INTERNATIONAL CYANIDE MANAGEMENT CODE

Allship Logistics Limited, China Supply Chain Certification Audit, Summary Audit Report

Submitted to:
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Distribution:
1 Electronic Copy – Allship Logistics
1 Electronic Copy – Golder Associates Pty Ltd
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Important Information
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
   PO Box BT 582

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1.2 Audit Scope

The scope of the China Supply Chain covers the receipt and management of cyanide at the Port of Qingdao
in China, transport by the ocean carriers Mediterranean Shipping Company (MSC) and Maersk Shipping
Line (Maersk), and receipt and management at the Ports of Takoradi and Tema, Ghana.

This specifically includes:
- Oversight of the China Supply Chain by Allship.
- The Port of Qingdao in China.
- Marine transportation of solid cyanide from the Port of Qingdao to the Ports of Takoradi and Tema
  using MSC and Maersk.
- The Ports of Takoradi and Tema, Ghana.

1.3 Description of Operations

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 (ha) truck yard and 3.4 ha general warehouse facility at its Head office in Tema. It
also has a 0.8 ha truck yard and a 0.5 ha general warehouse facility at its branch office in Takoradi. Allship
has a cyanide warehouse in Dompin near Tarkwa in Ghana.

Allship Logistics Limited is a Network Partner with UTi, a worldwide Freight Forwarding and Logistics
Company operating a network of over 400 offices in 128 countries worldwide.
1.4 Road Transportation

1.5 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 (ha) truck yard and 3.4 ha warehouse facility at its Head office in Tema. It also has a 0.8 ha truck yard and a 0.5 ha warehouse facility at its branch office in Takoradi.

Allship Logistics Limited is a Network Partner with Röhlig-Grindrod (Pty) Ltd, which is an arfreight, seafreight and project logistics service provider situated in sub-Saharan Africa, operating internationally and into Africa.

1.5.1 Hebei Chengxin Co Ltd, China Production Facility

Allship transport cyanide manufactured by Hebei Chengxin Co Ltd, China, recertified as compliant with the Code on December 16, 2015. Hebei Chengxin Co Ltd was established in 1990. It is a joint-stock enterprise with 4000 employees. It is one of the largest production bases of cyanide and its derivatives in China. The company has been approved by the Quality Management System, Environmental Management System Occupational Health and Safety Management System, and Kosher.

Hebei Chengxin Transport Co Ltd was established in 2003 and certified as compliant with the code in October 2013. Hebei Chengxin Transport Co Ltd transport cyanide produced at Hebei Chengxin Co Ltd to the Port of Qingdao, China.

1.6 Marine Transportation

Allship contracts all marine transportation of solid sodium cyanide within the China Supply Chain to MSC and Maersk.

1.6.1 Mediterranean Shipping Company

MSC, headquartered in Geneva, Switzerland, is engaged in worldwide container transport. As of December 2013, MSC operates 443 container vessels with the capacity to handle the equivalent capacity of 2 228 200 twenty foot containers. MSC has set up dangerous goods cargo management centres that control the proper stowage of hazardous cargo worldwide through their MSC Link computer system headquartered in Antwerp. This hazardous cargo system is initiated when hazardous cargo is booked into the container booking MSC Link computer system.

All of MSC’s vessels are registered by the Lloyd’s Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. This registration is a requirement of the Australian Customs Act 1901.

1.6.2 Maersk Shipping Line

Maersk, headquartered in Copenhagen, Denmark, operates a fleet of containers vessels with worldwide shipping coverage. The fleet consists of approximately 590 container vessels with the capacity to handle more than three million 20 foot containers. Maersk operates a container booking and tracking system called the Global Customer Service System (GCSS). The system is also the management tool for handling the dangerous goods cargo for the proper control of the stowage of hazardous cargo.
Maersk’s vessels are registered by the Lloyd’s Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. Maersk also has current certificates for its vessels under the International Ship and Port Facility Security (ISPS) Code developed by the IMO.

1.7 Ports

1.7.1 Port of Qingdao, China

The Port of Qingdao is located between the Bohai Rim port region and the Yangtze River Delta port region and is an important hub for international trade and transportation in the West Pacific, maintaining shipping routes to over 700 ports in over 180 countries and regions around the world.

Qingdao Port International Co Ltd is the primary operator of the Port of Qingdao providing port-related services ranging from basic port services, such as stevedoring and storage services, to ancillary and extended services such as logistics services and financing-related services. In 2012, the cargo throughput of the Port of Qingdao exceeded 14 million twenty equivalent units (TEU).

The Port of Qingdao also serves as a container transhipment hub for ports in the Bohai Rim region, along the Yangtze River, as well as in Japan and South Korea.

1.7.2 Port of Takoradi, Ghana

The Port of Takoradi is the main ingress port in Ghana for industrial products entering Ghana. It is also the main transit port for industrial products entering both Mali and Burkina Faso. The Port of Takoradi is located 228 km west of Accra (the capital of Ghana).

The Ghana Ports and Harbour Authority is the controlling entity for all ports within Ghana.

1.7.3 Port of Tema, Ghana

The Port of Tema is officially the main port in Ghana. However, the majority of industrial cargo now transits the Port of Takoradi due to its proximity to the areas being developed within Ghana.

Tema city and port lies in south eastern Ghana along the Gulf of Guinea (Atlantic Ocean), 18 miles (29 km) east of Accra. Tema Port is the biggest of the two sea ports in Ghana. It has water-enclosed area of 1.7 million square metres and a total land area of 3.9 million square metres. The port's container yard is capable of holding over 8000 TEU’s at any given time. There are 290 reefer points available. A separate fishing harbour with cold-storage and marketing facilities is east of the lee breakwater.

The Ghana Ports and Harbour Authority is responsible for developing, managing and operating Port of Tema facilities.

1.8 Trans-shipping and Interim Storage

Allship does not directly operate trans-shipping and interim storage facilities within this supply chain.

Depending on weather, cargo types and other operational matters, shipping lines may trans-ship their cargo from one vessel to another. This involves unloading the cargo at a terminal facility, temporary set down and loading onto another vessel for the continuation of the delivery. Such trans-shipping may occur with Allship’s solid sodium cyanide. Allship has no control over when and where this happens, but through its due diligence assessments has satisfied itself that the shipping lines used undertake the shipping of its product in accordance with the International Dangerous Goods Code (IMO DG Code) and in a professional manner. This extends to the selection of terminals for trans-shipping.

Interim storage will occur at the Ports and these facilities are assessed through a due diligence process.
1.9 Auditors Findings and Attestation

- in full compliance with

Allship’s China Supply Chain is

- in substantial compliance with

The International Cyanide Management Code

- not in compliance with

Audit Company: Golder Associates Pty Ltd
Audit Team Leader: Edward Clerk – Exemplar Global (105995)
Email: eclerk@golder.com.au

Name and Signatures of Auditors:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Signature</th>
<th>Date</th>
</tr>
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<tbody>
<tr>
<td>Edward Clerk</td>
<td>Lead Auditor and Technical Specialist</td>
<td></td>
<td>16 November 2016</td>
</tr>
</tbody>
</table>

1.10 Dates of Audit

The Certification Audit of Allship’s China Supply Chain was undertaken over a period of three (3) weeks concluding on 27 June 2016.

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.
2.0 CONSIGNOR SUMMARY

2.1 Principle 1 – Transport

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

2.1.1 Transport Practice 1.1

Select cyanide transport routes to minimise the potential for accidents and releases.

☑ in full compliance with

The Supply Chain is ☐ in substantial compliance with Transport Practice 1.1

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

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 processes to guide the selection of transport routes to minimise the potential for accidents and releases, or the potential impacts of accidents and releases.

Routes are selected by Allship's CEO in consultation with the cyanide supplier, Allship's transport contractors and customers. Allship provides cyanide to end users in Ghana and selects ports to limit the distance and manage potential hazards for travel from Ghanaian ports to mine site end users. The Port of Takoradi is Allship’s preferred port for importation of cyanide due to its location in relation to end users; Port of Tema is used as an alternative port when Port of Takoradi is unavailable. Similarly, preference is given to Chinese ports closest to production facilities in China that are serviced by major shipping lines with routes to Ghana.

Allship is limited in the number of shipping lines with routes between ports in China and ports in Ghana. Of those available, Allship selects large shipping lines that are able to transport dangerous goods and are utilised in other ICMC certified Supply Chains.

Allship conducts annual due diligence reviews of shipping lines and port facilities to identify potential risks within the selected routes in accordance with the ICMC. Recent due diligence reviews indicate shipping lines and port facilities, with the exception of the Port of Qingdao, do not present special safety or security concerns.

Due to recent incidents, the due diligences recommended that Allship undertakes annual reviews of the Port of Qingdao to monitor management of dangerous goods.

MSC and Maersk

Allship takes into consideration the shipping services available to service the intended target area. Allship only operates in markets that are serviced by major international shipping companies with the ability to offer scheduled container services from the Chinese ports to the destination country or continent. Allship uses Maersk and MSC for its international shipping to Ghana due to their selection of services available from the Chinese Port.

Allship does not have control of the routes taken by the shipping lines contracted to transport sodium cyanide. In selecting a route, shipping lines must take into account factors such as tides, currents, winds, storms and load compatibilities. To account for this variability, Allship has undertaken due diligence reviews of Maersk and MSC to ensure that the shipments are in accordance with the IMO DG Code.
Ports of Qingdao, Takoradi and Tema

Due diligences of the ports were conducted by Allship and Golder (on behalf of Allship) in March and May 2016 respectively. Allship and Golder’s assessments concluded that the Ports meet the requirements of the ICMC and Allship.

Allship takes into consideration the shipping services available to service the intended target market, which include the quality of the ports. Allship only operates in markets that are serviced by major international shipping companies with the ability to offer scheduled container services from the Chinese Port to the selected destination port. These shipping companies also provide the correct manifest documentation to the destination port which provides them with a list of the cargo types and in the case of sodium cyanide and any other hazardous cargo the number and reference of the containers.

2.1.2 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

☐ 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 Transport Practice 1.2 requiring personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.

Allship does not employ transport drivers or directly operate transport vehicles in its China Supply Chain. There is no road transport of cyanide product in the China Supply Chain.

Allship conducts annual due diligence reviews of shipping lines and port facilities subcontracted as part of the China Supply Chain.

2.1.3 Transport Practice 1.3

Ensure that transport equipment is suitable for the cyanide shipment.

☑ in full compliance with

☐ 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 Transport Practice 1.3 requiring that transport equipment is suitable for the cyanide shipment.

Allship does not employ transport drivers or directly operate transport vehicles in its China Supply Chain. There is no road transport of cyanide product in the China Supply Chain.

Allship conducts annual due diligence reviews of shipping lines and port facilities subcontracted as part of the China Supply Chain.
2.1.4 Transport Practice 1.4
Develop and implement a safety program for transport of cyanide.

☑ in full compliance with

The Supply Chain is ☐ in substantial compliance with ☐ not in compliance with

Transport Practice 1.4

Summarise the basis for this Finding/Deficiencies Identified:
Allship is in FULL COMPLIANCE with Transport Practice 1.4 requiring the operation develop and implement a safety programme for transport of cyanide.

Allship does not employ transport drivers or directly operate transport vehicles in its China Supply Chain. There is no road transport of cyanide product in the China Supply Chain.

Allship conducts annual due diligence reviews of shipping lines and port facilities subcontracted as part of the China Supply Chain.

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

☑ in full compliance with

The Supply Chain is ☐ in substantial compliance with ☐ not in compliance with

Transport Practice 1.5

Summarise the basis for this Finding/Deficiencies Identified:
Allship is in FULL COMPLIANCE with Transport Practice 1.5 requiring the operation follow international standards for transportation of cyanide by sea and air.

Allship purchases consignments of cyanide from the Hebei Chengxin Co Ltd Code certified production facility in China. As such, this producer has systems in place to ensure its containers are labelled in accordance with the IMDG Code and as required by local regulations or international standards.

Consignments of cyanide are not transported by air within the scope of this audit.

MSC and Maersk
Due diligences of MSC and Maersk conducted by Allship indicated that the shipping companies transported cyanide in compliance with the Dangerous Goods Code of the International Maritime Organisation. The due diligences specifically referenced provisions of the Dangerous Goods Code that are required to be addressed under this question, namely:

MSC and Maersk operations personnel provide copies of emergency information together with the Dangerous Goods manifest (including stowage plan) and Packing Certificates for each hazardous cargo unit to be loaded at that port to the ship’s Master. This documentation ensures that adequate information is available in order to identify the correct stowage and separation of dangerous goods. This information then determines the placement and segregation of the container on the vessel and handling through trans-shipment ports, if applicable.
Ports of Qingdao, Takoradi and Tema

Due diligences conducted on each of the Ports by Allship indicated that the operations comply with the IMO DG Code.

2.1.6 Transport Practice 1.6

Track cyanide shipments to prevent losses during transport.

☒ in full compliance with

☐ in substantial compliance with  ☐ not in compliance with 

Transport Practice 1.6

Summarise the basis for this Finding/Deficiencies identified:

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

Allship does not employ transport drivers or directly operate transport vehicles in its China Supply Chain. There is no road transport of cyanide product in the China Supply Chain.

However, Allship maintains tracks the estimated time of arrival of shipments at Ghanaian ports so product is collected following customs clearance to reduce the time product is at port facilities.

Allship conducts annual due diligence reviews of shipping lines and port facilities subcontracted as part of the China Supply Chain.
2.2 Principle 2 – Interim Storage

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

2.2.1 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:

Allship is in FULL COMPLIANCE with Transport Practice 2.1 that requires transporters design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent release and exposures.

Allship does not directly operate trans-shipping and interim storage facilities within this supply chain. Trans-shipping and interim storage does, however occur along the supply chain and these aspects are assessed through the due diligence process.

MSC and Maersk

Depending on weather, cargo types and other operational matters, shipping lines may tranship their cargo from one vessel to another. This involves unloading the cargo at a terminal facility, temporary set down and loading onto another vessel for the continuation of the delivery. Such trans-shipping may occur within Allship’s China Supply Chain. Allship has no control over when and where this happens, but through its due diligence investigations has satisfied itself that the shipping lines used (MSC and Maersk) undertake the shipping of the product in accordance with the International Maritime Dangerous Goods Code (IMO DG Code) and in a professional manner. This extends to the selection of terminals for trans-shipping.

Ports of Qingdao, Takoradi and Tema

Due diligence reviews of the ports identified that storage in transit of product may occur in the China Supply Chain. The due diligence reviews recommended that, due to recent events and the paucity of data available on the Port of Qingdao, Allship undertakes annual reviews to monitor the management of dangerous goods at the port.
2.3 Principle 3 – Emergency Response

Protect communities and the environment through the development of emergency response strategies and capabilities.

2.3.1 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 Transport Practice 3.1 requiring the operation prepare detailed Emergency Response Plans for potential cyanide releases.

Allship does not employ transport drivers or directly operate transport vehicles in its China Supply Chain. There is no road transport of cyanide product in the China Supply Chain.

Allship requires transport companies to have an appropriate emergency response plan for handling any sodium cyanide incident that falls within their contractual responsibility.

MSC and Maersk

The review of due diligences for shipping lines utilised by Allship indicates that each has appropriate emergency response plans to deal with potential dangerous goods releases.

Both Maersk and MSC emergency response teams who are experts in handling dangerous cargo and dangerous situations in the event of an emergency and can be dispatched as required.

Ports of Qingdao, Takoradi and Tema

The review of due diligences for ports utilised by Allship indicates that each has appropriate emergency response plans to deal with potential dangerous goods releases.
2.3.2 Transport Practice 3.2
Designate appropriate response personnel and commit necessary resources for emergency response.

☑ in full compliance with

The Supply Chain is ☐ in substantial compliance with ☐ not in compliance with Transport Practice 3.2

Summarise the basis for this Finding/Deficiencies Identified:
Allship is in FULL COMPLIANCE with Transport Practice 3.2 requiring they designate appropriate response personnel and commit necessary resources for emergency response.

Allship does not employ transport drivers or directly operate transport vehicles in its China Supply Chain. There is no road transport of cyanide product in the China Supply Chain.

MSC and Maersk

The review of due diligences for shipping lines utilised by Allship indicates that each has appropriate emergency response plans to deal with potential dangerous goods releases.

Both Maersk and MSC emergency response teams who are experts in handling dangerous cargo and dangerous situations in the event of an emergency and can be dispatched as required.

Ports of Qingdao, Takoradi and Tema

The review of due diligences for ports utilised by Allship indicates that each has appropriate emergency response plans to deal with potential dangerous goods releases.

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

☑ in full compliance with

The Supply Chain 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 Transport Practice 3.3 requiring that they develop procedures for internal and external emergency notification and reporting.

Allship does not employ transport drivers or directly operate transport vehicles in its China Supply Chain. There is no road transport of cyanide product in the China Supply Chain.

Allship requires transport companies to have an appropriate emergency response plan for handling any sodium cyanide incident that falls within their contractual responsibility.

As part of the procedure to evaluate the risks of selected transport routes, Allship undertake annual due diligence reviews of shipping lines and port facilities.
2.3.4 Transport Practice 3.4
Develop procedures for remediation of releases that recognise the additional hazards of cyanide treatment.

☑ in full compliance with

The Supply Chain is
☐ in substantial compliance with Transport Practice 3.4
☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:
Allship is in FULL COMPLIANCE with Transport Practice 3.4 requiring that they develop procedures for remediation of releases that recognise the additional hazards of cyanide treatment.
Allship does not employ transport drivers or directly operate transport vehicles in its China Supply Chain. There is no road transport of cyanide product in the China Supply Chain.
Allship requires transport companies to have an appropriate emergency response plan for handling any sodium cyanide incident that falls within their contractual responsibility.
As part of the procedure to evaluate the risks of selected transport routes, Allship undertake annual due diligence reviews of shipping lines and port facilities.

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

☑ in full compliance with

The Supply Chain is
☐ in substantial compliance with Transport Practice 3.5
☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:
Allship is in FULL COMPLIANCE with Transport Practice 3.5 requiring the operation periodically evaluate response procedures and capabilities and revise them as needed.
Allship does not employ transport drivers or directly operate transport vehicles in its China Supply Chain. There is no road transport of cyanide product in the China Supply Chain.
Allship requires transport companies to have an appropriate emergency response plan for handling any sodium cyanide incident that falls within their contractual responsibility.
As part of the procedure to evaluate the risks of selected transport routes, Allship undertake annual due diligence reviews of shipping lines and port facilities.
3.0 DUE DILIGENCE

3.1 Ports

Allship conducted due diligence reviews of the Ports of Takoradi and Tema, Ghana as part of the China Supply Chain Certification Audit in March 2016.

Golder conducted a due diligence review of the Port of Qingdao, China, on behalf of Allship as part of the China Supply Chain Certification Audit in May 2016. Golder also visited the Port of Takoradi. The reviews were conducted by Ed Clerk of Golder. Ed is pre-certified by the ICMI as a Lead Auditor and Transport Technical Specialist.

The following items were addressed within the due diligences:

- Introduction
- ICMC Transport Verification Protocol Assessment
  - Transport Practice 1.1 (Questions 1-4 and 6)
  - Transport Practice 1.5 (Question 1, Items g – i)
  - Transport Practice 1.6
  - Transport Practice 2.1
  - Transport Practice 3.1.
- Conclusion
- References.

A desktop due diligence was conducted of the Port of Qingdao in accordance with the requirements of the CTV Protocol. Information was obtained from previous experience and online resources. Site visits were used to conduct due diligences of the Port of Takoradi and Port of Tema by Allship.

3.1.1 Port of Qingdao

Golder conducted a due diligence of Port of Qingdao, China on 18 May 2016 on behalf of Allship.

The international sales and exports of sodium cyanide take into consideration the shipping services available to service the intended target market. The Port of Qingdao is located in relative close proximity to the cyanide manufacturers, is connected to a well-developed intermodal transportation system consisting of railways, highways, waterways and pipelines, and is serviced by shipping companies that have routes to over 700 ports in 180 countries, including routes to South America.

The China Maritime Safety Administration (MSA) develops and implements policies, statutes and regulations governing the carriage of dangerous goods and other goods by ships in accordance with relative national and international requirements. This includes supervising the safety of ships carrying dangerous goods and other goods, processing declarations made by ships carrying dangerous goods, providing accreditation services for personnel involved in the declaration of dangerous goods and inspection of containers, and inspecting containers holding dangerous goods.

As a member of the IMO and to comply with the International Maritime Solid Bulk Cargoes Code (IMSBC Code), vessels are required to declare dangerous cargo to the MSA by submitting the MSA’s Transport Document for Goods by Sea (Package) form to the MSA before arriving/leaving at the port.
The IMO's International Convention for the Safety of Life at Sea (SOLAS) 1974 includes provisions adopted to address maritime security matters. Within SOLAS's is the International Ship and Port Facility Security (ISPS) Code, which is a mandatory instrument for all countries Party to the Convention. The ISPS Code aims to ensure that the applicable ocean going ships and port facilities of IMO Member States are implementing the highest possible standards of security.

The ISPS code contains detailed security-related requirements for Governments, port authorities and shipping companies in mandatory Part A, and a series of guidelines on how to meet those requirements in a non-mandatory Part B.

The production schedule (ship movement plan) is arranged by the Qingdao Port International Co Ltd. Dispatch Control Center in coordination with the wharf operators, the MSA, and the pilot center. The Dispatch Center organizes ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring.

As a member of the IMO and to comply with the IMSBC Code, vessels are required to declare dangerous cargo to the MSA by submitting the MSA's Transport Document for Goods by Sea (Package) form to the MSA before arriving/leaving at the port.

Chain of custody documentation is used by shipping companies to prevent the loss of cargo during shipment. This documentation includes the vessel manifest and Material Safety Data Sheets (MSDS), which identifies the location and content of each container on the vessel.

The Port of Qingdao has restricted access. The Dispatch Center organizes ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring.

The Port of Qingdao has dedicated storage areas for specialised products including dangerous goods. The port operations for dangerous goods are registered and licensed by the government. Containers departing the port are checked against documentation for matching container numbers and product detail.

All sodium cyanide transited through the Port of Qingdao remains contained within its sealed containers at all times.

On August 12 2015, a fire and subsequent explosions occurred at a dangerous goods warehouse located in the Tianjin Binhai New Area of the Port of Tianjin, China. Following these incidents, the Port of Qingdao was temporarily no longer allowed storage of all hazardous cargo of Class 2.1, Class 4 (excluding sulfur, UN1350/CLS4.1) & Class 5 (UN2465 and UN2468) in their hazardous warehouse (including transhipment and importing). A review of dangerous goods security and handling at the Port of Qingdao was undertaken by The Qingdao Port (Group) Co and by individual freight companies. Following the reviews, the Port of Qingdao is again able to receive and export dangerous goods including Sodium Cyanide.

China is a Category A member of the IMO Council and complies with the accordance with the IMO DG Code. Emergency response plans are in place at the Port of Qingdao. The Logistics Branch of Qingdao Port International Co Ltd, is responsible for developing and implementing emergency response plans including the Production Safety Emergency Response Plan, and Dangerous Goods Yards Safety Emergency Response. The Safety Production Supervision and Administration Bureau of Qingdao Municipality reviews emergency response plans to ensure they are in compliance with statutory requirements.

The Shandong Search and Rescue Center is responsible for coordinating all search and rescue activities in the Port of Qingdao waters.

Based on the evidence reviewed, this due diligence did not find significant issues of concern in regards to the Port of Qingdao’s management of solid sodium cyanide product.
3.1.2 Port of Takoradi and Port of Tema

Allship conducted due diligence reviews of the Ports of Takoradi and Tema, Ghana as part of the China Supply Chain Certification Audit in March 2016.

The Tema Port near Accra is the main container Port servicing Ghana, and its landlocked neighbouring countries; the Takoradi Port in south west Ghana is suitably located to service the mining industry located near the town of Tarkwa in the SW region of Ghana. Cyanide manufacturers and suppliers have the ability to ship to these Ports in Ghana by utilising the MSC or Maersk for the shipment of product from different parts of the world and the shipping line’s service through to both Tema and Takoradi Ports. The Ports allow unloading of the shipments for the final road transport section to the mining operations in Ghana as well as landlocked countries within the West Africa region.

The Ghana Ports and Harbour Authority (GPHA) oversees the operation of the overall Port operations. This includes:

- Management of the Port protocols for docking for vessels, e.g. use of Pilots; use of tug boats; different weather conditions, tides, currents; safety; and general Port operations. This sees to the safe docking and turnaround of the vessels in and out of the Port.

- Entry into Port is controlled by the Port’s Pilot who understands the Port protocols and any unique issues regarding the approach and docking of a vessel at the Port. The Ship’s Captain works in conjunction with the Pilot as he understands his vessel and can implement and assist with the Pilot’s instructions.

- The approach of the vessel to the Port will take into any account any channels, special navigation points and as mentioned above the currents, tides and weather.

- The GPHA manages the handling of dangerous goods through the Tema Port via the *Regulations and Procedures for Handling Storage and Transport of Dangerous Goods in the Port of Tema*. This document is to assist ship owners, ship agents, stevedores, terminal operators, and other Port users and operators to provide minimum acceptable safety requirements when handling dangerous goods.

The Meridian Port Services Limited is the stevedoring company which manages the on shore (wharf) operations. This includes for a container terminal or handling area:

- Handling of the containers whether full or empty on and off the vessels; container storage areas; port security, emergency response, control systems for companies and their vehicles collecting and or delivering containers

- Software programs control container movement through the Ports. In the case of the sodium cyanide containers on arrival the Ports the containers are stacked separately and segregated from other containers. The software also monitors the restricted time allowed for dangerous goods to be handled through the Port and allows the Port to charge penalty rates for goods not cleared and taken from the Port within a defined time.
The due diligence also noted:

- There is the introduction of dangerous goods handling through the Ports. There have been improved handling and controls for DG products over the years.
- Port facility: 2005 through to 2015 the Tema Port facilities were upgraded, this included overall site perimeter fencing and security; upgrade of the terminal entry and exit gates; new storage and paved lay down areas for containers – including area for DG goods; cyanide containers are segregated and stacked separately; new reach stackers acquired and the new software installed for the terminal operating systems.
- The Ports operate with security for the terminal operations.
- The ports have safety; first aid and emergency response capabilities.
- The terminal operators (MPS) are aware of sodium cyanide through the Port.

The due diligence report found no issues of concern in regards to the Ghana Ports and Harbour Authority and Meridian Port Services Limited awareness and management of the handling and systems in place for the sodium cyanide product. Allship will continue to review and monitor the port authority's performances by keeping close contact with them.

3.2 Shipping

Golder conducted due diligence reviews of the shipping lines MSC and Maersk as part of the China Supply Chain Certification Audit in May 2016.

The reviews were conducted by Ed Clerk of Golder. Ed is pre-certified by the ICMI as a Lead Auditor and Transport Technical Specialist.

The following items were addressed within the due diligences:

- Introduction
- ICMC Transport Verification Protocol Assessment
  - Transport Practice 1.1 (Questions 1-4 and 6)
  - Transport Practice 1.5 (Question 1, Items g – i)
  - Transport Practice 1.6
  - Transport Practice 2.1
  - Transport Practice 3.1
- Conclusion
- References.

Desktop due diligences were conducted in accordance with the requirements of the CTV Protocol. Information was obtained from previous experience, due diligence reviews, and interviews with other consigners.
3.2.1 Mediterranean Shipping Company (MSC)

Golder conducted a due diligence of MSC on 20 May 2016 on behalf of Allship.

MSC is a carrier service providing international shipping of containers on a fleet of their container vessels. Containers holding sodium cyanide are placed and secured on their vessels at the loading port by the port stevedoring company or service provider. As such, MSC provide a marine carrier service and all actual handling of containers (on and off vessels) is predominately undertaken by stevedoring companies at each port.

In some instances, sodium cyanide shipments are unloaded at terminals en-route to its final destination. This is known as trans-shipping and involves a temporary set down within a port facility before loading onto another vessel for continuation of the delivery. It is at the discretion of MSC to determine when and where this occurs. However, through previous due diligence investigations and accounts from other consigners, Golder is satisfied that MSC conducts itself in accordance with the International Maritime Organisation (IMO) Dangerous Goods (DG) Code and in a professional manner, which extends to the selection of terminals used by MSC for trans-shipping.

The routes taken are not ‘definitive’ routes as ships can take various routes to arrive at the same destination as they take into account tides, currents, wind and storms. This is also noted in the schedules which provide estimated travel times between ports.

MSC Shipping has their own in-house tracking systems for tracking freight which is linked by the specific container number and Bill of Lading (BOL) number.

MSC transports sodium cyanide by sea to various destination ports. All packaging and transportation is in accordance with the IMO DG Code. MSC has set up dangerous goods cargo management centres that control the proper stowage of hazardous cargo worldwide through their MSC Link computer system headquartered in Antwerp. This hazardous cargo system is initiated when hazardous cargo is booked into the container booking MSC Link computer system and ensures shipments meet the IMO DG Code requirements.

MSC operations personnel provide the vessel’s Master with copies of the Emergency Information, Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each hazardous cargo transport units loaded onto the ship at the port.

The manifests that are provided to the vessel Master contain emergency response information.

Documentation provided including Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each hazardous cargo transport units loaded onto the ship at the port.

MSC vessels have continuous means of tracking and communication during their voyages. MSC Shipping has their own in-house tracking systems for tracking freight which is linked by the specific container number and BOL number. Communication equipment is tested through continuous use.

Chain of custody documentation is used by MSC to prevent the loss of cargo during shipment. This documentation includes the vessel manifest and Material Safety Data Sheets (MSDS), which identifies the location and content of each container on the vessel.
MSC has set up dangerous goods cargo management centres that control the proper stowage of hazardous cargo worldwide through their MSC Link computer system headquartered in Antwerp. This hazardous cargo system is initiated when hazardous cargo is booked into the container booking MSC Link computer system.

MSC vessels are registered by the Lloyd’s Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories.

MSC operations personnel provide the vessel’s Master with copies of the Emergency Information, Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each hazardous cargo transport units loaded onto the ship at the port.

MSC also developed the Intelligent Planning Exchange system (IPX) stowage management system which plans and stows dangerous cargo automatically to eliminate the potential for human error.

MSC are also able to dispatch one of their eight worldwide emergency rescue teams who are experts in handling dangerous cargo and dangerous situations in the event of an emergency. Specialist chemists’ on-hand at the centres are able to provide advice in the event of an emergency.

Based on the evidence reviewed, the due diligence did not find issues of concern in regards to MSC’s management of solid sodium cyanide product.

3.2.2 Maersk Shipping Line (Maersk)

Golder conducted a due diligence of Maersk on 19 May 2016 on behalf of Allship.

Maersk is a carrier service providing international shipping of containers on a fleet of their container vessels. Containers holding sodium cyanide are placed and secured on their vessels at the loading port by the port stevedoring company or service provider. As such, Maersk provide a marine carrier service and all actual handling of containers (on and off vessels) is predominately undertaken by stevedoring companies at each port. Where a port does not have equipment to lift containers on and off the vessel, Maersk service these ports with a ‘self-geared’ vessel that has its own lifting devices.

In some instances, sodium cyanide shipments are unloaded at terminals en-route to its final destination. This is known as trans-shipping and involves a temporary set down within a port facility before loading onto another vessel for continuation of the delivery. It is as the discretion of Maersk to determine when and where this occurs. However, through previous due diligence investigations and accounts from other consigners, Golder is satisfied that Maersk conducts itself in accordance with the IMO DG Code and in a professional manner, which extends to the selection of terminals used by Maersk for trans-shipping.

The routes taken are not ‘definitive’ routes as ships can take various routes to arrive at the same destination as they take into account tides, currents, wind and storms. This is also noted in the schedules which provide estimated travel times between ports. The consignment booking in the GCSS system will ensure any changes to the booking or scheduling are requested and confirmed from the vessel controllers or terminals. The booking carries all the requirements as regards to handling and stowage required for the sodium cyanide containers.

Maersk transports sodium cyanide by sea to various destination ports. All packaging and transportation is in accordance with the IMO DG Code.

Maersk operations personnel provide the vessel’s Master with copies of the Emergency Information, Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each hazardous cargo transport units loaded onto the ship at the port. The manifests that are provided to the vessel Master contain emergency response information.
Based on previous due diligence investigations and accounts from other consigners, Golder is satisfied that Maersk complies with Part 7 of the IMO DG Code.

Documentation provided including Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container and the Maersk’s Global Customer Service System (GCSS) (which records the UN classification (UN 1689), Dangerous Goods Class (6) and that the product is a marine pollutant) ensure that adequate information is available in order to identify the correct stowage and separation of dangerous goods. This information then determines the placement and segregation of the container on the vessel and handling through trans-shipment ports, if applicable. Maersk has multiple cross checking layers to verify that products arriving at the laydown areas match those provided on the booking and that containers being loaded onto the vessels match those stipulated on the loading (or stowage) plan.

Maersk vessels have continuous means of tracking and communication during their voyages. Maersk operates a container booking and tracking system called the GCSS. The system is also the management tool for handling the dangerous goods cargo for the proper control of the stowage of hazardous cargo. Communication equipment is tested through continuous use.

Chain of custody documentation is used by Maersk to prevent the loss of cargo during shipment. This documentation includes the vessel manifest and Material Safety Data Sheets (MSDS), which identifies the location and content of each container on the vessel. In All Maersk vessels are registered by the Lloyd’s Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories.

Maersk also has current certificates for its vessels under the International Ship and Port Facility Security (ISPS) Code developed by the IMO, which includes the IMDG Code (Chapter 7) and the ISM Code (Chapter 9).

In the case of an incident, Maersk’s Casualty Committee, which consists of key stakeholders from dedicated technical and operational areas within the A P Moller – Maersk Group, is called into action to ensure measures are taken to minimise environmental impacts. Drills are carried out periodically to ensure emergency procedures are up-to-date and functioning efficiently.

Based on the evidence reviewed, this due diligence did not find significant issues of concern in regards to Maersk’s management of solid sodium cyanide product.
4.0 IMPORTANT INFORMATION

Your attention is drawn to the document titled – “Important Information Relating to this Report”, which is included in Appendix A of this report. The statements presented in that document are intended to inform a reader of the report about its proper use. There are important limitations as to who can use the report and how it can be used. It is important that a reader of the report understands and has realistic expectations about those matters. The Important Information document does not alter the obligations Golder Associates has under the contract between it and its client.
Report Signature Page

GOLDER ASSOCIATES PTY LTD

[Signature]

Edward Clerk
ICMI Lead Auditor

MCW_BJL/EWC/hsI

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APPENDIX A

Important Information
IMPORTANT INFORMATION RELATING TO THIS REPORT

The document ("Report") to which this page is attached and which this page forms a part of, has been issued by Golder Associates Pty Ltd ("Golder") subject to the important limitations and other qualifications set out below.

This Report constitutes or is part of services ("Services") provided by Golder to its client ("Client") under and subject to a contract between Golder and its Client ("Contract"). The contents of this page are not intended to and do not alter Golder’s obligations (including any limits on those obligations) to its Client under the Contract.

This Report is provided for use solely by Golder’s Client and persons acting on the Client’s behalf, such as its professional advisers. Golder is responsible only to its Client for this Report. Golder has no responsibility to any other person who relies or makes decisions based upon this Report or who makes any other use of this Report. Golder accepts no responsibility for any loss or damage suffered by any person other than its Client as a result of any reliance upon any part of this Report, decisions made based upon this Report or any other use of it.

This Report has been prepared in the context of the circumstances and purposes referred to in, or derived from, the Contract and Golder accepts no responsibility for use of the Report, in whole or in part, in any other context or circumstance or for any other purpose.

The scope of Golder’s Services and the period of time they relate to are determined by the Contract and are subject to restrictions and limitations set out in the Contract. If a service or other work is not expressly referred to in this Report, do not assume that it has been provided or performed. If a matter is not addressed in this Report, do not assume that any determination has been made by Golder in regards to it.

At any location relevant to the Services conditions may exist which were not detected by Golder, in particular due to the specific scope of the investigation Golder has been engaged to undertake. Conditions can only be verified at the exact location of any tests undertaken. Variations in conditions may occur between tested locations and there may be conditions which have not been revealed by the investigation and which have not therefore been taken into account in this Report.

Golder accepts no responsibility for and makes no representation as to the accuracy or completeness of the information provided to it by or on behalf of the Client or sourced from any third party. Golder has assumed that such information is correct unless otherwise stated and no responsibility is accepted by Golder for incomplete or inaccurate data supplied by its Client or any other person for whom Golder is not responsible. Golder has not taken account of matters that may have existed when the Report was prepared but which were only later disclosed to Golder.

Having regard to the matters referred to in the previous paragraphs on this page in particular, carrying out the Services has allowed Golder to form no more than an opinion as to the actual conditions at any relevant location. That opinion is necessarily constrained by the extent of the information collected by Golder or otherwise made available to Golder. Further, the passage of time may affect the accuracy, applicability or usefulness of the opinions, assessments or other information in this Report. This Report is based upon the information and other circumstances that existed and were known to Golder when the Services were performed and this Report was prepared. Golder has not considered the effect of any possible future developments including physical changes to any relevant location or changes to any laws or regulations relevant to such location.

Where permitted by the Contract, Golder may have retained subconsultants affiliated with Golder to provide some or all of the Services. However, it is Golder which remains solely responsible for the Services and there is no legal recourse against any of Golder’s affiliated companies or the employees, officers or directors of any of them.

By date, or revision, the Report supersedes any prior report or other document issued by Golder dealing with any matter that is addressed in the Report.

Any uncertainty as to the extent to which this Report can be used or relied upon in any respect should be referred to Golder for clarification.
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