide		d a procedure for transport route vironment where there are limited		
actions were identified and report on conditions during	l implemented t each trip. FFK,	o improve safety during this its clients and suppliers have	r risks and restrictions. Numerous process. Drivers also assess and consulted various stakeholders and development of cyanide		
	ditions). Each d		he risks along the route (e.g., traffic nicle and fitted with signs and flags		
			ency support (police and hospitals de and advised of their roles during		
Service Level Agreements.	The Service L		n storage of cyanide to AWL under nseast and AWL to comply with the or performance assessment.		
Transport Practice 1.2:		n perform their jobs with m	anide handling and transport inimum risk to communities and		
	⊠ in full com	pliance with			
The operation is	in substanti	al compliance with	Transport Practice 1.2		
	not in compliance with				
Summarise the basis for t	his Finding/Def	iciencies Identified:			
FFK through its subcontract within its Interim storage fac		uses trained and competent c	perators to drive its Reach Stacker		
FFK sub-contracts the driving competent operators to drive		ing cyanide to Transeast. Tr	anseast have only used trained and		
		heir drivers that contain copiens copies of the files on driver	es of licences (heavy vehicle drivers used by its subcontractors.		

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There is no requirement in Kenya and Tanzania for drivers to be licensed for dangerous goods transport. Kenya and Tanzania are both in the East African Community (EAC) where all members driving licences are accepted in each country. All personnel from FFK, Transeast and AWL operating cyanide handling and transport equipment have been trained to perform their jobs in a manner that minimises the potential for cyanide releases and exposures. The training of cyanide handling and transport equipment operators is coordinated by FFK.

Interviews with drivers at FFK, Transeast and AWL indicated that all FFK and subcontractor personnel operating cyanide handling and transport equipment are competent to perform their jobs in a manner that minimises the potential for cyanide releases and exposures.

FFK subcontracts the transport of cyanide to Transeast and the interim storage of cyanide to AWL under Service Level Agreements. The Service Level Agreements require Transeast and AWL to comply with the ICMC. FFK has developed an audit protocol to assist in the subcontractor performance assessment.

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:

FFK and its subcontractors Transeast and AWL only use equipment designed and maintained to operate with the design loads.

Transeast and its trailer suppliers (Nelion Trading Limited) have determined that the maximum trailer loading capacity for the trailers they use for cyanide loads is 45 tonnes. Orica supply cyanide containers of around 23 tonnes weight which is well within the capacity of the trailers. FFK with Transeast also ensure that each trailer only carries one load. The gross weight (trailer and load weight) allowed on Kenyan road is 48 tonnes and the loaded trailers are well below this limit.

FFK and its subcontractors have procedures in place to verify the adequacy of the equipment for the load it must bear and its fitness for purpose. FFK has performed daily vehicle checks during the convoys carried out between 2009 and 2011, and these are documented. Transeast also have routine maintenance schedules and ad hoc maintenance procedures that include checks for structural problems on the vehicles. Transeast and AWL maintain records of vehicle specifications and maintenance history.

FFK and its subcontractors have procedures in place to prevent overloading of the transport vehicles being used for handling cyanide. Transeast have sufficient vehicles of appropriate capacity to ensure that no other vehicles (without sufficient capacity) are used. The procedures and inspections carried out ensure that only one cyanide container is loaded and that no other freight is added to the vehicles.

FFK subcontracts the transport of cyanide to Transeast and the interim storage of cyanide to AWL under Service Level Agreements. The Service Level Agreements require Transeast and AWL to comply with the ICMC. FFK has developed an audit protocol to assist in the subcontractor performance assessment.

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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	Transport Practice 1.4				
	not in compliance with					
Summarise the basis for t	his Finding/Deficiencies Identified:					
that the cyanide is transpo	ractors Transeast and AWL, has implemente rted in a manner that maintains the integrity securely attached to the trailers using twistlook in place during the convoy.	of the packaging. These include				
These signs are attached to	n used by FFK to identify shipments as containing the lead vehicles and all cyanide containing neadlights are used. The signage is inspected ne convoy progresses.	vehicles. In addition, the vehicles				
carry the cyanide container with its subcontractors Tran preventive maintenance act ensure that driver hours are driver hours. Procedures twistlocks. Procedures are a	vehicles (trailers) that were purchased to a s. FFK has developed a Safety Program whaseast and AWL. This includes vehicle insperivities. Limitations on driver hours are also relimited each day, and through the use of the have also been followed to prevent loads also in place for modifying or suspending transditions and can take appropriate action.	nich is implemented in conjunction ections prior to each shipment and managed by Convoy Leaders who e GPS system which also monitors from shifting through the use of				
FFK and it sub-contractors a Safety Program.	also have a drug prevention policy. Records a	re maintained for all aspects of the				
Service Level Agreements.	port of cyanide to Transeast and the interim The Service Level Agreements require Trans an audit protocol to assist in the subcontractor	seast and AWL to comply with the				
Transport Practice 1.5:	Follow international standards for transpair.	ortation of cyanide by sea and				
	in full compliance with					
The operation is	in substantial compliance with	Transport Practice 1.5				
	not in compliance with					
Summarise the basis for th	nis Finding/Deficiencies Identified:					
FFK does not transport cyan	ide by sea or air and therefore this principle is	not applicable.				

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

FFK, through its sub-contractors Transeast and AWL has effective means of communication with their transport vehicles. Communication systems include GPS tracking which is used for all cyanide shipments; the use of long-range cell phones which are continuously on and satellite phones. All communication equipment is checked prior to the start of each convoy, during the convoy pre-checks and at various points each day.

Communication risk areas have not been identified in Kenya where total coverage is obtained through the use of cell phones, but a satellite phone is used to cover Tanzania.

FFK has systems to track the progress of cyanide shipments. FFK's subcontractors (Transeast) utilise a GPS system (which is continuously monitored) to track progress along the routes while FFK also log convoy movements using telephone text messaging, which are also recorded. All information is shared between the parties.

FFK has appropriate inventory controls and chain of custody documentation to prevent loss of cyanide during shipment. Vehicles are also weighed at weighbridge station along the route which verifies that no material is lost. All trucks carry a material safety datasheet for sodium cyanide in English.

FFK subcontracts the transport of cyanide to Transeast and the interim storage of cyanide to AWL under Service Level Agreements. The Service Level Agreements require Transeast and AWL to comply with the ICMC. FFK has developed an audit protocol to assist in the subcontractor performance assessment.

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PRINCIPLE 2 - INTERIM STORAGE

Design, Construct and Operate Cyanide Trans-shipping Depots and Interim Storage Sites to Prevent Releases and Exposures.

Store cyanide in a manner that releases.	minimizes the potential fo	r accidenta
⊠ in full compliance with		
in substantial compliance with	Interim Storage Practic	e 2.1
not in compliance with		
	releases. in full compliance with in substantial compliance with	 ☑ in full compliance with ☐ in substantial compliance with Interim Storage Practice

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in full compliance with Transport Practice 2.1; store cyanide in a manner that minimizes the potential for accidental releases.

The AWL interim storage facility is secured to prevent unauthorised access to cyanide, has appropriate warning signs (no smoking, eating and drinking, no naked flames and PPE requirements).

Incompatible materials such as acids, strong oxidisers and explosives are stored at a distance of more than 40 m from any cyanide held at the AWL interim storage facility.

Cyanide is stored within shipping containers that are designed to minimise the potential for contact of solid cyanide with water.

Cyanide stored with adequate ventilation to prevent build-up of hydrogen cyanide gas and the shipping containers are not opened while in storage and they are stored outside on a hardstand area.

Systems and resources are in place on the site to contain and remediate any spilled cyanide materials and minimise the extent of a release.

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PRINCIPLE 3 – EMERGENCY RESPONSE

Ensure that Process Controls are Protective of the Environment.

Emergency Response Practice 3.1:	Prepare releases.	detailed	emergency	response	plans	for	potential	cyanide
	oxtimes in full	complian	ce with					
The operation is	in sub	stantial cor	mpliance with	Emerg	ency R	espo	nse Practio	ce 3.1
	not in	compliance	e with					

Summarise the basis for this Finding/Deficiencies Identified:

FFG has developed and implemented an Emergency Response Guide (CPERG) which forms an appendix to its Emergency Management document. FFK utilises this procedure.

The CPERG has been adapted by FFG from the supplier Orica's Emergency Response Guide. The Orica Emergency Response Guide was developed by Orica Mining Chemicals to provide guidance in the development of specific site and transport route emergency response plans for the management of incidents involving spillage of Orica sodium cyanide product. The document has been modified by FFG to suit the conditions of Kenya and Tanzania.

The CPERG has been developed to be appropriate for the selected transportation routes and interim storage facility and considers the physical and chemical form of cyanide and the design of the transport vehicle.

The CPERG covers specific circumstances where it will be used. The document includes Emergency Response Guides for specific scenarios including:

- RG1 Dry Sodium Cyanide Spill inside interim storage facility;
- RG2 Dry Sodium Cyanide Spill outside interim storage facility;
- RG3 Dry Sodium Cyanide Spill inside a Shipping container;
- RG4 Shipping container Decontamination;
- RG5 Handling Wet Sodium Cyanide;
- RG6 Dry Sodium Cyanide Spill to a Waterway;
- RG7 Decontamination of a Spill of Solid Cyanide into Soil; and
- RG8 Response to an Incident with a Fire Involving Sodium Cyanide.

External responders identified in the documents are aware of their role in an emergency.

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Emergency Response Practice 3.2:	Designate appropriate response personnel and commit necessary resources for emergency response.						
	⊠ in full compliance with						
The operation is	in substantial compliance with Emergency Response Practice 3.2						
	not in compliance with						
Summarise the basis for t	his Finding/Deficiencies Identified:						
Health and Safety Officer	e the same training to their respective employees which is given by Transeast's . All drivers transporting cyanide, AWL facility operators including handling banksmen receive the Cyanide Awareness course and the drivers received the s course.						
The CPERG document ide following positions:	entifies the key roles and responsibilities in the event of an emergency for the						
Convoy Leader;							
Convoy Truck Driver;							
Escort Personnel;							
Record Keeper;							
 Communications Person 	on;						
Interim storage facility	Supervisor; and						
Interim storage facility	Worker.						
The requirements are clear	and unambiguous and are also covered in the training programmes.						
All emergency response equipment is taken in an Emergency Response vehicle as no other equipment is available en route. A list of emergency response equipment is documented on a checklist. The equipment is checked and tested before every convoy of vehicles leaves. The lists were viewed during the audit. It addition to the emergency response vehicles all drivers are issued with an 'escape' kit bag when the convocassembles that includes essential PPE and an MSDS for sodium cyanide.							
Emergency Response Practice 3.3:	Develop procedures for internal and external emergency notification and reporting.						
	☑ in full compliance with						
The operation is	in substantial compliance with Emergency Response Practice 3.3						
	not in compliance with						
Summarise the basis for the	nis Finding/Deficiencies Identified:						
Section 1 Emergency Call List and Section 6 Plan Activation of the Cyanide Procedures Emergency Response Guide contains details on how the emergency response procedures are activated including details of who is contacted. This includes emergency personnel, internal personnel, the shipper, the receiver and the regulatory authorities.							

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A desk exercise test of the contact numbers for the police, hospital and the KPA fire brigade was undertaken in 2010.

F	
Emergency Response Practice 3.4:	Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.
	☑ in full compliance with
The operation is	in substantial compliance with Emergency Response Practice 3.4
	not in compliance with
Summarise the basis for t	his Finding/Deficiencies Identified:
• •	Guide RG 7 within the CPERG details the decontamination of a Spill of Solid noludes details what to do if water is impacted.
contaminated soil and spilt	or disposal of cyanide contaminated soil and wash water. It states that material will be disposed of at a mine site heap leach facility/tailings facilities. or dealing with a dry spill and for dealing with a wet spill.
'Spill of Solid Cyanide into	Guide RG 7 within the CPERG details the requirements for decontamination of a Soil'. The document prohibits the use of chemicals ferrous sulphate, and Emergency Guide recommends the use of sodium hypochlorite for use in soil
Emergency Response Practice 3.5:	Periodically evaluate response procedures and capabilities and revise them as needed.
	☑ in full compliance with
The operation is	in substantial compliance with Emergency Response Practice 3.5
	not in compliance with
Cummaniae the besis for th	his Finding/Definionaine Identified.

Summarise the basis for this Finding/Deficiencies Identified:

The CPERG contains provisions for periodically reviewing and evaluating its adequacy and they are being implemented.

In addition to this the Review and Audit Process Section of the CPERG states that the responsible people are required to coordinate a review at least annually, and after any of the following resulting from or affected by the transportation of cyanide:

- Incidents;
- Emergencies;
- Emergency exercises; and
- Transportation audits and assessments.

In the last three years one drill has been undertaken. The drill took place at Maji ya Chumvi area about 35 km from Mombasa along the Mombasa – Nairobi highway. The drill report includes a corrective action section and has dates for implementation of the actions. Roger Lucheli, the Health and Safety officer, plans

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to have the CPERG updated as a result of the drill. FFK plan to undertake mock drills more frequently in the future and preferably at least one a year.

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GOLDER ASSOCIATES (UK) LTD

Sophie Wheeler

ICMI Lead Auditor/Project Manager

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l. lhl

Date: 17 August 2011

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