REPORT

International Cyanide Management Code
Hebei Chengxin Co Ltd, Global Ocean Supply Chain Certification –
Summary Audit Report – Amendment

Submitted to:
International Cyanide Management Institute
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1.0 INTRODUCTION
1.1 Operational Information

Name of Transportation Facility: Hebei Chengxin Co Ltd – Global Ocean Supply Chain
Name of Facility Owner: Not Applicable
Name of Facility Operator: Hebei Chengxin Co Ltd
Name of Responsible Manager: Jason Li, Business Manager, Hebei Chengxin International Department
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2.0 DESCRIPTION OF OPERATION
2.1 Hebei Chengxin Co Ltd, China Production Facility

Hebei Chengxin Co Ltd’s (Hebei) cyanide production facility is located in Yuanshi County, approximately 30 km south of the Hebei Province capital of Shijiazhuang City.

The site is used to manufacture a large number of chemicals using liquid sodium cyanide as a basic feed stock. These products include sodium cyanide, sodium ferrocyanide, cyanuric chloride, benzyl cyanide and phenylacetic acid. The part of the site used to manufacture liquid cyanide and then convert the liquid cyanide into solid cyanide is referred to in this report as the cyanide facility.

The cyanide production facility is connected to the site’s utilities including stormwater drains and the wastewater treatment plant. The facility was constructed in 2007 and replaced earlier cyanide production facilities.

Hebei’s production facility is an ICMC certified cyanide production facility (November 2015) and meets the requirements of the ICMC for the manufacture, transport and use of cyanide in the gold production cycle.

2.2 Marine Transportation

Hebei contracts the marine transportation of solid cyanide within its Supply Chain to major international shipping companies with the ability to offer scheduled container services from point of origin to destination. The shipping companies used are CMA CGM, Hapag-Lloyd, KMTC, Maersk and Mediterranean Shipping Company (MSC).
2.3 Audit Scope

The scope of Hebei’s Supply Chain covers the following:

- Hebei Chengxin Transport Co Ltd (consignor)
- Ports
  - Port of Buenos Aires, Argentina (destination port)
  - Port of Callao, Peru (destination port)
  - Port of Manzanillo, Mexico (destination port)
  - Port of Valparaiso, Chile (destination port)
  - Port of Conakry, Guinea (destination port)
  - Port of Dakar, Senegal (destination port)
  - Port of Dar es Salaam (destination port)
  - Port of Tema, Ghana (destination port)
  - Port of Qingdao, China (port of departure)
  - Port of Shanghai, China (port of departure)
  - Port of Tianjin, China (port of departure)
  - Port of Lianyungang, China (port of departure)
  - Port of Jakarta, Indonesia (destination port)
  - Port of Surabaya, Indonesia (destination port)
  - Port of Jeddah, Saudi Arabia (destination port)
  - Port of Vostochny, Russia (destination port)
  - Port of Izmir, Turkey (destination port)
  - Port of Mersin, Turkey (destination port)
  - Port of Trabzon, Turkey (destination port)
- Carriers
  - CMA CGM
  - KMTC
  - Hapag-Lloyd
  - Maersk
  - MSC.
2.4 Marine Transportation

2.4.1 CMA CGM

The CMA CGM Group is a global logistics enterprise headquartered in Marseille, France. CMA CGM is present in more than 160 countries through its network of over 600 agencies, 200 vessels and 521 commercial Ports. The company operates on every one of the world's seas and in 2015/16 transported a volume of 18 million Twenty-Foot Equivalent Units (TEUs).

CMA CGM states it aligns to the IMO DG Code, ISM Code, SOLAS treaty, MARPOL Convention, French Vessel safety rules, and International Maritime Organization publications.

CMA CGM conduct their own annual vessel audits, additionally, vessels are registered by the Lloyd’s Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories.

2.4.2 Hapag-Lloyd

Hapag-Lloyd, headquartered in Hamburg, Germany, is a global shipping company. Hapag Lloyd operates 166 vessels with the capacity to transport 7.4 million TEUs annually, through a fully integrated global network of 125 liner services calling at 538 commercial Ports across 121 countries.

Hapag-Lloyd’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.

2.4.3 KMTC

Established in 1954, KMTC is a Korean marine transportation company. KMTC offer logistical marine transport between the mainland of China, South Korea, Japan, South-East Asia and the Middle East. KMTC, headquartered in Seoul, South Korea, is present in 25 countries with 90 global offices and branches and 55 commercial ports.


2.4.4 Maersk Shipping (Maersk)

Maersk, headquartered in Copenhagen, Denmark, operates a fleet of 639 container vessels with worldwide shipping coverage. Maersk operates via 306 offices in 114 countries and throughout 378 Ports of call. The fleet has the capacity to handle more than 3 million TEUs annually. Maersk operates a container booking and tracking system called the Global Customer Service System (GCSS). This is a management tool used to manage the stowage and handling of dangerous goods cargo.

Maersk states they operate in accordance with the IMO DG Code, ISM Code, SOLAS treaty, MARPOL Convention and International Maritime Organization publications to carry out the transportation of dangerous goods in accordance with local and international regulations. Maersk has the right to refuse cargo if the packaging, container and/or documentation are not acceptable to their internal standards, designed to meet the requirements of the IMO DG Code standards.

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 ISPS Code developed by the IMO.
2.4.5  Mediterranean Shipping Company (MSC)

MSC, headquartered in Geneva, Switzerland, is engaged in worldwide container transport via its fleet of 460 vessels, 200 shipping routes and 315 Ports of call. MSC operates in 150 countries with a network of over 480 offices and branches. The fleet has the capacity to handle more than 2.7 million TEUs annually.

MSC has Dangerous Goods Cargo Management Centres that manage the stowage of hazardous cargo worldwide through their computer system. MSC state they operate in accordance with the stringent requirements for stowage and segregation of dangerous goods as per the IMO DG Code.

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.

2.5  Road Transportation

2.5.1  Hebei Chengxin Transport Co Ltd, China

Transportation from Hebei’s cyanide production facility to one of four Chinese Ports – Qingdao, Shanghai, Lianyungang or Tianjin occurs as part of the Global Ocean Supply Chain (Supply Chain). All road transportation is carried out by Hebei Chengxin Transport Co Ltd (a consignor) an ICMC certified (December 2016) sister transport company of Hebei Chengxin Co Ltd (the producer).

2.5.2  Trans-shipping and Interim Storage

Depending on weather, cargo types, journey length and other operational matters, carriers 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 does occur within Hebei’s Supply Chain. Hebei has no control over when and where this happens, but through its due diligence assessments has satisfied itself that the carriers used (CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC) undertake the shipping of the product in accordance with the International Maritime Dangerous Goods Code (IMO DG Code) and in a professional and safe manner.

This satisfaction extends to the selection of Port terminals made by the shipping companies and used for trans-shipping operations.

Trans-shipping Ports used may include:

- CMA CGM:
  - Port of Algeciras, Spain
  - Port of Antwerp, Belgium
  - Port of Busan, South Korea
  - Port of Callao, Peru
  - Port of Hong Kong
  - Port of Shekou, China
  - Port of Singapore
■ KMTC:
  ▪ Port of Busan, South Korea
  ▪ Port of Ho Chi Minh, Vietnam
  ▪ Port of Jebel, United Arab Emirates
  ▪ Port of Klang, Malaysia

■ Hapag-Lloyd:
  ▪ Port of Antwerp, Belgium
  ▪ Port of Busan, South Korea
  ▪ Port of Hamburg, Germany
  ▪ Port of Hong Kong
  ▪ Port of Klang, Malaysia
  ▪ Port of Le Havre, France
  ▪ Port of Singapore

■ Maersk:
  ▪ Port of Algeciras, Spain
  ▪ Port of King Abdullah, Saudi Arabia
  ▪ Port of Singapore
  ▪ Port of Tangier, Morocco
  ▪ Port of Tanjung Pelepas, Malaysia
  ▪ Port of Walvis Bay, Namibia

■ Mediterranean Shipping Company (MSC)
  ▪ Port of Antwerp, Belgium
  ▪ Port of Buenaventura, Colombia
  ▪ Port of Busan, South Korea
  ▪ Port of Felixstowe, UK
  ▪ Port of Las Palmas, Canary Islands
  ▪ Port of Louis Harbour, Mauritius
  ▪ Port of Sal Al Ah, Oman
  ▪ Port of Singapore.
2.6 Auditors Findings and Attestation

☑ in full compliance with

Hebei is: ☐ in substantial compliance with The International Cyanide Management Code

☐ not in compliance with

No significant cyanide exposures or releases were noted to have occurred during Global Marine’s Supply Chain recertification audit.

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

2.7 Name and Signatures of Other Auditors

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed Clerk</td>
<td>Lead Auditor and Transport Technical Specialist</td>
<td>[Signature]</td>
<td>2 October 2018</td>
</tr>
</tbody>
</table>

2.8 Dates of Audit

The certification audit of Hebei’s Supply Chain was undertaken between January and July of 2017, with the Detailed Audit Report being finalised in July. The certification amendment was undertaken in August and September 2018.

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 Cyanide Transportation Verification Protocol for the International Cyanide Management Code and using standard and accepted practices for health, safety and environmental audits.
3.0 CONSIGNOR SUMMARY

3.1 Principle 1 – Transport

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

3.1.1 Transport Practice 1.1

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

☒ in full compliance with

☐ in substantial compliance with ☐ not in compliance with

Transport Practice 1.1

Hebei is

Summarise the basis for this Finding/Deficiencies Identified:

The Hebei is in FULL COMPLIANCE with Transport Practice 1.1 requiring the transport of cyanide in a manner that minimises the potential for accidents and releases.

Hebei has implemented a process for selecting transport routes that minimises the potential for accidents and releases or the potential impacts of accidents and releases.

Hebei has developed and implemented a management system for transportation and there is a specific written procedure that details the process and the parameters to be assessed when identifying, selecting and assessing potential transport routes. As well as road transportation issues the procedure also considers marine carriers and ports.

Due diligence assessments are completed as a part of the selection process. Hebei conducts due diligence assessments on the Port facility or carrier on an annual basis to ensure that dangerous goods product transportation is being carried out in accordance with the regulatory standards.

The due diligence assessments state that:

“The report is not a final acceptance of [the shipping lines] OR [the Port] for future work and as with all service providers to Hebei, Hebei will continue to review and monitor the performance on an annual basis.”

The international sales and exports of cyanide by Hebei take into consideration the Ports and their extended infrastructure available to service the intended target area. Hebei only operates in export markets that are serviced by major international shipping companies with the ability to offer scheduled container services from the Port of origin to the destination.

Hebei utilises CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC for the international shipping of solid cyanide. Containers are placed and secured on their vessels at the Port of loading in China by the stevedoring company or service provider, and removed at the destination by the stevedoring company or service provider at that Port. As such, CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC provide a marine carrier service and handling of containers (on and off vessels) is undertaken by stevedoring companies at each Port.

Hebei does not have control of over routes taken by the service providers, but has undertaken due diligence assessments of CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC to verify that the shipments are transported in accordance with the IMO DG and IMSBC Codes.
The destination Port is selected on the basis that it is the closest Port to the customer and that it meets reasonable industry standards for safety, security and emergency response.

Due diligence assessments of the Ports used in the Supply Chain concluded that the Ports meet the requirements of the ICMC.

Where issues were identified, it was established that they would be adequately mitigated by Hebei reducing the time that product spends at that Port.

Hebei has implemented a procedure to evaluate the risks of selected cyanide transport routes and take the measures necessary to manage these risks. Risks are identified during the route selection process and Hebei has implemented a procedure to periodically re-evaluate routes. Hebei documents the measures taken to address risks identified with the selected routes.
3.1.2 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
Hebei is ☐ in substantial compliance with ☐ not in compliance with Transport Practice 1.2

Summarise the basis for this Finding/Deficiencies Identified:

Hebei is in FULL COMPLIANCE with Transport Practice 1.2 requiring personnel operating cyanide handling and transport equipment to perform their jobs with minimum risk to communities and the environment.

Hebei utilises CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC for the international shipping of solid cyanide. Containers are placed and secured on their vessels at the Port of loading in China by the stevedoring company or service provider, and removed at the destination by the stevedoring company or service provider at that Port. As such, CMA CGM, Hapag-Lloyd, KMTC, Maersk and 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.

Due diligence assessments of CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC were undertaken to verify that the shipments are handled in accordance with the IMO DG Code. The due diligence assessments found that there were no issues of concern with regards to the management and shipping of cyanide product by any of the carriers.

Hebei does not operate transport vehicles or equipment at Port facilities used in its Supply Chain, operation is undertaken by the managing Port Authority or stevedoring service provider at the Port.

The due diligence assessments found that the Ports used by Hebei are performing dangerous goods handling duties in accordance with international and local regulations. Ports selected in the Supply Chain are located in IMO member countries, member nations must ensure that Ports comply with the requirements of the IMO DG Code 2014, and in particular the training requirements for shore-side personnel as described in section 1.3.1 of the IMO DG Code.

Hebei conducts annual due diligence assessments of carriers and Port facilities used in the Supply Chain.
3.1.3 Transport Practice 1.3

Ensure that transport equipment is suitable for the cyanide shipment.

☒ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

Transport Practice 1.3

Summarise the basis for this Finding/Deficiencies Identified:

Hebei is in FULL COMPLIANCE with Transport Practice 1.3 requiring that transport equipment is suitable for the cyanide shipment.

Carriers and Ports used by Hebei have equipment operation and maintenance capabilities and procedures that are not dependent on Hebei. The ability of the carriers and Port facilities to operate safely, and their capability to handle dangerous goods is assessed during the due diligence process.

The completed due diligence assessments found that there were no issues of concern with regards to the management and shipping of cyanide product by any of the carriers; and that the Ports used by Hebei are performing dangerous goods handling duties in accordance with international and local regulations.
3.1.4 Transport Practice 1.4

Develop and implement a safety program for transport of cyanide.

- in full compliance with

Hebei is  

☐ in substantial compliance with  

☐ not in compliance with

Transport Practice 1.4

Summarise the basis for this Finding/Deficiencies Identified:

Hebei is in FULL COMPLIANCE with Transport Practice 1.4 requiring the operation develop and implement a safety programme for transport of cyanide.

There are procedures in place to ensure the cyanide is transported in a manner that maintains the integrity of the producer’s packaging.

Product packaging is undertaken at the ICMC certified production facility and meets the requirements of the political jurisdictions through which the loads will pass.

There are in-transit procedures that allow for regular checks of the packaging integrity and the reporting of any damage or spillage. There are single use seals placed on doors of shipping containers and checks are tracked and recorded alongside a package’s unique serial number.

CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC require from Hebei, evidence that products booked for transport meet the packaging requirements of the IMO DG Code. Some carriers reserve the right to refuse acceptance of cargo that does not meet packaging, container and documentation standards as set out in the Code.

Due diligence assessments of CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC were undertaken to verify that shipments of dangerous goods are handled in accordance with the IMO DG Code. The due diligence assessments found that there were no issues of concern with regards to the shipping of cyanide product by CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC. Cyanide product remains sealed and packaged within locked shipping containers until it reaches the end use destination.

Hebei conducts annual due diligence assessments of carriers and Port facilities used in the Supply Chain.

Placards and signage used to identify the shipment as cyanide meet local (Chinese) and international standards. Diamonds placed at the front and rear of the vehicles identify the load as cyanide and the containers also have labelling that identifies the contents of the container.

All Hebei packaged cyanide remains sealed within its initial packaging and container until its arrival at the final destination.
3.1.5 Transport Practice 1.5

Follow international standards for transportation of cyanide by sea and air.

☑ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

Transport Practice 1.5

Hebei is

Summarise the basis for this Finding/Deficiencies Identified:

Hebei is in FULL COMPLIANCE with Transport Practice 1.5 requiring the operation follow international standards for transportation of cyanide by sea and air.

Shipments of cyanide transported by sea are transported in compliance with the IMO DG Code.

CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC transport Hebei cyanide by sea to various destination Ports. All packaging and transportation is carried out in accordance with the IMO DG and IMSBC Codes.

Due diligence assessments of CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC were undertaken on behalf of Hebei to verify that the shipments are handled in accordance with the IMO DG and IMSBC Codes. The due diligence assessments found that there were no issues of concern with regards to the conduct and shipping of cyanide product by CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC.

No cyanide is transported by air within the scope of this Supply Chain.
3.1.6 Transport Practice 1.6

Track cyanide shipments to prevent losses during transport.

☑️ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

Hebei is

Transport Practice 1.6

Summarise the basis for this Finding/Deficiencies Identified:

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

Hebei communicates with CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC onshore representatives by phone, fax and email.

The due diligence assessments for CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC found that their vessels have continuous means of tracking and communication during voyages. Additionally, each service provider has systems in place to track individual containers from point of origin through to the destination Port.

Chain of custody documentation is used by shipping companies to prevent the loss of cargo during shipment. This documentation includes the vessel manifest which identifies the location and content of each container on the vessel along with packing certificates, Multimodal Dangerous Goods Forms and Safety Data Sheets (SDS).

CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC onshore representatives and vessels have the software capability to track individual containers. This service is available from the time they are booked onto a vessel, right through the entirety of the journey, until they are received at the nominated destination Port.

For ports of departure in China, the China Maritime Safety Administration (MSA) regulates the carriage of dangerous goods and other goods by ships in accordance with relative national and international requirements.

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

For destination Ports the due diligences found that Ports in the Supply Chain are IMO members and ISPS Signatories (ISPS excluding Tanzania).

As IMO members and to comply with the requirements of the IMO DG Code, vessels are required to declare dangerous cargo before arriving/leaving the Port to Authorities or stevedoring service providers.

Chain of custody documentation is used by shipping companies to prevent the loss of cargo during shipment. This documentation includes the vessel manifest which identifies the location and content of each container on the vessel along with packing certificates, Multimodal Dangerous Goods Forms and Safety Data Sheets (SDS).
At each destination Port stevedoring service providers or terminal managers operate their own choice of information management and cargo tracking systems. These systems include advanced terminal software programs capable of tracking individual containers that are unloaded from carriers and transferred to laydown areas or placed onto another means of transportation (trans-shipping, ground or rail).

Hebei’s shipping agent provides updates on the status of shipments on a weekly basis. In each case this includes an estimate on arrival/departure times, where trans-shipping will occur and the time that discharge from the destination Port occurs.

Communication equipment is periodically tested to ensure it functions correctly. The primary means through which equipment is tested is through continuous use. Blackout areas have not been identified, however all vessels have continuous means of tracking and communication during their voyages.

There are systems to track the progress of the cyanide shipments. Hebei’s shipping agent provides updates on the status of shipments on a weekly basis. In each case this includes the departure time/date and point of origin, an estimate on arrival time, where trans-shipping will occur and the time that discharge from the destination Port occurs.

All carriers have computer tracking software to allow them to identify at which phase of shipment each container is in. Inventory controls and chain of custody documentation processes are implemented to prevent the loss of cyanide during shipment.

The due diligence assessments found that there were no issues of concern with regards to the management and shipping of cyanide product by CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC.

Shipping records indicate the amount of cyanide material in transit and SDS sheets are available. The amount of cyanide in transit, the packing certificates and the SDS are contained within the ships manifest (including the MO41 Document), which accompanies the cargo throughout the journey.
3.2  **Principle 2 – Interim Storage**

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

3.2.1  **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**

**Hebei is**

- in full compliance with
- not in compliance with

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

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

Hebei does not operate trans-shiping or interim storage facilities within its Supply Chain, but circumstances may arise where trans-shiping of cyanide product is required. This involves unloading the cargo at a terminal facility, temporary set down and loading onto another vessel for the continuation of the delivery.

Hebei has no control over when and where this happens, but through the completion of due diligence assessments has satisfied itself that the carriers used (CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC) undertake the trans-shiping of product in accordance with the IMO DG Code and regulations for the handling of dangerous goods pertinent to that Port.

Depending on weather, cargo types and other operational matters, carriers may transship their cargo form one vessel to another.

Trans-shiping Ports were identified for each shipping service provider but not assessed as part of the due diligence assessments carried out on behalf of Hebei. The due diligence assessments did not identify any issues of concern with regards to the management or transport of cyanide by CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC – this extends to the carrier’s ability to select a suitable Port for the purpose of trans-shiping when required.

The due diligence assessments of the Ports identified that temporary storage or set down of product is conducted in accordance with the requirements of the IMO DG Code and other relevant international, and where developed, local dangerous goods handling regulations.
3.3 Principle 3 – Emergency Response

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

3.3.1 Transport Practice 3.1

Prepare detailed Emergency Response Plans for potential cyanide releases.

- ☒ in full compliance with

Hebei is

☐ in substantial compliance with

☐ not in compliance with

Transport Practice 3.1

Summarise the basis for this Finding/Deficiencies Identified:

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

Hebei has an emergency response plan (ERP).

A copy of the ERP is kept in each vehicle that is used to transport cyanide.

Whilst Hebei’s product is embarked on CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC vessels all emergency response is governed by the vessel’s captain. Hebei conducts due diligence assessments of CMA CGM, Hapag Lloyd, KMTC, Maersk and MSC to verify that the shipments occur in accordance with the IMO DG Code, thereby meeting emergency response requirements.

Hebei require transport companies to have appropriate emergency response plans and capabilities for handling any cyanide incident that falls within their contractual responsibility.

The due diligences found that CMA CGM, Hapag Lloyd, KMTC, Maersk and MSC carry out the shipping of dangerous goods in accordance with the requirements of the IMO DG Code.

Each operator implements their own system of safety and emergency response management that extends to emergency situations involving cyanide and other dangerous goods. Expert emergency responders, as well as dangerous goods technical experts, are available to respond and assist in emergency situations.

The due diligence assessments found that the Ports used by Hebei are performing dangerous goods handling duties in accordance with international and local regulations. Ports selected in the Supply Chain are located in IMO member countries, member nations must ensure that Ports comply with the requirements of the IMO DG Code.

The due diligences also found that the Ports are certified under the IMO’s International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States that are party to OPRC 90 protocol are required to establish a national system for responding to oil and hazardous/noxious substances pollution incidents, including a designated national authority, a national operational contact point and a national contingency plan. This needs to be supported by a minimum level of response equipment, communications plans, regular training and exercises.
3.3.2 Transport Practice 3.2
Designate appropriate response personnel and commit necessary resources for emergency response.

☑ in full compliance with

☐ in substantial compliance with Transport Practice 3.2

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

Hebei is in FULL COMPLIANCE with Transport Practice 3.2 requiring they designate appropriate response personnel and commit necessary resources for an emergency response.

Whilst Hebei’s product is embarked on carriers, all emergency response is governed by the vessel’s captain. Hebei conducts due diligence reviews to verify that the shipments occur in accordance with the IMO DG Code. Due diligence reviews have found that there were no issues of concern in regards to the management and shipping of cyanide product by any of the shipping lines.

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

Hebei require transport companies to have appropriate emergency response plans and capabilities for handling any cyanide incident that falls within their contractual responsibility. The level of capability is assessed through the due diligence process.

The due diligence assessments found that CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC each carry out the shipping of dangerous goods in accordance with the requirements of the IMO DG and IMSBC Codes. Each operator implements their own system of safety and emergency response management that extends to

The due diligence assessments found that the Ports used by Hebei have appropriate emergency response capabilities to deal with potential dangerous goods releases.
3.3.3 Transport Practice 3.3
Develop procedures for internal and external emergency notification and reporting.

☒ in full compliance with
☐ in substantial compliance with
☐ not in compliance with

Hebei is

Transport Practice 3.3

Summarise the basis for this Finding/Deficiencies Identified:

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

Whilst Hebei’s product is embarked on CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC vessels all emergency response is governed by the vessel’s captain. Hebei conducts due diligence assessments of CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC to verify that the shipments occur in accordance with the IMO DG Code, thereby meeting emergency response requirements.

Hebei require transport companies to have appropriate emergency response plans, including current contact information, and capabilities for handling any cyanide incident that falls within their contractual responsibility.

The due diligences found that CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC carry out the shipping of dangerous goods in accordance with the requirements of the IMO DG Code.
3.3.4 Transport Practice 3.4

Develop procedures for remediation of releases that recognise the additional hazards of cyanide treatment.

☑ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

Transport Practice 3.4

Summarise the basis for this Finding/Deficiencies Identified:

Hebei is in FULL COMPLIANCE with Transport Practice 3.4 requiring the operation to develop procedures for remediation of releases that recognise the additional hazards of cyanide treatment.

Whilst Hebei’s product is embarked on CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC vessels all emergency response is governed by the vessel’s captain. Hebei conducts due diligence assessments of CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC to verify that the shipments occur in accordance with the IMO DG Code, thereby meeting emergency response requirements.

Hebei require transport companies to have appropriate emergency response plans and capabilities for handling any cyanide incident that falls within their contractual responsibility.

The due diligences found that CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC carry out the shipping of dangerous goods in accordance with the requirements of the IMO DG Code.
3.3.5 Transport Practice 3.5
Periodically evaluate response procedures and capabilities and revise them as needed.

☑️ in full compliance with

Hebei is

☐ in substantial compliance with

☐ not in compliance with Transport Practice 3.5

Summarise the basis for this Finding/Deficiencies Identified:

Hebei is in FULL COMPLIANCE with Transport Practice 3.5 requiring the operation to periodically evaluate response procedures and capabilities and revise them as needed.

Whilst Hebei’s product is embarked on CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC vessels all emergency response is governed by the vessel’s captain. Hebei conducts due diligence assessments of CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC to verify that the shipments occur in accordance with the IMO DG Code, thereby meeting emergency response requirements.

Hebei require transport companies to have appropriate emergency response plans and capabilities for handling any cyanide incident that falls within their contractual responsibility.

The due diligences found that CMA CGM, Hapag-Lloyd, KMTC, Maersk and MSC carry out the shipping of dangerous goods in accordance with the requirements of the IMO DG Code.
4.0 DUE DILIGENCE

4.1 Marine Transportation

Refer to Appendix A for due diligence assessments completed for each carrier.

4.2 Ports

Refer to Appendix A for due diligence assessments completed for each port.

4.3 Auditor Review of Due Diligences

The due diligence assessments were found by the Auditor to sufficiently evaluate the Port operations, within the constraints of access and limited influence, and additional management measures by the consigner were not considered necessary.

5.0 IMPORTANT INFORMATION

Your attention is drawn to the document titled – “Important Information Relating to this Report”, which is included in Appendix B 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.
Signature Page

GOLDER ASSOCIATES PTY LTD

Ed Clerk
ICMC Lead Auditor and ICMC Transportation Expert

MCW/EWC/hn

A.B.N. 64 006 107 857

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APPENDIX A

Due Diligence Assessments
REPORT

Due Diligence for Izmir Port
Hebei Chengxin Co., Ltd.

Submitted to:
Hebei Chengxin Co., Ltd.
16th Floor, Zhongyue Building, No. 170 Yucai Street, Yuhua District, Shijiazhuang City, Hebei Province, 050031, China.

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1668932-022-R-Rev0

September 2018
Distribution List

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1 copy: Golder Associates Consulting Limited
Executive Summary

Golder Associates Consulting Limited (Golder) was retained by Hebei Chengxin Co., Ltd. (Chengxin) to conduct a due diligence of Port of Izmir, Turkey. This assessment was conducted by Environmental Engineer Sijia Liu and International Cyanide Management Code (ICMC or the Code) Transport Technical Specialist Mike Woods.

The following items, as detailed in the ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016), were addressed within the due diligence:

- Transport Practice 1.1
- Transport Practice 1.5
- Transport Practice 1.6
- Transport Practice 2.1
- Transport Practice 3.1

The ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016) was used to guide the due diligence assessment. It was not possible during this due diligence to physically inspect the Port, as such the review was based on information obtained from previous due diligence reviews, ICMI audit reports and publicly available online information.

Based on the evidence reviewed, this due diligence did not find significant issues of concern in regard to the Port of Izmir’s management of solid sodium cyanide product.

This assessment should not be a final acceptance of the Port of Izmir for future work; rather it is recommended that Hebei continue to review and monitor the Port of Izmir’s performance annually and implement an adaptive management process.
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1.0 INTRODUCTION

This letter provides the results of a due diligence assessment of the Port of Izmir, Turkey, in accordance with the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (ICMC or the Code).

Golder conducted a desktop due diligence assessment of the Port of Izmir, Turkey, during August 2018. This assessment was conducted by Environmental Engineer Sijia Liu and International Cyanide Management Code (ICMC or the Code) Transport Technical Specialist Mike Woods.

1.1 Terms of Reference

Hebei Chengxin Co., Ltd. (herein after referred to as “Chengxin”) retained Golder Associates Consulting Ltd (herein after referred to as “Golder”) to conduct a desktop Due Diligence Audit of Izmir Port, Turkey. The Port of Izmir is to be included in their Global Ocean Supply Chain.

1.2 Scope and Method

The scope of this Due Diligence Audit includes the management, interim storage and emergency response in relation to cyanide transported though Izmir Port.

The following items, as detailed in the ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016), were addressed within the due diligence:

- Overview of the Port of Izmir
- ICMC Transport Verification Protocol Assessment
  - Transport Practice 1.1
  - Transport Practice 1.5
  - Transport Practice 1.6
  - Transport Practice 2.1
  - Transport Practice 3.1
- Conclusion
- References.

The ICMI’s December 2016 version of the Cyanide Transportation Verification Protocol (the CTPV Protocol), developed by the ICMI, was adopted to guide the Due Diligence process; similarly, the ICMI’s Auditor Guidance for Use of the Transportation Verification Protocol (Auditor Guidance) published December 2016 was used to interpret the CTPV Protocol questions and aid in evaluating the measures taken to meet the Transportation Practices. Due to access restrictions, the due diligence was conducted as a desktop process using information obtained from previous due diligence reviews, ICMI audit reports and publicly available online information.

2.0 OVERVIEW OF PORT OF IZMIR, TURKEY

The Port of Izmir lies on the southeast coast of Izmir Gulf in West Turkey, to the east of Aegean. It is the largest seaport in West Turkey. Port of Izmir is about 505 nautical miles south of Bur Said, 569 nautical miles east of Mersin, and 509 nautical miles of Mesos, 198 nautical miles west of Peiraievs, and 276 nautical miles north of Istanbul.
According to the Turkish Ministry of Transport's Maritime Bureau data, Port of Izmir has set a record for 1.44 million TEU (Twenty foot equivalent unit (TEU) which is used to measure ship and port capacity) container throughput in 2017.

The container terminal has seven berths, which have an alongside depth of 13 m. The total length of the berths is 1050 m. The terminal covers an area of 152,000 m². And the holding capacity is 7074 TEU. Container operations at the quays are carried out by 5 gantry cranes of 40 tons capacity. The operations at the container yard are carried out by 19 rubber tired transtainers and 21 reach stackers of 40 tons capacity, together with 28 containers forklifts of up to 42 tons capacity. Reefer facilities for refrigerated containers are also available. The berths and the yard behind are well equipped with modern handling facilities. There is one floating crane with 100 tons capacity, 5 container quayside gantry cranes of 40 tons capacity, 9 shore cranes of 3-15 tons capacity, 14 mobile cranes of 5-25 tons capacity, 16 rubber tyred transtainers of 40 tons capacity, 21 reach stackers of 40 tons capacity, 28 container forklifts of 10-42 tons capacity, 47 general cargo forklifts of 2-5 tons capacity, 36 tug masters, 2 loaders and 62 trailers.

(source: http://www.tcdd.gov.tr/content/46)

**Figure 1:** Overview photo of the Izmir Port

### 3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT

The ICMI’s *Auditor Guidance for Use of Cyanide Transportation Verification Protocol*, General Guidance states:

> Except as specifically identified in this Guidance document, the Cyanide Transportation Protocol is not to be used to evaluate transport by rail and ship or management of cyanide at rail terminals and port facilities due to security issues, limited access, and the inability of consignors to affect changes in the operating practices of these transport facilities. Rather than conduct Code audits of these facilities, the consignor must conduct and document due diligence investigations of rail carriers, rail terminals, consignor must conduct and document due diligence investigations of rail carriers, rail terminals, shipping companies and port facilities that are engaged to handle cyanide shipments, as further discussed below under Transport Practice 1.1. The consignor’s due diligence investigation must either be conducted or reviewed by an auditor meeting ICMI requirements for a transport expert, and the auditor must conclude that the due diligence investigation has reasonably evaluated these facilities and that the consignor has, to the extent practical, implemented any necessary management measures.
Transport Practice 1.1: Select cyanide transport routes to minimise the potential for accidents and releases

The international sales and exports of sodium cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operated in export markets that are serviced by major international shipping companies with the ability to offer scheduled container services from point of origin to destination. This approach provides transport of Chengxin product through larger ports with modern facilities and management systems. The shipping companies provide the correct manifest documentation to the destination port which provides them with a list of the cargo types and in the case of cyanide and other hazardous cargo the number and location reference of the containers. CMA-CGM is responsible for the sea transportation from the manufacturer to Izmir Port.

The Izmir Port is selected on the basis that it is the closest port to the customer that it meets all reasonable industry standards for safety, security and emergency response and provides the most practical and overall lowest risk route from the manufacture to the customer. Izmir Port is used for the transfer from ship to road transport.

Türkiye Cumhuriyeti Devlet Demiryolları (TCDD) has a management procedure for Izmir Port <Guide to Hazardous Substances>, which details emergency response plans for potential chemical releases.

Chengxin packages all cyanide for transport in accordance with Chinese regulatory standards for the packing of solid cyanide. These standards were prepared to meet the requirements of the United Nations Recommendation on the Transport of Dangerous Goods- Model Regulations, (2005) and thereby meet the requirements of the political jurisdictions through which the loads will pass. Shipments of cyanide are packaged and labelled as stated in the Dangerous Goods Code of the International Maritime Organisation (IMO DG Code) by the producer Chengxin.

Photo of the labels put up on the cyanide containers is as follow:

Figure 2: Labels on cyanide containers
Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organization (IMO DG Code)?

a) **Is the shipment packaged as required by Part 4 of the IMO DG Code?**

Cyanide is packaged at the ICMC certified production facility in Hebei Province and no changes or additional packaging is added. Cyanide is packaged in steel drums or in wooden intermediate bulk containers (IBCs) in accordance with regulatory requirements which are stowed securely in close cargo containers (shipping containers or containers).

b) **Are cyanide packages marked as required by Section 5.2.1 of the IMO DG Code?**

Cyanide packages are marked with placards showing the Dangerous Goods Class, pictogram and UN numbers.

c) **Are cyanide packages marked as required by Section 5.2.2 of the IMO DG Code?**

Cyanide packages are marked with placards showing the Dangerous Goods Class, pictogram for marine pollutant and UN number.

d) **If cyanide is shipped in cargo transport units, are the units placarded and marked as required by Chapter 5.3 of IMO DG code?**

Shipping containers are placarded on two sides with the diamonds with pictogram, UN number and DG class.

e) **Has DG transport documentation been prepared with the information required under Chapter 5 of the IMO DG code?**

Chengxin prepares transport documentation detailing the nature of the product, amount.

f) **If the cyanide has been packed or loaded into a container has a “container/Vehicle packing certificate been prepared meeting the requirements of Section 5.4.2 of the IMO DG Code”?**

Chengxin prepares container packing certificate which meets the requirements of Section 5.4.2 of the IMO DG Code.

g) **If the cyanide has been packed or loaded into a container has a “container/Vehicle packing certificate been prepared meeting the requirements of Section 5.4.2 of the IMO DG Code”?**

Chengxin packages all cyanide for transport in accordance with Chinese regulatory standards for the packing of solid cyanide.

h) **Does the ship carrying cyanide have a list or manifest identifying the presence and location of cyanide or detailed stowage plan including this information as required under section 5.4.3.1 of the IMO DG Code?**

Not Applicable – Vessel transportation is not within the scope of this due diligence.

i) **Does the ship carrying the cyanide have emergency response information, as required under Section 5.4.3.2 of the DG Code?**

Not Applicable – Vessel transportation is not within the scope of this due diligence.
Transport Practice 1.6: Track cyanide shipments to prevent losses during transport

Compagnie Maritime d’Affrètement- Compagnie Générale Maritime (CMA-CGM) is responsible for the sea transportation from the port of origin to Izmir Port. Izmir Port is responsible for the handling between the sea transportation and the road transporter. Road transportation and custom clearance is handled by the cyanide product buyer. Cyanide product is accompanied by bill of Lading documentation that details the amount of product in the shipping and this information is conveyed along the supply chain.

Transport Practice 2.1: Store cyanide in a manner that minimises the potential for accidental releases

Storage facilities of Izmir consist of 215,940 m² open areas and 26,978 m² covered areas including a designated hazardous cargo warehouse. Storage in transit may occur in the event that receipt at the port is delayed. All cargo handling and storing services are provided at the port by a specialist staff utilising modern port equipment 7 days a week and 24 hours a day. ISPS “International Ship and Port Facilities Safety Code” is implemented in the seaport and high standard security and control is provided 24 hours a day within the context of seaports approved for security by the Undersecretaries of Maritime Affairs. Entire terminal site is monitored through CCTV security cameras.

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

Türkiye Cumhuriyeti Devlet Demiryolları (TCDD) has a management procedure for Izmir Port <Guide to Hazardous Substances>, which details emergency response plans for potential chemical releases.

4.0 CONCLUSION

It was not possible during this due diligence to physically inspected the Port, as such the review was based on information obtained from previous due diligence reviews, ICMI audit reports, discussions with consignors and publicly available online information.

Based on the evidence reviewed for Izmir Port within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Izmir Port's management of solid sodium cyanide products and additional management measures by the consigner are not considered necessary.

This assessment should not be a final acceptance of Izmir Port for all future work; rather it is recommended that Chengxin continue to review and monitor Izmir's Port's performance annually and implement an adaptive management process.

5.0 CLOSING

We trust this due diligence report meets Chengxin’s requirements. If you have any questions, please do not hesitate to contact the undersigned.
REFERENCES
Turkey Izmir Port (2016). Available at: https://dlca.logcluster.org/display/public/DLCA/2.1.2+Turkey+Port+of+Izmir.jsessionid=8DF80384C4526792C3C436599A250BBF; accessed on August 26th 2018.


Features of the Port of Izmir. Available at: http://www.tcdd.gov.tr/content/46; accessed on August 26th 2018.

Image: http://www.tcdd.gov.tr/content/46
Signature Page

Golder Associates Consulting Ltd.

Sijia Liu  
*EHS Engineer*

Mike Woods  
*Transport Technical Specialist*

SL/MCW/hn

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Executive Summary

Golder Associates Consulting Limited (Golder) was retained by Hebei Chengxin Co., Ltd. (Chengxin) to conduct a due diligence of Port of Mersin, Turkey. This assessment was conducted by Environmental Engineer Sijia Liu and International Cyanide Management Code (ICMC or the Code) Transport Technical Specialist Mike Woods.

The following items, as detailed in the ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016), were addressed within the due diligence:

- Transport Practice 1.1
- Transport Practice 1.5
- Transport Practice 1.6
- Transport Practice 2.1
- Transport Practice 3.1.

The ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016) was used to guide the due diligence assessment. It was not possible during this due diligence to physically inspect the Port, as such the review was based on information obtained from previous due diligence reviews, ICMI audit reports and publicly available online information.

Based on the evidence reviewed, this due diligence did not find significant issues of concern in regard to the Port of Mersin’s management of solid sodium cyanide product.

This assessment should not be a final acceptance of the Port of Mersin for future work; rather it is recommended that Hebei continue to review and monitor the Port of Mersin’s performance annually and implement an adaptive management process.
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1.0 INTRODUCTION

This letter provides the results of a due diligence assessment of the Port of Mersin, Turkey, in accordance with the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (ICMC or the Code).

Golder conducted a desktop due diligence assessment of the Port of Mersin, Turkey, during September 2018. This assessment was conducted by Environmental Engineer Sijia Liu and International Cyanide Management Code (ICMC or the Code) Transport Technical Specialist Mike Woods.

1.1 Terms of Reference

Hebei Chengxin Co., Ltd. (herein after referred to as “Chengxin”) retained Golder Associates Consulting Ltd (herein after referred to as “Golder”) to conduct a desktop Due Diligence Audit for Port of Mersin, Turkey. The Port of Mersin is to be included in their Global Ocean Supply Chain.

1.2 Scope and Method

The scope of this Due Diligence Audit includes the management, interim storage and emergency response in relation to cyanide transported through Mersin Port.

The following items, as detailed in the ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016), were addressed within the due diligence:

- Overview of the Port of Mersin
- ICMC Transport Verification Protocol Assessment
  - Transport Practice 1.1
  - Transport Practice 1.5
  - Transport Practice 1.6
  - Transport Practice 2.1
  - Transport Practice 3.1
- Conclusion
- References.

The ICMI’s December 2016 version of the Cyanide Transportation Verification Protocol (the CTPV Protocol), developed by the ICMI, was adopted to guide the Due Diligence process; similarly, the ICMI’s Auditor Guidance for Use of the Transportation Verification Protocol (Auditor Guidance) published December 2016 was used to interpret the CTPV Protocol questions and aid in evaluating the measures taken to meet the Transportation Practices. Due to access restrictions, the due diligence was conducted as a desktop process using information obtained from previous due diligence reviews, ICMI audit reports and publicly available online information.

2.0 OVERVIEW OF PORT OF MERSIN, TURKEY

Port of Mersin, which was constructed in 1954, is located on the north bank of Mersin Bay on the southern coast of Turkey. It is on the north-east side of the Mediterranean Sea and is the largest port in southern Turkey. It is a member of the Global PSA. The main industries are textiles, food, phosphate and glass industries, as well as refineries with an annual refining capacity of 4.5 million tons. The port is about 75 km from the airport and has regular domestic flights.
Mersin Port, operated by Türkiye Cumhuriyeti Devlet Demiryolları (TCDD), was taken into the scope of privatization through “Transfer of Operational Rights” method with Decision of High Board of Privatization dated 30.12.2004 and No. 2004/128 and it was transferred to PSA - Akfen Joint Venture Group winning the tender for 36 years with an amount of 755,000,000 USD. The Port continues its activities under the title of Mersin Uluslararası Liman İşletmeciliği A.Ş. (MIP) (Mersin International Port Management JSC).

TCDD performs its control and supervision duties and authorities given within the framework of the concerned provisions of the Concession Agreement on Transfer of Operational Rights by means of TCDD Mersin Port Authority Control Department.

As a result of the ports extensive facilities where services are provided to all types of cargoes including containers, general cargoes, project cargoes, Ro-Ro, dry bulk and liquid bulk, passenger services and direct dry bulk handling services from ship to container, Port of Mersin is the largest multi-purpose port in Turkey with the capacity to provide all port services in the same port area. The port is able to conduct loading-discharging services to 30 vessels simultaneously, depending on the lengths of the vessels. An average volume of 30 million tons of cargo per year is handled at Port of Mersin.

The container terminal has 21 berths, which have an alongside depth of 15.8 m. The total length of the berths is 3370 m. The terminal covers an area of 112 hectares. Container handling capacity of Port of Mersin is 2,600,000 TEU/Year (Twenty foot equivalent unit (TEU) which is used to measure ship and port capacity). Container operations at the quays are carried out by 5 gantry cranes of 40 tons capacity. The operations at the container yard are carried out by 11 pieces SSG, 5 pieces MHC, 38 pieces RTG, 100 pieces terminal tractor together with 67 containers forklifts, 24 pieces conveyor, 13 pieces mini loader and 28 pieces reach stacker.

(source: http://www.tcdd.gov.tr/content/50)

Figure 1: Overview photo of Mersin Port
3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT

The ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol, General Guidance states:

*Except as specifically identified in this Guidance document, the Cyanide Transportation Protocol is not to be used to evaluate transport by rail and ship or management of cyanide at rail terminals and port facilities due to security issues, limited access, and the inability of consignors to affect changes in the operating practices of these transport facilities. Rather than conduct Code audits of these facilities, the consignor must conduct and document due diligence investigations of rail carriers, rail terminals, shipping companies and port facilities that are engaged to handle cyanide shipments, as further discussed below under Transport Practice 1.1. The consignor’s due diligence investigation must either be conducted or reviewed by an auditor meeting ICMI requirements for a transport expert, and the auditor must conclude that the due diligence investigation has reasonably evaluated these facilities and that the consignor has, to the extent practical, implemented any necessary management measures.*

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

The international sales and exports of sodium cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operated in export markets that are serviced by major international shipping companies with the ability to offer scheduled container services from point of origin to destination. This approach provides transport of Chengxin product through larger ports with modern facilities and management systems. The shipping companies provide the correct manifest documentation to the destination port, which provides them with a list of the cargo types and in the case of cyanide and other hazardous cargo the number and location reference of the containers.

The Mersin Port is selected on the basis that it is the closest port to the customer that it meets all reasonable industry standards for safety, security and emergency response and provides the most practical and overall lowest risk route from the manufacture to the customer.

Mersin Port has a management procedure for Health, Safety, Environmental and Security Policies <MIP HSSE Policy>, which details emergency response plans for potential chemical releases. Transport Practice 1.5: (1.5.1) Follow international standard for the transportation of cyanide by sea.

Chengxin packages all cyanide for transport in accordance with Chinese regulatory standards for the packing of solid cyanide. These standards were prepared to meet the requirements of the United Nations Recommendation on the Transport of Dangerous Goods- Model Regulations, (2005) and thereby meet the requirements of the political jurisdictions through which the loads will pass. Shipments of cyanide are packaged and labelled as stated in the Dangerous Goods Code of the International Maritime Organization (IMO DG Code) by the producer Chengxin.

Photo of the labels put up on the cyanide containers is as follows:
Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organization (IMO DG Code)?

a) Is the shipment packaged as required by Part 4 of the IMO DG Code?

Cyanide is packaged at the ICMC certified production facility in Hebei Province and no changes or additional packaging is added. Cyanide is packaged in steel drums or in wooden intermediate bulk containers (IBCs) in accordance with regulatory requirements which are stowed securely in close cargo containers (shipping containers or containers).

b) Are cyanide packages marked as required by Section 5.2.1 of the IMO DG Code?

Cyanide packages are marked with placards showing the Dangerous Goods Class, pictogram and UN numbers.

c) Are cyanide packages marked as required by Section 5.2.2 of the IMO DG Code?

Cyanide packages are marked with placards showing the Dangerous Goods Class, pictogram for marine pollutant and UN number.

d) If cyanide is shipped in cargo transport units, are the units placarded and marked as required by Chapter 5.3 of IMO DG code?

Shipping containers are placarded on two sides with the diamonds with pictogram, UN number and DG class.

e) Has DG transport documentation been prepared with the information required under Chapter 5 of the IMO DG code?

Chengxin prepares transport documentation detailing the nature of the product, amount.
f) If the cyanide has been packed or loaded into a container has a “container/ Vehicle packing certificate been prepared meeting the requirements of Section 5.4.2 of the IMO DG Code”?

Chengxin prepares container packing certificate which meets the requirements of Section 5.4.2 of the IMO DG Code.

g) If the cyanide has been packed or loaded into a container has a “container/ Vehicle packing certificate been prepared meeting the requirements of Section 5.4.2 of the IMO DG Code”?

Chengxin packages all cyanide for transport in accordance with Chinese regulatory standards for the packing of solid cyanide.

h) Does the ship carrying cyanide have a list or manifest identifying the presence and location of cyanide or detailed stowage plan including this information as required under section 5.4.3.1 of the IMO DG Code?

Not Applicable – Vessel transportation is not within the scope of this due diligence.

i) Does the ship carrying the cyanide have emergency response information, as required under Section 5.4.3.2 of the DG Code?

Not Applicable – Vessel transportation is not within the scope of this due diligence.

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

At the time of this due diligence, Port of Mersin had not been used by Chengxin. Transportation from the port of Mersin to the final destination is handled by a road transportation company (To-Pet). Mersin Port is responsible for the handling of goods between the sea transportation and the road transporter. Anagold Madencilik A.S., which is the buyer and the final destination of the cyanide product is responsible for the custom clearance. Cyanide product is accompanied by bill of Lading documentation that details the amount of product in the shipping and this information is conveyed along the supply chain.

Transport Practice 2.1: Store cyanide in a manner that minimises the potential for accidental releases

Storage facilities of Mersin consist of 468,000 m² open areas and 13,500 m² covered areas. Storage in transit may occur in the event that receipt at the port is delayed. As of 27 December 2007, Mersin International Port has completed studies for the International Ship and Port Facility Security Code (ISPS Code) and in accordance with the Port Security Plan it has presented to the Undersecretariat of Maritime Affairs, has obtained the ISPS Code Compliance Certificate. While MIP ensures port security within the ISPS Code Compliance Certificate framework, it additionally applies the rules stated in the “Mersin International Port Inc. Security Plan”, approved by the Republic of Turkey Ministry of Transport, Maritime Affairs and Communication. Entries and exits are limited through the use of new biometric identification cards enabling entrance only to authorised personnel. The port is under continuous surveillance through 300 CCTV cameras with 360° rotation capability are placed at various points within the port area.

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

Türkiye Cumhuriyeti Devlet Demiryolları (TCDD) has a management procedure for Izmir Port <Guide to Hazardous Substances>, which details emergency response plans for potential chemical releases.
4.0 CONCLUSION

It was not possible during this due diligence to physically inspected the Port, as such the review was based on information obtained from previous due diligence reviews, ICMI audit reports, discussions with consignors and publicly available online information.

Based on the evidence reviewed for Mersin Port within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Mersin Port’s management of solid sodium cyanide products and additional management measures by the consigner are not considered necessary.

This assessment should not be a final acceptance of Mersin Port for all future work; rather it is recommended that Chengxin continue to review and monitor Mersin’s Port’s performance annually and implement an adaptive management process.

5.0 CLOSING

We trust this due diligence report meets Chengxin’s requirements. If you have any questions, please do not hesitate to contact the undersigned.

REFERENCES

Mersin Port Location. Available at: https://en.mersinport.com.tr/port-specifications/detail/Port-Location/192/454/0; accessed on September 2nd 2018.


Features of the Port of Mersin. Available at: http://www.tcdd.gov.tr/content/50; accessed on September 2nd 2018.

Image: http://www.tcdd.gov.tr/content/50
Signature Page

Golder Associates Consulting Ltd.

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EHS Engineer

Mike Woods
Transport Technical Specialist

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REPORT

Due Diligence for Surabaya Port

Hebei Chengxin Co., Ltd.

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September 2018
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1 Copy: Hebei Chengxin Co. Ltd
1 Copy: Golder Associates Consulting Limited
Executive Summary

Golder Associates Consulting Limited (Golder) was retained by Hebei Chengxin Co., Ltd. (Chengxin) to conduct a due diligence of Port of Surabaya, Indonesia. This assessment was conducted by Environmental Engineer Sijia Liu and International Cyanide Management Code (ICMC or the Code) Transport Technical Specialist Mike Woods.

The following items, as detailed in the ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016), were addressed within the due diligence:

- Transport Practice 1.1
- Transport Practice 1.5
- Transport Practice 1.6
- Transport Practice 2.1
- Transport Practice 3.1.

The ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016) was used to guide the due diligence assessment. It was not possible during this due diligence to physically inspect the Port, as such the review was based on information obtained from previous due diligence reviews, ICMI audit reports and publicly available online information.

Based on the evidence reviewed, this due diligence did not find significant issues of concern in regard to the Port of Surabaya’s management of solid sodium cyanide product.

This assessment should not be a final acceptance of the Port of Surabaya for future work; rather it is recommended that Hebei continue to review and monitor the Port of Surabaya’s performance annually and implement an adaptive management process.
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1.0 INTRODUCTION
This letter provides the results of a due diligence assessment of the Port of Surabaya, Indonesia, in accordance with the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (ICMC or the Code).

Golder conducted a desktop due diligence assessment of the Port of Surabaya, Indonesia, during September 2018. This assessment was conducted by Environmental Engineer Sijia Liu and International Cyanide Management Code (ICMC or the Code) Transport Technical Specialist Mike Woods.

1.1 Terms of Reference
Hebei Chengxin Co., Ltd. (herein after referred to as “Chengxin”) retained Golder Associates Consulting Ltd (herein after referred to as “Golder”) to conduct a desktop Due Diligence Audit for Port of Surabaya, Indonesia. The Port of Surabaya is to be included in their Global Ocean Supply Chain.

1.2 Scope and Method
The scope of this Due Diligence Audit includes the management, interim storage and emergency response in relation to cyanide transported through Surabaya Port.

The following items, as detailed in the ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016), were addressed within the due diligence:

- Overview of the Port of Surabaya
- ICMC Transport Verification Protocol Assessment
  - Transport Practice 1.1
  - Transport Practice 1.5
  - Transport Practice 1.6
  - Transport Practice 2.1
  - Transport Practice 3.1
- Conclusion
- References.

The ICMI’s December 2016 version of the Cyanide Transportation Verification Protocol (the CTPV Protocol), developed by the ICMI, was adopted to guide the Due Diligence process; similarly, the ICMI’s Auditor Guidance for Use of the Transportation Verification Protocol (Auditor Guidance) published December 2016 was used to interpret the CTPV Protocol questions and aid in evaluating the measures taken to meet the Transportation Practices. Due to access restrictions, the due diligence was conducted as a desktop process using information obtained from previous due diligence reviews, ICMI audit reports and publicly available online information.

2.0 OVERVIEW OF PORT OF SURABAYA, INDONESIA
Port of Surabaya is located on the west part of Tantung Perak Port with the coordinates of 7; 12; S, 112; 40E. It is on the north shore of eastern Java Province, at the mouth of the Mas River in the Strait of Madura, 50 n.m. south-east of Tuban Marine Terminal and 60 n.m. south of Camar Marine Terminal.
The Port is under the authority of PT Terminal Petikemas Surabaya (TPS). Tanjung Perak is the port of Surabaya, handling general cargo, bulk carriers, gas carriers, tankers, container vessels, Ro-Ro and passenger vessels. PT Terminal Petikemas Surabaya as one of the international terminal in Indonesia with international standard is committed to maintain prominent position of TPS as The Gateway to Eastern Indonesia, to ensure that it continues to provide the level of services required to bolster up the economic growth of Indonesia and to give its best services to the customers. It is the only terminal operator in Indonesia that is certified C-TPAT and ISO 28000: 2007 (safety management systems for the supply chain).

Port of Surabaya has an international wharf and a domestic wharf. The international wharf is 1,000 m in length, 50 m in width and 13 m in depth, while the domestic wharf is 450 m in length, 45 m in width and 8 m in depth. The international wharf covers an area of 35 hectares. Container handling capacity of Port of Surabaya is 32,223 TEU/Year (Twenty foot equivalent unit (TEU), which is used to measure ship and port capacity). Container operations at the quays are carried out by 15 units of container crane. The operations at the container yard are carried out by 30 pieces of RTG, 7 units of reach stacker, 3 units of sky stacker, 909 units of reefer plug together with 18 containers forklifts, 63 units of dolly system and 80 units of head trucks.

(source: http://www.tps.co.id/en/services/container-discharge-service)

Figure 1: Overview photo of Surabaya Port

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT

The ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol, General Guidance states:

Except as specifically identified in this Guidance document, the Cyanide Transportation Protocol is not to be used to evaluate transport by rail and ship or management of cyanide at rail terminals and port facilities due to security issues, limited access, and the inability of consignors to affect changes in the operating practices of these transport facilities. Rather than conduct Code audits of these facilities, the consignor must conduct and document due diligence investigations of rail carriers, rail terminals, consignor must conduct and document due diligence investigations of rail carriers, rail terminals, shipping companies and port facilities that are engaged to handle cyanide shipments, as further discussed below under Transport Practice 1.1. The consignor’s due diligence investigation must either be conducted or reviewed by an auditor meeting ICMI requirements for a transport expert, and the auditor must conclude that the due diligence investigation has reasonably evaluated these facilities and that the consignor has, to the extent practical, implemented any necessary management measures.
Transport Practice 1.1: Select cyanide transport routes to minimise the potential for accidents and releases

The international sales and exports of sodium cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operated in export markets that are serviced by major international shipping companies with the ability to offer scheduled container services from point of origin to destination. This approach provides transport of Chengxin product through larger ports with modern facilities and management systems. The shipping companies provide the correct manifest documentation to the destination port, which provides them with a list of the cargo types and in the case of cyanide and other hazardous cargo the number and location reference of the containers.

The Surabaya Port is selected on the basis that it is the closest port to the customer that it meets all reasonable industry standards for safety, security and emergency response and provides the most practical and overall lowest risk route from the manufacture to the customer.

Surabaya Port has a policy to meet customer requirements and applicable regulations and laws related to the service, environment, occupational health and safety, information security, security of supply chain and continuously improve the level of fulfilment.

Chengxin packages all cyanide for transport in accordance with Chinese regulatory standards for the packing of solid cyanide. These standards were prepared to meet the requirements of the United Nations Recommendation on the Transport of Dangerous Goods- Model Regulations, (2005) and thereby meet the requirements of the political jurisdictions through which the loads will pass. Shipments of cyanide are packaged and labelled as stated in the Dangerous Goods Code of the International Maritime Organization (IMO DG Code) by the producer Chengxin.

Photo of the labels put up on the cyanide containers is as follow:

![Figure 2: Labels on cyanide containers](image)
Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organization (IMO DG Code)?

a) Is the shipment packaged as required by Part 4 of the IMO DG Code?
Cyanide is packaged at the ICMC certified production facility in Hebei Province and no changes or additional packaging is added. Cyanide is packaged in steel drums or in wooden intermediate bulk containers (IBCs) in accordance with regulatory requirements which are stowed securely in close cargo containers (shipping containers or containers).

b) Are cyanide packages marked as required by Section 5.2.1 of the IMO DG Code?
Cyanide packages are marked with placards showing the Dangerous Goods Class, pictogram and UN numbers.

c) Are cyanide packages marked as required by Section 5.2.2 of the IMO DG Code?
Cyanide packages are marked with placards showing the Dangerous Goods Class, pictogram for marine pollutant and UN number.

d) If cyanide is shipped in cargo transport units, are the units placarded and marked as required by Chapter 5.3 of IMO DG code?
Shipping containers are placarded on two sides with the diamonds with pictogram, UN number and DG class.

e) Has DG transport documentation been prepared with the information required under Chapter 5 of the IMO DG code?
Chengxin prepares transport documentation detailing the nature of the product, amount.

f) If the cyanide has been packed or loaded into a container has a “container/vehicle packing certificate been prepared meeting the requirements of Section 5.4.2 of the IMO DG Code”?
Chengxin prepares container packing certificate which meets the requirements of Section 5.4.2 of the IMO DG Code.

g) If the cyanide has been packed or loaded into a container has a “container/vehicle packing certificate been prepared meeting the requirements of Section 5.4.2 of the IMO DG Code”?
Chengxin packages all cyanide for transport in accordance with Chinese regulatory standards for the packing of solid cyanide.

h) Does the ship carrying cyanide have a list or manifest identifying the presence and location of cyanide or detailed stowage plan including this information as required under section 5.4.3.1 of the IMO DG Code?
Not Applicable – Vessel transportation is not within the scope of this due diligence.

i) Does the ship carrying the cyanide have emergency response information, as required under Section 5.4.3.2 of the DG Code?
Not Applicable – Vessel transportation is not within the scope of this due diligence.
Transport Practice 1.6: Track cyanide shipments to prevent losses during transport

KMTC is responsible for the sea transportation from the manufacturer to Surabaya Port. Chengxin has entrusted PT Transcontinent and PT Energy Logistics for the transportation from the port of origin. Surabaya Port is used for the transfer from ship to road transport. Custom clearance of cyanide products is handled by PT J Resources Nusantara. Cyanide product is accompanied by bill of Lading documentation that details the amount of product in the shipping and this information is conveyed along the supply chain.

Transport Practice 2.1: Store cyanide in a manner that minimises the potential for accidental releases

Storage facilities of Surabaya covers a total area of 10,000 m², including 6,500 m² of dangerous goods storage area. Storage in transit may occur in the event that receipt at the port is delayed. ISPS “International Ship and Port Facilities Safety Code” is implemented in Port of Surabaya. While Surabaya Port ensures port security within the ISPS Code Compliance Certificate framework, the New TOS System, implemented since 2013 is used to serve operational activities and billing. New TOS System consists of TOS (Terminal Operating System) for operational activities. The system is used to manage all container movement. Port of Surabaya can monitor container movement online and real time. New TOS System provides the actual conditions of operational activities.

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

The Indonesian Government has national standards in place for the transportation, handling and storage of hazardous substances.

Indonesia’s National Oil Spill Contingency Plan (NOSCP) (2006), extends to hazardous and noxious substances (HNS). In the event of an emergency situation, the National Team for Oil Spill Response would provide the technical expertise, with input from other institutions, government departments, the private sector and other non-government organisations. The National Team through its Command and Control Centre would carry out the response, using personnel, equipment and materials belonging to its member organisations in the vicinity of the emergency incident.

The DGST is the competent authority and administers the Plan for dealing with pollution by oil and other noxious substances in marine and freshwater environments. The DGST has equipment that could be utilised for HNS spills and is supported by further equipment from the oil industry.

4.0 CONCLUSION

It was not possible during this due diligence to physically inspected the Port, as such the review was based on information obtained from previous due diligence reviews, ICMI audit reports, discussions with consignors and publicly available online information.

Based on the evidence reviewed for Surabaya Port within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Surabaya Port’s management of solid sodium cyanide products and additional management measures by the consigner are not considered necessary.

This assessment should not be a final acceptance of Surabaya Port for all future work; rather it is recommended that Chengxin continue to review and monitor Surabaya Port’s performance annually and implement an adaptive management process.
5.0 CLOSING

We trust this due diligence report meets Chengxin’s requirements. If you have any questions, please do not hesitate to contact the undersigned.

REFERENCES

History. Available at: http://www.tps.co.id/community-development-programme/history; accessed on September 2nd 2018.

Yard. Available at: http://www.tps.co.id/facilities/yard; accessed on September 6th 2018.

Equipment. Available at: http://www.tps.co.id/facilities/equipment; accessed on September 6th 2018.


Location. Available at: http://www.tps.co.id/profile/location; accessed on September 6th 2018.


Image: http://www.tps.co.id/en/services/container-discharge-service
Signature Page

Golder Associates Consulting Ltd.

Sijia Liu  
EHS Engineer

Mike Woods  
Transport Technical Specialist

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REPORT

Due Diligence for Trabzon Port

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September 2018
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1 Copy: Hebei Chengxin Co. Ltd
1 Copy: Golder Associates Consulting Limited
Executive Summary

Golder Associates Consulting Limited (Golder) was retained by Hebei Chengxin Co., Ltd. (Chengxin) to conduct a due diligence of Port of Trabzon, Turkey. This assessment was conducted by Environmental Engineer Sijia Liu and International Cyanide Management Code (ICMC or the Code) Transport Technical Specialist Mike Woods.

The following items, as detailed in the ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016), were addressed within the due diligence:

- Transport Practice 1.1
- Transport Practice 1.5
- Transport Practice 1.6
- Transport Practice 2.1
- Transport Practice 3.1.

The ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016) was used to guide the due diligence assessment. It was not possible during this due diligence to physically inspect the Port, as such the review was based on information obtained from previous due diligence reviews, ICMI audit reports and publicly available online information.

Based on the evidence reviewed, this due diligence did not find significant issues of concern in regard to the Port of Trabzon’s management of solid sodium cyanide product.

This assessment should not be a final acceptance of the Port of Trabzon for future work; rather it is recommended that Hebei continue to review and monitor the Port of Trabzon’s performance annually and implement an adaptive management process.
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1.0 INTRODUCTION

This letter provides the results of a due diligence assessment of the Port of Trabzon, Turkey, in accordance with the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (ICMC or the Code).

Golder conducted a desktop due diligence assessment of the Port of Trabzon, Turkey, during September 2018. This assessment was conducted by Environmental Engineer Sijia Liu and International Cyanide Management Code (ICMC or the Code) Transport Technical Specialist Mike Woods.

1.1 Terms of Reference

Hebei Chengxin Co., Ltd. (herein after referred to as “Chengxin”) retained Golder Associates Consulting Ltd (herein after referred to as “Golder”) to conduct a desktop Due Diligence Audit for Port of Trabzon, Turkey. The Port of Trabzon is to be included in their Global Ocean Supply Chain.

1.2 Scope and Method

The scope of this Due Diligence Audit includes the management, interim storage and emergency response in relation to cyanide transported through Trabzon Port.

The following items, as detailed in the ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016), were addressed within the due diligence:

- Overview of the Port of Trabzon
- ICMC Transport Verification Protocol Assessment
  - Transport Practice 1.1
  - Transport Practice 1.5
  - Transport Practice 1.6
  - Transport Practice 2.1
  - Transport Practice 3.1
- Conclusion
- References.

The ICMI’s December 2016 version of the Cyanide Transportation Verification Protocol (the CTPV Protocol), developed by the ICMI, was adopted to guide the Due Diligence process; similarly, the ICMI’s Auditor Guidance for Use of the Transportation Verification Protocol (Auditor Guidance) published December 2016 was used to interpret the CTPV Protocol questions and aid in evaluating the measures taken to meet the Transportation Practices. Due to access restrictions, the due diligence was conducted as a desktop process using information obtained from previous due diligence reviews, ICMI audit reports and publicly available online information.

2.0 OVERVIEW OF PORT OF TRABZON, TURKEY

Port of Trabzon, which was constructed in 1954. Port of Trabzon is located between North 40° 57’ 30” latitude and East 40° 02’30” longitude and North 41° 06’36” and East 39° 25’00” longitude. It is situated within the line that is drawn towards the North direction between the Narlik foreland on the east and the Isikli foreland on the west and the coastline that is bordered with the Turkish Territorial Waters.
Trabzon Port is operated by Turkish Maritime Organization (TDI). Port of Trabzon was modernised in order that it could cater for the increased sea traffic and the construction works in 1980. The construction was completed in 1990 and the port was brought into its current state.

The operational rights of the Port of Trabzon for the duration of 30 years has been taken over on 21.11.2003 by Trabzon Port Operations INC, which is affiliated company of ALBAYRAK Group, as the tender that was opened by the Republic of Turkey Prime Ministry Privatisation Administration, was awarded to the company.

ISPS Code Certificate has been obtained for the Port of Trabzon by full filling the provisions of the ISPS Code Contract. The Country Code for Port of Trabzon is 0114 and the IMO No is 24882.

Bilge Facilities is available at the Port of Trabzon with 2 tons per hour treatment and with 100 tons of storage capacity. The port has eight berths, and the depths are between 2.5 m and 10 m. The total length of the berths is 1525 m. Container handling capacity of Port of Trabzon is 10 million tons/annum. Container operations at the quays are carried out by 10 shore cranes of 3 to 25 tons, 13 mobile cranes of 5 to 140 tons, 10 forklifts of 3 to 33 tons, 2 stackers of 40-45 tons, 8 trailers of 20-44 tons, 5 loaders of 0.6-1.6 tons, 10 tow trucks of 40-44 tons, and 2 pneumatics with capacities of 80 – 200 tons/hour.


Figure 1: Overview photo of Trabzon Port
3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT

The ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol, General Guidance states:

Except as specifically identified in this Guidance document, the Cyanide Transportation Protocol is not to be used to evaluate transport by rail and ship or management of cyanide at rail terminals and port facilities due to security issues, limited access, and the inability of consignors to affect changes in the operating practices of these transport facilities. Rather than conduct Code audits of these facilities, the consignor must conduct and document due diligence investigations of rail carriers, rail terminals, shipping companies and port facilities that are engaged to handle cyanide shipments, as further discussed below under Transport Practice 1.1. The consignor’s due diligence investigation must either be conducted or reviewed by an auditor meeting ICMI requirements for a transport expert, and the auditor must conclude that the due diligence investigation has reasonably evaluated these facilities and that the consignor has, to the extent practical, implemented any necessary management measures.

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

The international sales and exports of sodium cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operated in export markets that are serviced by major international shipping companies with the ability to offer scheduled container services from point of origin to destination. This approach provides transport of Chengxin product through larger ports with modern facilities and management systems. The shipping companies provide the correct manifest documentation to the destination port which provides them with a list of the cargo types and in the case of cyanide and other hazardous cargo the number and location reference of the containers.

The Trabzon Port is selected on the basis that it is the closest port to the customer that it meets all reasonable industry standards for safety, security and emergency response and provides the most practical and overall lowest risk route from the manufacture to the customer.

Port of Turkey has a Marine Pollution Prevention Regulations, which details rules and prohibited actions taken by the Turkish Ministry of Environment (rules numbered 2872). And emergency responses to emergency marine pollution incidents.

Chengxin packages all cyanide for transport in accordance with Chinese regulatory standards for the packing of solid cyanide. These standards were prepared to meet the requirements of the United Nations Recommendation on the Transport of Dangerous Goods- Model Regulations, (2005) and thereby meet the requirements of the political jurisdictions through which the loads will pass. Shipments of cyanide are packaged and labelled as stated in the Dangerous Goods Code of the International Maritime Organization (IMO DG Code) by the producer Chengxin.

Photo of the labels put up on the cyanide containers is as follows:
Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organization (IMO DG Code)?

a) Is the shipment packaged as required by Part 4 of the IMO DG Code?

Cyanide is packaged at the ICMC certified production facility in Hebei Province and no changes or additional packaging is added. Cyanide is packaged in steel drums or in wooden intermediate bulk containers (IBCs) in accordance with regulatory requirements which are stowed securely in close cargo containers (shipping containers or containers).

b) Are cyanide packages marked as required by Section 5.2.1 of the IMO DG Code?

Cyanide packages are marked with placards showing the Dangerous Goods Class, pictogram and UN numbers.

c) Are cyanide packages marked as required by Section 5.2.2 of the IMO DG Code?

Cyanide packages are marked with placards showing the Dangerous Goods Class, pictogram for marine pollutant and UN number.

d) If cyanide is shipped in cargo transport units, are the units placarded and marked as required by Chapter 5.3 of IMO DG code?

Shipping containers are placarded on two sides with the diamonds with pictogram, UN number and DG class.

e) Has DG transport documentation been prepared with the information required under Chapter 5 of the IMO DG code?

Chengxin prepares transport documentation detailing the nature of the product, amount.
f) If the cyanide has been packed or loaded into a container has a “container/vehicle packing certificate been prepared meeting the requirements of Section 5.4.2 of the IMO DG Code”? 
Chengxin prepares container packing certificate which meets the requirements of Section 5.4.2 of the IMO DG Code.

g) If the cyanide has been packed or loaded into a container has a “container/vehicle packing certificate been prepared meeting the requirements of Section 5.4.2 of the IMO DG Code”? 
Chengxin packages all cyanide for transport in accordance with Chinese regulatory standards for the packing of solid cyanide.

h) Does the ship carrying cyanide have a list or manifest identifying the presence and location of cyanide or detailed stowage plan including this information as required under section 5.4.3.1 of the IMO DG Code? 
Not Applicable – Vessel transportation is not within the scope of this due diligence.

i) Does the ship carrying the cyanide have emergency response information, as required under Section 5.4.3.2 of the DG Code? 
Not Applicable – Vessel transportation is not within the scope of this due diligence.

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

At the time of conducting this due diligence, Port of Trabzon had not been used by Chengxin. Transportation from the port to the final destination is handled by road transportation (To-Pet). Trabzon Port is responsible for the handling of goods between the sea transportation and the road transporter. Koza Gold Corporation, which is the buyer and the final destination of the cyanide products is responsible for the custom clearance. Cyanide product is accompanied by bill of Lading documentation that details the amount of product in the shipping and this information is conveyed along the supply chain.

Transport Practice 2.1: Store cyanide in a manner that minimises the potential for accidental releases

Storage facilities of Trabzon Port consist of 230,000 m² open areas and 13,000 m² covered areas. Storage in transit may occur in the event that receipt at the port is delayed. International Ship and Port Facility Security Code (ISPS Code) Certificate has been obtained for the Port of Trabzon by fulfilling the provisions of the ISPS Code Contract.

Trabzon Free Zone is situated within the Port of Trabzon. It is identified as an area for commodities that have high value, which is within the country but outside of the borders of the customs. It provides a secure and convenient warehousing opportunity, where small deliveries of the goods of the local market is performed. Consequently, goods originating through the overseas trade could be brought into the warehouses of Trabzon Free Zone as being exempt from customs duties and from importation taxes and from other charges. Trabzon Free Zone provides a secure and convenient warehousing opportunity through two warehouses with an area of 11,000 m² that have first class flooring for high value goods and through an uncovered open area with an area of 20,000 m². Both of the warehouses have canopied loading areas and spaces for the cranes. Private warehouse provisions are available with special small warehouses with sizes of 200 m².
Transport Practice 3.1: Prepare detail emergency response plans for potential cyanide releases

Port of Turkey has a Marine Pollution Prevention Regulations, which details rules and prohibited actions taken by the Turkish Ministry of Environment (rules numbered 2872) and emergency responses to emergency marine pollution incidents.

4.0 CONCLUSION

It was not possible during this due diligence to physically inspected the Port, as such the review was based on information obtained from previous due diligence reviews, ICMI audit reports, discussions with consignors and publicly available online information.

Based on the evidence reviewed for Trabzon Port within the constraints of access and limited influence, this due diligence did not find significant concerns with regards to Trabzon Port’s management of solid sodium cyanide products and additional management measures by the consigner are not considered necessary.

This assessment should not be a final acceptance of Trabzon Port for all future work; rather it is recommended that Chengxin continue to review and monitor Trabzon’s Port’s performance annually and implement an adaptive management process.

5.0 CLOSING

We trust this due diligence report meets Chengxin’s requirements. If you have any questions, please do not hesitate to contact the undersigned.

REFERENCES


A general view of the Turkish ports. Available at: http://www.europeanmaritime.com/ports.html; accessed on September 2nd 2018.

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Transport Technical Specialist

SL/MCW/hn

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Executive Summary

Golder Associates Consulting Limited (Golder) was retained by Hebei Chengxin Co., Ltd. (Chengxin) to conduct a due diligence of Lianyungang Port, China. This assessment was conducted by Environmental Engineer Sijia Liu and International Cyanide Management Code (ICMC or the Code) Transport Technical Specialist Mike Woods.

The following items, as detailed in the ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016), were addressed within the due diligence:

- Transport Practice 1.1
- Transport Practice 1.5
- Transport Practice 1.6
- Transport Practice 2.1
- Transport Practice 3.1.

The ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016) was used to guide the due diligence assessment. It was not possible during this due diligence to physically inspect the Port, as such the review was based on information obtained from previous due diligence reviews, ICMI audit reports and publicly available online information.

Based on the evidence reviewed, this due diligence did not find significant issues of concern in regard to the Lianyungang Port’s management of solid sodium cyanide product.

This assessment should not be a final acceptance of the Lianyungang Port’s for future work; rather it is recommended that Hebei continue to review and monitor the Lianyungang Port’s performance annually and implement an adaptive management process.
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1.0 INTRODUCTION

This letter provides the results of a due diligence assessment of the Lianyungang Port, China, in accordance with the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (ICMC or the Code).

Golder conducted a desktop due diligence assessment of the Lianyungang Port, China, during July 2018. This assessment was conducted by Environmental Engineer Sijia Liu and International Cyanide Management Code (ICMC or the Code) Transport Technical Specialist Mike Woods.

1.1 Terms of Reference

Hebei Chengxin Co., Ltd. (herein after referred to as “Chengxin”) retained Golder Associates Consulting Ltd (herein after referred to as “Golder”) to conduct a desktop Due Diligence Audit for Lianyungang Port, China. The Lianyungang Port is to be included in their Global Ocean Supply Chain.

1.2 Scope and Method

The scope of this Due Diligence Audit includes the management, interim storage and emergency response in relation to cyanide transported though Trabzon Port.

The following items, as detailed in the ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol (December 2016), were addressed within the due diligence:

- Overview of the Port of Trabzon
- ICMC Transport Verification Protocol Assessment
  - Transport Practice 1.1
  - Transport Practice 1.5
  - Transport Practice 1.6
  - Transport Practice 2.1
  - Transport Practice 3.1
- Conclusion
- References.

The ICMI’s December 2016 version of the Cyanide Transportation Verification Protocol (the CTPV Protocol), developed by the ICMI, was adopted to guide the Due Diligence process; similarly, the ICMI’s Auditor Guidance for Use of the Transportation Verification Protocol (Auditor Guidance) published December 2016 was used to interpret the CTPV Protocol questions and aid in evaluating the measures taken to meet the Transportation Practices. Due to access restrictions, the due diligence was conducted as a desktop process using information obtained from previous due diligence reviews, ICMI audit reports and publicly available online information.

2.0 OVERVIEW OF LIANYUNGANG PORT, CHINA

2.1 Lianyungang Port

Lianyungang Ports is located at the northeast portion of Jiangsu Province and consists of 41 berths. In addition to 12 special berths such as coal, bulk grain, wood, containers and liquid chemicals, the remaining 20 berths are basically universal bulk and general cargo berths under 20,000 tons. The total length of berth is 7,255 m, and the comprehensive annual capacity is 4.077 million tons.
The Port is controlled by Nanjing Port Authority. PSA Marine Ltd. (PSA) is a subsidiary company of Nanjing Port Authority who is responsible for the loading and unloading, and interim storage of the cyanide containers at Lianyungang Port. The contract for container handling and interim storage is between PSA and LiDa.

Lianyungang Port is one of the 25 major ports and 12 main regional hub ports in China and one of the major ports in the Yangtze port cluster. Lianyungang Port is the major marine port and cross-border transportation passage in the areas along Lianyungang-Lanzhou railway and Lanzhou-Xinjiang railway. It has a main channel of 250,000 tons and 60 productive marine port berths represented by mineral docks of 300,000 tons and sixth-generation container docks with a passage capacity of 140 million tons. The Port is a coastal breakwater and can handle vessels up to 500 feet in length with a cargo pier depth of 6.4 to 7.6 m. The port has fixed, mobile and floating cranes with capacities of up to and over 100 tonnes. The Port uses cranes for container transfer from land to vessels. The Port has a designated dangerous chemical interim storage area with 24/7 patrol and surveillance cameras.

Figure 1: Dangerous goods storage area
2.2 Lian Yun Gang LiDa International Freight Forwarding Co. Ltd

Chengxin started using Lianyungang Port for exportation from early 2018. LiDa is a contracted forwarding agent for Chengxin. LiDa is responsible for the transportation of cyanide from Lianyungang Port to destinations of many countries, such as Peru, Russia and Columbia by ship. LiDa is responsible for the ship and cargo arrangements and custom clearance and declaration.
3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT

The ICMI’s Auditor Guidance for Use of Cyanide Transportation Verification Protocol, General Guidance states:

Except as specifically identified in this Guidance document, the Cyanide Transportation Protocol is not to be used to evaluate transport by rail and ship or management of cyanide at rail terminals and port facilities due to security issues, limited access, and the inability of consignors to affect changes in the operating practices of these transport facilities. Rather than conduct Code audits of these facilities, the consignor must conduct and document due diligence investigations of rail carriers, rail terminals, shipping companies and port facilities that are engaged to handle cyanide shipments, as further discussed below under Transport Practice 1.1. The consignor’s due diligence investigation must either be conducted or reviewed by an auditor meeting ICMI requirements for a transport expert, and the auditor must conclude that the due diligence investigation has reasonably evaluated these facilities and that the consignor has, to the extent practical, implemented any necessary management measures.

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

The international sales and exports of sodium cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operated in export markets that are serviced by major international shipping companies with the ability to offer scheduled container services from point of origin to destination. This approach provides transport of Chengxin product through larger ports with modern facilities and management systems. The shipping companies provide the correct manifest documentation to the destination port which provides them with a list of the cargo types and in the case of cyanide and other hazardous cargo the number and location reference of the containers.

The Lianyungang Port is selected on the basis that a major port with good access from the production facility and alternative export location to Tianjin. It provides a practical and low risk route from the manufacture to the customer with the Port meeting reasonable industry standards for safety, security and emergency response.

Chengxin packages all cyanide for transport in accordance with Chinese regulatory standards for the packing of solid cyanide. These standards were prepared to meet the requirements of the United Nations Recommendation on the Transport of Dangerous Goods- Model Regulations, (2005) and thereby meet the requirements of the political jurisdictions through which the loads will pass. Shipments of cyanide are packaged and labelled as stated in the Dangerous Goods Code of the International Maritime Organization (IMO DG Code) by the producer Chengxin.

Photo of the labels put up on the cyanide containers is as follows:
Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organization (IMO DG Code)?

a) Is the shipment packaged as required by Part 4 of the IMO DG Code?

Cyanide is packaged at the ICMC certified production facility in Hebei Province and no changes or additional packaging is added. Cyanide is packaged in steel drums or in wooden intermediate bulk containers (IBCs) in accordance with regulatory requirements which are stowed securely in close cargo containers (shipping containers or containers).

b) Are cyanide packages marked as required by Section 5.2.1 of the IMO DG Code?

Cyanide packages are marked with placards showing the Dangerous Goods Class, pictogram and UN numbers.

c) Are cyanide packages marked as required by Section 5.2.2 of the IMO DG Code?

Cyanide packages are marked with placards showing the Dangerous Goods Class, pictogram for marine pollutant and UN number.

d) If cyanide is shipped in cargo transport units, are the units placarded and marked as required by Chapter 5.3 of IMO DG code?

Shipping containers are placarded on two sides with the diamonds with pictogram, UN number and DG class.

e) Has DG transport documentation been prepared with the information required under Chapter 5 of the IMO DG code?

Chengxin prepares transport documentation detailing the nature of the product, amount.
If the cyanide has been packed or loaded into a container has a “container/vehicle packing certificate been prepared meeting the requirements of Section 5.4.2 of the IMO DG Code”?

Chengxin prepares container packing certificate which meets the requirements of Section 5.4.2 of the IMO DG Code.

If the cyanide has been packed or loaded into a container has a “container/vehicle packing certificate been prepared meeting the requirements of Section 5.4.2 of the IMO DG Code”?

Chengxin packages all cyanide for transport in accordance with Chinese regulatory standards for the packing of solid cyanide.

Does the ship carrying cyanide have a list or manifest identifying the presence and location of cyanide or detailed stowage plan including this information as required under Section 5.4.3.1 of the IMO DG Code?

Not Applicable – Vessel transportation is not within the scope of this due diligence.

Does the ship carrying the cyanide have emergency response information, as required under Section 5.4.3.2 of the DG Code?

Not Applicable – Vessel transportation is not within the scope of this due diligence.

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

Chengxin Transport is responsible for the road transportation from the manufacturer to Lianyungang Port. LiDa is responsible for the sea transportation of cyanide and there are inventory controls in place to prevent the loss of cyanide during shipment.

Cyanide containers are delivered to Lianyungang Port using trucks by Chengxin Transport, as the trucks arrive at Lianyungang Port, the cyanide containers are transported from the trucks to the designated interim storage area for dangerous chemicals using crane by PSA, cyanide containers are stored at the interim storage area while waiting for custom clearance, where 24/7 designated patrol personnel and surveillance cameras are equipped for the security of the containers. Once custom clearance is completed, cyanide containers are transported from the interim storage area to the vessel using crane by PSA. Cyanide product is accompanied by bill of Lading documentation that details the amount of product in the shipping and this information is conveyed along the supply chain.

Transport Practice 2.1: Store cyanide in a manner that minimises the potential for accidental releases

Lianyungang Port is responsible for the interim storage of cyanide after the containers arrive and before the containers are exported. According to the interview with the contact person of LiDa, cyanide arrived at Lianyungang Port are lead-sealed containers. Intact labels and identifications are posted properly around the containers before entering Lianyungang Port by Chengxin. Cyanide containers are stored in the dangerous chemical interim storage area during custom clearance. The interim storage area is surrounded by steel net fencing and is secured by designated patrol personnel and surveillance cameras 24/7. Chemicals in the dangerous chemical interim storage area are effectively isolated based on the MSDS and the isolation requirements of the Port.
Transport Practice 3.1: Prepare detail emergency response plans for potential cyanide releases

Emergency response actions of cyanide incident are specified in Chemical Incident Emergency Response Guidelines provided by LiDa. These Guidelines are suitable for the interim dangerous chemical storage area of the Port.

These Guidelines include the following requirements:

The first section of the Guidelines identifies the basic characteristics of solid sodium cyanide and specifies applicable emergency response measures, including:

- Health risks, exposure limits and symptoms.
- Physicochemical properties.
- Personnel protective equipment requirements.
- Isolation and public security.
- Leakage treatment including collection of spilled material and neutralization of impacted areas.
- Fire extinguishing.
- First aid measures, including administration of antidotes.

The second section of the Guidelines include the general principles for chemical incident emergency response, including:

- Chapter 1, general procedures of chemical incident emergency response:
  - Alarming the police department about detailed address, primer of the incident, brief of the incident, injuries and casualties.
  - Quarantine of the incident scene, set up alert boundaries by the “Immediately Dangerous to Life or Health” and buffer area as precautionary area.
  - Personnel evacuation, including evacuate endanger personnel from dangerous area to a more secure area in order, and in-situ protection when evacuation cannot be proceeded.
  - On-Site control measures based on incident characteristics and primer of the incident, including gathering of relevant technical information regarding the incident and consulting specialists from national chemical incidents emergency hotline for effective disposal measures.

- Chapter 2, general principles of chemical incident emergency response:
  - General principles for incidents involving fire and explosion, including using of personnel protection equipment and retreat timing.
  - General principles for spill incident, including spill source control, spill control, using of personnel protection equipment and equipment of communication devices.
  - On-Site treatment for poisoning, suffocation and burn and immediate hospital care afterward.

The third section of the Guidelines include the authorities and contact information that needs to be notified, including:

- 119 Fire Department.
110 Command Center.
120 Emergency Center.
122 Road Traffic Accidents.
Command Center of Lianyungang Port.
Security Department of Container Wharf.
LiDa International Freight Transportation.

4.0 CONCLUSION

It was not possible during this due diligence to physically inspected the Port, as such the review was based on information obtained from previous due diligence reviews, ICMI audit reports, discussions with consignors and publicly available online information.

Based on the evidence reviewed for Lianyungang Port within the constraints of access and limited influence, this due diligence did not find significant concerns with regards to Lianyungang Port’s management of solid sodium cyanide products and additional management measures by the consigner are not considered necessary.

This assessment should not be a final acceptance of Lianyungang Port’s for all future work; rather it is recommended that Chengxin continues to review and monitor Lianyungang Port’s performance annually and implement an adaptive management process.

5.0 CLOSING

We trust this due diligence report meets Chengxin’s requirements. If you have any questions, please do not hesitate to contact the undersigned.

REFERENCES

http://ports.com/china/port-of-lianyungang/
https://www.searates.com/port/lianyungang_cn.htm
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APPENDIX B

Important Information
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