REPORT

International Cyanide Management Code

Hebei Chengxin Co., Ltd. Global Ocean Supply Chain Re-certification – Summary Audit Report

Submitted to:

International Cyanide Management Institute
1400 I Street, NW - Suite 550, Washington, DC 20005, USA

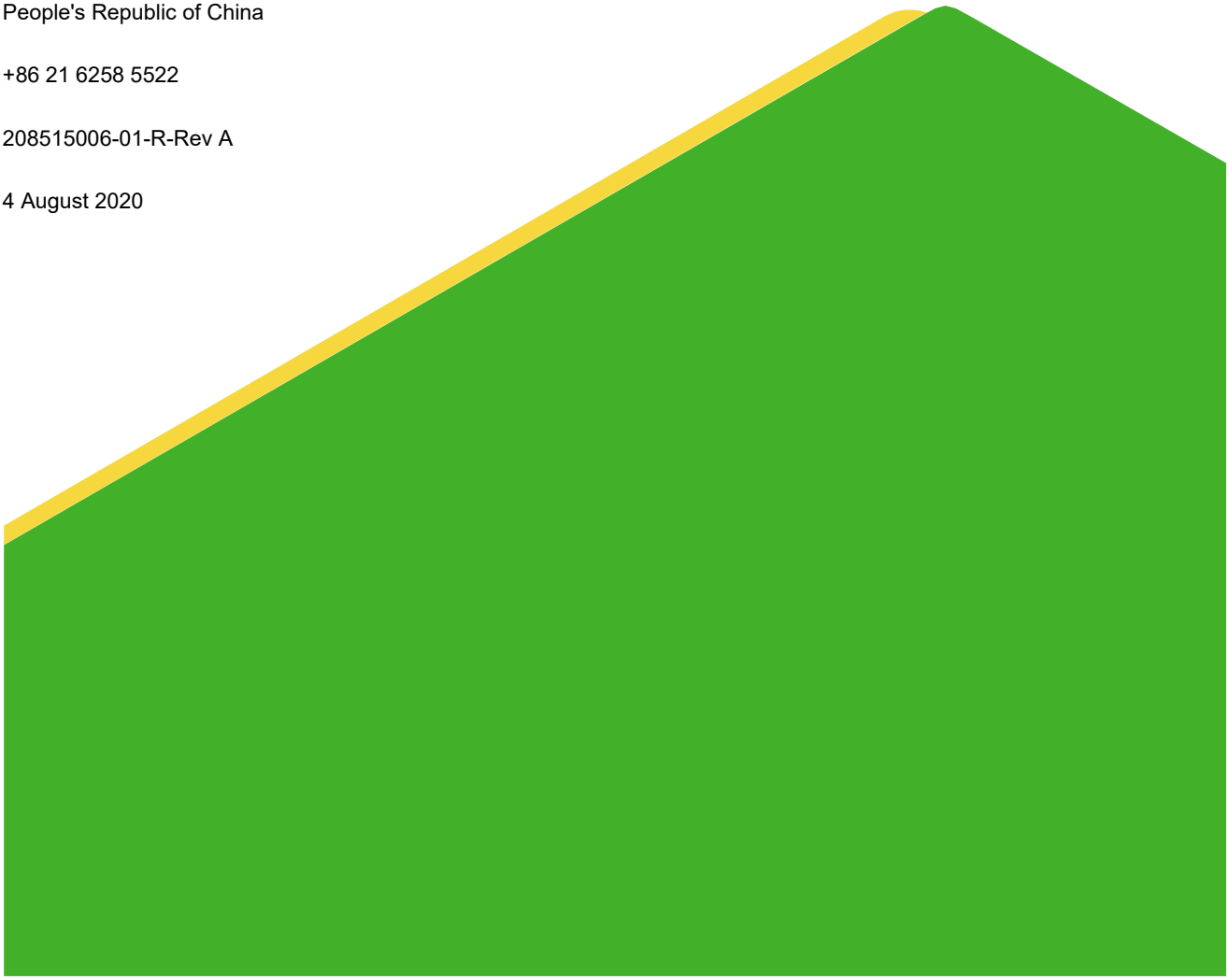
Submitted by:

Golder Associates Consulting Ltd.
Suite 1201, 555 Building, 555 Nanjing Road (W), Shanghai 200041,
People's Republic of China

+86 21 6258 5522

208515006-01-R-Rev A

4 August 2020



Distribution List

1 Copy – ICMI (+1 Electronic)

1 Copy – Hebei Chengxin (Electronic)

1 Copy – Golder Associates (Electronic)

Table of Contents

1.0 INTRODUCTION 1

1.1 Operational Information 1

2.0 DESCRIPTION OF OPERATION 1

2.1 Hebei Chengxin Co., Ltd, China Production Facility 1

2.2 Marine Transportation 1

2.3 Audit Scope 2

2.4 Marine Transportation 3

2.4.1 CMA CGM 3

2.4.2 Hapag-Lloyd 3

2.4.3 KMTC 4

2.4.4 Maersk Shipping (Maersk) 4

2.4.5 Mediterranean Shipping Company (MSC) 5

2.4.6 Swire shipping 5

2.4.7 Hamburg Süd 6

2.5 Ports 6

2.5.1 Port of Buenos Aires, Argentina 6

2.5.2 Port of Callao, Peru 7

2.5.3 Port of Manzanillo, Mexico 7

2.5.4 Port of Valparaiso, Chile 7

2.5.5 Port of Conakry, Guinea 8

2.5.6 Port of Dakar, Senegal 8

2.5.7 Port of Dar es Salaam, Tanzania 9

2.5.8 Port of Tema, Ghana 9

2.5.9 Port of Qingdao, China 9

2.5.10 Port of Shanghai, China 10

2.5.11 Port of Tianjin, China 11

2.5.12 Port of Jakarta, Indonesia 12
2.5.13 Port of Jeddah, Saudi Arabia 12
2.5.14 Port of Vostochny, Russia 12
2.5.15 Port of Deseado, Argentina 13
2.5.16 Port of Guaymas, Mexico 13
2.5.17 Port of Puerto Angamos, Chile 13
2.5.18 Port of San Antonio, Chile 14
2.5.19 Port of Punta Arenas, Chile 14
2.5.20 Port of Nouakchott, Mauritania 14
2.5.21 Port of Mombassa, Kenya 15
2.5.22 Port of Abidjan, Cote d'Ivoire 15
2.5.23 Port of Aliaga, Turkey 15
2.6 Road Transportation 16
2.6.1 Hebei Chengxin Transport Co., Ltd, China 16
2.6.2 Trans-shipping and Interim Storage 16
2.7 Auditors Findings and Attestation 20
2.8 Name and Signatures of Other Auditors 20
2.9 Dates of Audit 20
3.0 CONSIGNOR SUMMARY 21
3.1 Principle 1 – Transport 21
3.1.1 Transport Practice 1.1 21
3.1.2 Transport Practice 1.2 24
3.1.3 Transport Practice 1.3 25
3.1.4 Transport Practice 1.4 26
3.1.5 Transport Practice 1.5 28
3.1.6 Transport Practice 1.6 31
3.2 Principle 2 – Interim Storage 34
3.2.1 Transport Practice 2.1 34

3.3 Principle 3 – Emergency Response 42
3.3.1 Transport Practice 3.1 42
3.3.2 Transport Practice 3.2 44
3.3.3 Transport Practice 3.3 45
3.3.4 Transport Practice 3.4 46
3.3.5 Transport Practice 3.5 47
4.0 DUE DILIGENCE 48
4.1 Marine Transportation 48
4.2 Ports 48
4.3 Auditor Review of Due Diligences 48

APPENDICES

Appendix A: Due Diligence Assessments

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
Address:	Hebei Chengxin Co., Ltd Yuanzhao Road, Yuanshi County Shijiazhuang City, Hebei Province 051130 CHINA
State/Province:	Hebei Province
Country:	China
Telephone:	+86 311 66500855
Email:	jason.li@hebeichengxin.com

2.0 DESCRIPTION OF OPERATION

2.1 Hebei Chengxin Co., Ltd, China Production Facility

The cyanide production facility of Hebei Chengxin Co., Ltd (Chengxin) 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.

Chengxin's production facility is an International Cyanide Management Code (ICMC) certified cyanide production facility (Recertified in February 2019) and meets the requirements of the ICMC for the manufacture, transport and use of cyanide in the gold production cycle.

2.2 Marine Transportation

Chengxin 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, Mediterranean Shipping Company (MSC), Swire Shipping and Hamburg Süd.

2.3 Audit Scope

The scope of Chengxin'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, Tanzania (destination port)
  - Port of Tema, Ghana (destination port)
  - Port of Qindao, China (port of departure)
  - Port of Shanghai, China (port of departure)
  - Port of Tianjin, China (port of departure)
  - Port of Jakarta, Indonesia (destination port)
  - Port of Jeddah, Saudi Arabia (destination port)
  - Port of Vostochny, Russia (destination port)
  - Port of Deseado, Argentina (destination port)
  - Port of Guaymas, Mexico (destination port)
  - Port of Puerto Angamos, Chile (destination port)
  - Port of San Antonio, Chile (destination port)
  - Port of Punta Arenas, Chile (destination port)
  - Port of Nouakchott, Mauritania (destination port)
  - Port of Mombassa, Kenya (destination port)
  - Port of Abidjan, Cote d'Ivoire (destination port)
  - Port of Aliaga, Turkey (destination port)
  - Port of Deseado，Argentina (destination port)

- Carriers
  - CMA CGM
  - KMTC
  - Hapag-Lloyd
  - Maersk
  - MSC
  - Swire Shipping
  - Hamburg Süd.

2.4 Marine Transportation

2.4.1 CMA CGM

CMA CGM was founded in 1978. With a presence in 160 countries through 755 agencies, 750 warehouses, 110,000 employees and a wide fleet of 502 vessels, CMA CGM serves 420 of the world's 521 commercial ports and operates 285 shipping lines.

The CMA CGM Group is a global logistics enterprise centred on various forms of marine transport including global logistics and bulk energy transportation, cruises, terminal and harbour transport, shipping- related services and real estate. CMA CGM has global ocean, land, and air transportation networks.

CMA CGM has aligned itself with other shipping companies (GA Alliance and the G6 Alliance) to respond to the diversifying needs of customers. The GA Alliance comprises NYK, Hapag-Lloyd, and Orient Overseas Container Line to cover the trade between Asia and the West Coast of North America, whereas the G6 Alliance includes the GA members in addition to Mitsui O.S.K. Lines, APL, and Hyundai Merchant Marine to cover the trade between Asia and Europe in addition to the trade between Asia and the East Coast of North America.

CMA CGM provides its customers with terminal and stevedoring services for containerships, pure car carriers, and cruise ships at terminals in Japan, Asia, North America, Europe, and Australia.

CMA CGM has obtained 18 OHSAS 18001, ISO 14001 and ISO 9011 certifications for all of the 23 covered terminals until 2018, i.e. approximately 39% of the terminals subject to the CMA CGM QHSSE policy which has established a voluntary certification process.

2.4.2 Hapag-Lloyd

Hapag-Lloyd was founded in 1847. Hapag-Lloyd is a global liner shipping company with 13,000 employees in 392 offices in 129 countries.

Hapag-Lloyd offers a fleet of 231 ships with a total capacity of 1.7 Million TEU, as well as a container stock of approximately 2.6 million TEU. It predominately operates along Transatlantic, Middle East, Latin America and Intra-America routes.

ISO 9001 and 14001 certifications were renewed in 2018 as well as OHSAS 18001 certification.

Hapag-Lloyd has expertise in the area of dangerous goods and has developed specialist software ('Watchdog') that continuously and systematically scans all the bookings placed globally, using intelligently linked criteria, to identify dangerous goods which have been declared incorrectly or which have not been declared at all.

Hapag-Lloyd is a founding member of the Cargo Incident Notification System Network (CINSNET). The network of ten major liner shipping companies accounts for around two-thirds of all global container traffic and allows its members to share information on incidents relating to dangerous goods.

Hapag-Lloyd has more than 80 internationally recognised Dangerous Goods experts worldwide. The employees who deal with dangerous goods, such as captains and cargo officers, receive regular training by Hapag-Lloyd dangerous good officer in line with International Maritime Organisation Dangerous Goods (IMO DG) Code, the German Ordinance on the Transport of Dangerous Goods by Sea (GGVSee) and 49 CFR.

2.4.3 KMTC

KMTC was founded in 1954, headquartered in Seoul, Korea. The main business of KMTC is marine transport with routes between the mainland of China, South Korea, Japan, South-East Asia and the Middle East.

KMTC has 68 offices in Korea, Japan, China, Singapore, Indonesia, Malaysia and Thailand and Middle East.

KMTC has an integrated marine computer service management system that was internationally recognised in 2006 for its punctuality rate.

KMTC has obtained compliance for the International Safety Management Code under the authority of the Government of Korea by Korean Registry of Shipping in 1998 and renewed it in May of 2018. Also, KMTC has obtained ISO 9001 Certificate, International Ship and Port Facility Security Code (ISPS Code) Certificate and Korea Authorized Economic Operator Code (AEO Code) Certificate.

2.4.4 Maersk Shipping (Maersk)

A.P. Moller - Maersk is an integrated container logistics company with a dedicated team of over 76,000 people, operating in 130 countries. The first Maersk company was established in the United States on 7 July 1919 by ship-owner A.P. Moller.

Maersk, headquartered in Copenhagen, Denmark, operates a fleet of containers vessels with worldwide shipping coverage. The fleet consists of approximately 590 container vessels with the capacity to handle more than three million twenty-foot containers. Maersk operates a container booking and tracking system called the Global Customer Service System (GCSS). The system is also the management tool for handling the dangerous goods cargo for the proper control of the stowage of hazardous cargo.

Maersk requires companies to provide evidence that their product packaging has been approved by government regulators and tested in accordance with International Maritime Organisation (IMO) Dangerous Goods (DG) Code. Maersk maintains the right to refuse cargo if the packaging, container and/or documentation are not acceptable to IMO DG Code requirements.

Maersk's vessels are registered by the Lloyd's Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. Maersk also has current certificates for its vessels under the International Ship and Port Facility Security (ISPS) Code developed by the IMO.

2.4.5 Mediterranean Shipping Company (MSC)

MSC is a privately-owned organisation and was founded in 1970. It is headquartered in Geneva, Switzerland and has a fleet of 520 vessels and more than 70,000 staff in 155 countries. MSC services 500 ports on 200 trade routes, carrying some 21 million TEU (twenty-foot equivalent units) annually.

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. MSC has also obtained the following certificates:

- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environmental Management
- ISO 50001: 2011 Energy Management Systems
- ISO 28000: Security Management Systems for Supply Chain
- OHSAS 18001: Occupational Health & Safety
- DNV GL Excellence 5 Stars Certification (2018)

2.4.6 Swire shipping

Swire Shipping is the brand name for all liner shipping services operated by The China Navigation Company Pte Ltd. Swire has provided regional, multipurpose shipping services since 1883 when The China Navigation Company established liner services in Australasia. From their traditional trading area (the Asia – South Pacific region), they have expanded to offer shipping links between over 100 ports in Asia, the Pacific Islands, Australia, New Zealand, North America, Europe the Middle East and the Indian Sub-Continent.

The China Navigation Company Pte Ltd is wholly owned by The China Navigation Company Ltd, a London registered company that oversees the marine operations of its parent company, John Swire and Sons.

Swire Shipping has a safety target of Zero Harm which is supported by a safety culture developed through training, learning and transparent reporting.

Swire Shipping has established a Responsible Cargo Carriage Policy to ensure cargo operations are performed in a safe and responsible manner. For Swire Shipping, cargo handling/stowage initiatives include:

- The design and implementation of cargo care policies and procedures for the safe handling and stowage of hazardous, reefer and special lift cargoes.
- Ongoing training and education of stakeholders to ensure compliance with the international Maritime Organisation (IMO) Dangerous Goods (DG) Code for hazardous cargo shipments at all times.
- Ensuring that cargo operations are safely and efficiently carried out by engaging stevedores and cargo lashing providers that meet our strict safety requirements and share our values and culture for cargo safety.
- Ensuring that all our lifting and securing equipment is certified and of the highest standard.

- Conducting risk assessments prior to lifting special cargo including heavy lifts, over-dimensional units, out-of-gauge pieces and boats; and ensuring that all persons involved in the job are aware of the hazards and take necessary measures to reduce exposure to these risks.
- Proactively identifying, mitigating and/or eliminating the main operating risks in relation to cargo handling, lifting and stowage that may lead to accidents and injuries.

2.4.7 Hamburg Süd

Hamburg Süd was founded as a joint-stock company by representatives of eleven Hamburg merchant houses in 1871 and is owned by A.P. Moller – Maersk since December 1, 2017. Hamburg Süd has 177 ships in service around the globe and a workforce of approximately 6,300 employees in over 250 offices worldwide. The shipments mainly included: dry cargo, reefer cargo, special cargo and dangerous goods.

Hamburg Süd inspects transportation requests for dangerous goods, to ascertain compliance with special safety regulations for transporting dangerous goods. The Company's regional dangerous goods experts plan and follow every transportation from acceptance of the order until the cargo reaches its destination. On board, trained employees are responsible for cargo is stowage and security according to the regulations.

Hamburg Süd has established an integrated management system addressing quality, environmental sustainability and the safety of people, ships and cargo. Hamburg Süd has been certified in accordance with the ISO 9001 quality standard since 1996. The International Safety Management (ISM) Code for safe ship operation was introduced in the same year. This was followed in 2000 with certification of environmental management system in accordance with ISO 14001. Hamburg Süd also publishes its Sustainability Report in accordance with the Global Reporting Initiative (GRI) G4 Standard Disclosures (Core).

2.5 Ports

The international sales and exports of cyanide by Chengxin take into consideration the Ports and their extended infrastructure available to service the intended target area. Chengxin only operates 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. The Port is selected on the basis that it is the closest Port to the customer and that it meets all reasonable industry standards for safety, security and emergency response.

2.5.1 Port of Buenos Aires, Argentina

The Port of Buenos Aires is located in Puerto Nuevo, Buenos Aires in Argentina. It is operated by the General Ports Administration, a state enterprise, and is one of the trans-shipment points for the foreign trade of Argentina.

Terminales Río de la Plata (TRP) operates Terminals 1 and 2 in Puerto Nuevo in Buenos Aires. The two facilities make up the largest container terminal in the Port, with capacity for handling one million 20-foot equivalents (TEUs) of containerized cargo per year.

TRP's facility comprises three basins, providing up to five berths for vessel operations. TRP has significant reefer (refrigerated cargo) capacity, 1650 plugs, which accommodate the large volume of reefer exports from Argentina. The terminal handles deep-sea vessels from Europe, Asia and North America, as well as feeders to both the East and West Coast of South America and barges upriver to Rosario.

TRP has an integrated management system which is certified against international standards for quality (ISO 9001:2015), environment (ISO 14001:2015), and occupational safety and health (ISO 45.001:2018).

2.5.2 Port of Callao, Peru

The Port of Callao, Peru is situated 12 km from Lima, the country's capital. The Port is governed by Peru's National Port Authority and is maintained and administered by La Empresa Nacional De Puertos S.A. (ENAPU) ENAPU is a public agency under the Ministry of Transport and Communications. The Port of Callao handles three-quarters of Peru's imports and one-fourth of its exports (about 1,050,000 TEUs).

The "Terminal Portuario Callao" TPC is owned and operated by ENAPU S.A. and operated by two dealers: APM Terminals and DP World. The terminal averages 30 gross moves per hour per crane and is ranked as the top container terminal facility in South America by several of its shipping line customers.

The Port is currently a point of entry for solid cyanide chemicals into the Peruvian market-place.

2.5.3 Port of Manzanillo, Mexico

The Port of Manzanillo is situated in the State of Colima, about 250 kilometers northwest of Puerto de Lázaro Cárdenas in the Republic of Mexico, which is Mexico's seventh busiest seaport, and it is a major transhipment point for trade with the United States and Central and South America.

The Port of Manzanillo covers 437 ha, including water, docks, and storage areas. The port has 19 docks, 14 hectares of storage areas, 13.5 km of railway lines, and 5.4 kilometres of roads. Within the Port of Manzanillo, 14 docks are dedicated for commercial traffic, 3 docks handle hydrocarbons, and 2 docks are devoted to cruise traffic. Private operators also have 14 terminals and a double-stack train service in the Port of Manzanillo.The Port's access channel is 500 m long and up to 15.2 m deep. The northern turning basin contains 3 docking positions which can receive vessels up to 300 meters long. The southern turning basin contains three docking positions accommodating vessels up to 300 m long with 14 m draft. The port has 14 privately-operated terminals and specialized installations for handling all types of cargo. The volume of container cargo handled in the port of Manzanillo amounted to 3.08 million TEUs in 2018, up from 2.83 million TEUs a year earlier. The port of Manzanillo had the third largest throughput in Latin America in 2018.

The specialized container terminal (TEC) at the port has an operating capacity of up to three ships simultaneously and productivity of up to 120 boxes per ship hour. The TEC has 25 ha devoted to storage of containers with capacity for 19 thousand TEUs, including 344 reefer outlets. TEC also has 0.53 ha of storage for general cargo and 1.5 ha of inspection area. This Port of Manzanillo terminal is served by three rail tracks, each of 500 meters. The truck gate has four inbound and four outbound lanes.

The TEC is equipped with two super-post-Panamax, four post-Panamax, and three Panamax cranes. It has 32 rubber-tyred gantry cranes, 15 top- and side-loaders, 79 container chassis, and 104 bomb carts.

2.5.4 Port of Valparaiso, Chile

The Port of Valparaiso lies on the coast of central Chile about 140 km north-west of the country's capital, Santiago. The Port of Valparaiso is managed by Empresa Portuaria Valparaiso (EPV). EPV is an independent company owned by Chile and was created in 1997 to administer, operate, develop and conserve the Port of Valparaiso.

It lies on the coast of central Chile about 140 km north-west of the country's capital, Santiago and on the shores where a coastal mountain range forms a rocky peninsula and a sheltered bay.

The Port of Valparaiso has been administered by various state agencies. Empresa Portuaria de Chile, Emporchi, a central and autonomous administrative entity, is in charge of the operation and administration of state ports. Empresa Portuaria of Valparaiso (EPV) owns eight terminals (out of a total of 10) inside the port, the total marine area covers about 50 hectares. Wharves lengths total 1404 m with alongside depths ranging from 6.2 m to 11.4 m.

In 2019, the port handled 9.4 million tons of cargo, including 7.7 million tons of containerized cargo, and 1.7 million tons of loose cargo. Of that total, 5 million tons were exports, and 3.5 million tons were imports. The main exports are copper, fruit, wine, wood, fish products, beans and wool, imported goods are mainly machinery, aluminum, paper, grain, crude oil, frozen meat and dairy products.

There are two terminals and 10 berths at the main docks, with a shore length of 1,685m and a maximum water depth of 10.5 m. Loading and unloading equipment has a variety of shore crane, hydraulic crane, floating crane, container crane and tugboat, among which the maximum lifting capacity of hydraulic crane is 70 tons, floating lifting of up to 100 tons,

In Chile, Port governance is influenced by a wide number of stakeholders – more than 30 organizations deal with the regulation of the port system. The main entities likely to generate or influence port policies include five ministries, these being: The Ministry of Transport and Telecommunication, The Ministry of Public Works, The Ministry of Defense, The Ministry of Finance and The Ministry of National Assets.

2.5.5 Port of Conakry, Guinea

The Port of Conakry has a 20 ha container yard and container storage capacity of 8000 twenty-foot equivalent units (TEUs). The theoretical annual capacity of the Port of Conakry is 600 000 TEUs. The container terminal is jointly operated by Bolloré Ports and the Port Authority of Conakry.

There are main 9 berths in the port area with a length of 1,904m and a maximum water depth of 11 m. Loading and unloading equipment consists of a variety of car cranes, forklifts, conveyors, floating cranes, tugboats and rolling facilities. The lifting capacity is 50 tons and increasing to 60 tons for floating cranes. Tugboat power has been recorded at 1400 kW. The warehouse area of the port area is 59,000 m^2, and the warehouse area is 25,000 m^2.

The port operates a continuous loading and unloading service and is linked to road and rail systems.

2.5.6 Port of Dakar, Senegal

The Port of Dakar is situated in the State of Colima, in the Republic of Senegal. It is an international port of transit and serves as the gateway for Mali thus offering the possibility of additionally serving Niger and Burkina Faso.

The Port is divided into two separate trading zones (North and South) separated by a military zone, ship repair shops and a fishing port. The container terminal in the North Zone of the Port of Dakar covers a total area of 24 ha. It has a linear quay of 700 m in length with three berths ranging from 12 to 13 metres in depth. Modern equipment is used for handling, including 2 platform docks of Panamax Tandem handling, 2 platform gantries of Post Panamax Tandem handling, 10 Rubber-Tyred Gantry Cranes (RTG), 3 mobile cranes, 2 automatic

spreaders, 6 self-locking spreaders, 15 Reach Stackers, 4 forks (Empty Handlers), 32 Tractor and Trailer Parks and 560 connection points for refrigerated containers.

The Port has separate terminals for bulk goods and hydrocarbons. The operator of the container terminal is DP World and they oversee the annual throughput of approximately 300 000 TEUs.

2.5.7 Port of Dar es Salaam, Tanzania

The Port of Dar es Salaam is located on the East Coast of Africa and is a key Port of call for carriers bringing goods into Tanzania. Dar es Salaam handles approximately 95% of Tanzanian international cargo and serves as a trans-shipment location for land locked countries such as Malawi, Zambia, Democratic Republic of Congo, Burundi, Rwanda and Uganda.

The Port of Dar es Salaam is the principle port of Tanzania located on the East Coast of Africa. The Port of Dar es Salaam handles approximately 95% of the Tanzania international freight and serves landlocked countries such as Malawi, Zambia, Democratic Republic of Congo, Burundi, Rwanda and Uganda. The port is strategically placed to serve as a convenient freight linkage not only to and from East and Central Africa countries but also to middle east, China, Europe, Australia and America.

The Port of Dar es Salaam has a rated capacity of 4.1 million (dwt) dry cargo and 6.0 million (dwt) bulk liquid cargo. The Port has a total quay length of 2600 m with eleven deep-water berths.

The Tanzania Ports Authority (TPA) operates the Port of Dar es Salaam, however all containerised cargo is handled by the Tanzania International Container Terminal Services Ltd (TICTS), which is located in the Port of Dar es Salaam and is the largest container terminal in Tanzania. TICTS are owned by Hutchison Port Holdings. The terminal has four berths totalling 725 m in length with a capacity to handle in excess of 500 000 twenty-foot equivalent units (TEUs) per year which includes many classes of Dangerous Goods cargo.

2.5.8 Port of Tema, Ghana

The Port of Tema is the largest port in Ghana and located 30 km from Accra. The Port handles about 17 million tonnes of cargo annually and receives over 1464 vessel calls per year, including container vessels, general cargo vessels, tankers, Ro-Ro and cruise vessels.

The Port of Tema is the main container Port servicing Ghana and its neighbouring landlocked countries. In 2017, the Port began to reach maximum capacity and a USD 1.0 billion investment in infrastructure, equipment and manpower training was initiated. The first phase was inaugurated in June 2019. Completion of Phase II is expected by end of 2020, two years earlier than initially planned.

Cyanide manufacturers and suppliers currently have the ability to ship product to the Port from different parts of the world. The Port serves as a key trans-shipment hub for the final transportation to mining operations in Ghana and landlocked countries within the West Africa region.

2.5.9 Port of Qingdao, China

The Port of Qingdao is located between the Bohai Rim port region and the Yangtze River Delta port region and is an important hub for international trade and transportation in the West Pacific, maintaining shipping routes to over 450 ports in over 130 countries and regions around the world. Port of Qingdao has achieved 20 million TEUs in container throughput in 2019.

The Port of Qingdao is composed of four primary port areas:

- Dagang Port Area –it is operated by Dagang Company, part of the Port of Qingdao Group, six terminals with 26 berths operated by the Dagang Company, primarily for handling home-trading of containers, import of bulk grains, import and export of steel materials, agricultural products, and passenger services.
- Qianwan Port Area – eleven terminals with 36 berths operated through the Qiangang Branch (joint venture between Qingdao Qianwan Container Terminal Company Ltd. and West United), primarily for containers, metal ore, coal, pulp and other general cargo. Qiangang Port has 3 most advanced unloading machine, 25 portal cranes, and 6 stackers.
- Huangdao Oil Port Area – five terminals with 11 berths operated through the joint venture Qingdao Shihua, primarily for liquid bulk cargo. The capacity for liquid transportation is 30 million tons/year, with an annual container loading and unloading capacity of about 200,000 TEUs.
- Qingdao New Port Area (Dongjiakou Port Area) has six terminals with 26 berths operated by the joint venture Huaneng Qingdao, primarily for handling metal ore, coal, crude oil and other general cargo. 37 of the world's leading large-scale operating equipment and matching mobile machinery. Dongjiakou Port is equipped with 4 of the world's most advanced unloading machines, each with a rated discharge rate of 3500 tons per hour. Supporting more than 21,000 meters of belt flow through all the yard. Discharge rate is 10500 tons/hour.

Port of Qingdao is primarily operated by Qingdao Port Group Co., Ltd. providing port-related services ranging from basic port services, such as stevedoring and storage services, to ancillary and extended services such as logistics services and financing-related services. The Port of Qingdao also serves as a container transhipment hub for ports in the Bohai Rim region, along the Yangtze River, as well as in Japan and South Korea.

In addition to stevedoring services, the Port of Qingdao provides assorted port services for containers, including short-term storage, vanning and de-vanning, and container repair services. Specialised storage services for containers with non-standard goods, such as frozen goods and hazardous substances are also offered at the Port of Qingdao.

2.5.10 Port of Shanghai, China

The Port of Shanghai is situated in the middle of the 18,000km-long Chinese coastline and includes a deep seaport and a river port. It is the meeting point in the T-shaped waterway network composed by the east-west Yangtse River and the south-north coastline and is also China’s largest comprehensive port and one of the country’s most important gateways for foreign trade. The port handled 43.6 million twenty-foot equivalent unit (TEU) containers and 542.46 million tonnes of cargo in 2019.

The Port of Shanghai is composed of multiple port areas which are designated as follows:

- The shore of Huangpu River: such as Wusongkou, Zhanghuabang, Jungong Road, Gongqing, Baoshan and Longwu port areas etc.
- The south shore of Yangtze River: such as Baoshan, Luojing, and Waigaoqiao port areas etc.
- Hangzhou Bay: Yangshan Port Area.

Shanghai International Port Group (SIPG) is responsible for operating and managing the public terminals in the port. SIPG handles domestic, national and international cargo transportation. It is also responsible for maintaining, manufacturing and leasing containers, as well as building, managing and operating port facilities. In addition to stevedoring services, the Port of Shanghai provides assorted port services for containers, including short-term storage, vanning and de-vanning and transfer services. Specialised storage services for containers with non-standard goods, such as frozen goods and hazardous substances are also offered at the Port of Shanghai.

Wusongkou, Waigaoqiao and Yangshan are the three main container port areas of the Port of Shanghai. The container terminals have over 13km-long quay length, 43 berths and 156 quay cranes.

The Wusongkou area is managed by Shanghai Container Terminals Company (SCT), a joint venture of Hutchison Port Holdings Limited (HPH) and SIPG. Zhanghuabang Terminal, Jungong Road Terminal and Baoshan Terminal are the three container terminals operated by SCT. The facilities provided by the company include container cleaning and management, storage and transport, inland goods storage, and electronic data interchange.

The Waigaoqiao area is operated by Shanghai Pudong International Container Terminals, SIPG Zhendong Container Terminal Branch, Shanghai East Container Terminal Company and Shanghai Mingdong Container Terminals Limited. Shanghai Pudong operates in 500,000m² and has 147 container handling equipment and machinery, 36 RTG, 10 quay cranes, 73 container trucks and 11 forklifts. Shanghai Mingdong facilitates container handling, storage and transfer. Other works carried out by the company include maintaining, cleaning and stripping of containers.

Shanghai Shengdong International Container Terminal Company is responsible for operating Yangshan Deepwater Port. The port's activities are carried out by 34 container quay cranes and 120 RTG. The terminal can handle containerized cargo of 2.2 million TEU. The port is also facilitated by non-container terminals located on the Huangpu River. These terminals act as distribution centers for the remote areas of the port and contribute the financial development of Yangtze River Valley.

2.5.11 Port of Tianjin, China

The Port of Tianjin is the largest manmade sea Port in mainland China and forms an important trade Port between northern China and north-east, central and western Asia. Located 160 km from Beijing and 60 km from the city centre of Tianjin, it covers a total land and sea area of 336 km^2.

The Port of Tianjin is composed of four primary port areas:

- Tianjin North Port – operation of containers and general cargoes
- Tianjin South Port – dry bulk and liquid bulk cargoes
- Tianjin East Port – container terminal operation and modern services of international shipping, logistics, trade, off-shore finance and cruise terminal
- Haihe River Port Area – cargo vessels below 5000 tons

There are 173 different vessel berths in Port of Tianjin. In 2013, the cargo throughput of Port of Tianjin exceeded 500 million tonnes and container throughput exceeded 13 million twenty-foot equivalent units (TEU). By 2018, the cargo throughput of Port of Tianjin exceeded 450 million tonnes and container volume will surpass 20 million TEUs in 2020.

China is a Category A member of the International Maritime Organization (IMO) Council and a signatory to the Tokyo MoU, and as such strictly performs its Port State obligations, supervises foreign ships in Chinese waters and promotes compliance with international conventions among Flag States through Port State Control (PSC).

Tianjin Port (Group) Co Ltd (TPG) is the main body of Port of Tianjin and owns the majority of the Port of Tianjin's main terminals. The Port of Tianjin's terminals are operated by autonomous companies that are mostly either fully owned by, or are joint ventures with, Tianjin Port Holdings Company (TPC) or Tianjin Port Development Company (TPD).

2.5.12 Port of Jakarta, Indonesia

The Port of Jakarta (also known as Tanjung Priok) lies on the north-west coast of the island of Java at the mouth of the Ciliwung River. It handles more than 30% of non-oil-and-gas cargo in the country, and around 50% of the entire flow of goods into and out of Indonesia. The comprehensive intermodal transport networks allow it to connect to all cities in Indonesia.

The Port of Jakarta contains twenty terminals devoted to general, dry bulk, liquid bulk and containerised cargoes. Specialised terminals handle oil, chemicals, scrap and passengers. The Port of Jakarta has 76 berths and a quay area totalling 16,800 m^2. The Port of Jakarta also contains storage areas of 661,800 m^2 with capacity to store over 401,400t of cargo.

2.5.13 Port of Jeddah, Saudi Arabia

The Port of Jeddah is located in the middle of the international shipping route between global east and west. The Port is situated on the Red Sea coast and is the Kingdom of Saudi Arabia's key Port serving as a trans-shipping location for approximately 60% of all goods entering the Kingdom.

The Kingdom established the Seaport Authority in September 1976, at which point it started expanding the Port of Jeddah from 10 operational berths to the current 58 berths.

The Port of Jeddah is a congestion free harbour that occupies a 10.5 km2 footprint, it has 58 deep water quays and an overall quay length of 11.2 km. Maximum draft reaches 16 m, which can accommodate the latest generation of large container vessels (with a capacity of 6500 TEUs).

2.5.14 Port of Vostochny, Russia

The Port of Vostochy is situated in the South Primorsky region in the gulf of Nakhodka, Vrangel Bay, Russia. Vostochny is a natural deep-water and year-round ice-free Port on Russia's Pacific Coast, on the Sea of Japan.

The Vostochnaya Stevedoring Company (VSC) is the largest container terminal by capacity in the Russian Far East, with an annual throughput capacity of 550 000 TEUs. Located at the eastern end of the Trans- Siberian Railway, VSC offers a full range of stevedoring, cargo forwarding and warehouse services, including the assembly and dispatch of container block trains with the use of its own stock of railway platforms. The facility also handles Ro/Ro vessels and offers storage and servicing of refrigerated containers.

The Terminal has four berths at 13.5 metres depth and a total quay length of 1284 metres, the Port area covers 72 hectares with 110 reefer plugs and 269 rail flatcar capacity in three rail storage areas. The Universal handling complex of Vostochny Port is equipped with machinery made by leading Japanese, European and Russian

manufacturers. A specialised machinery fleet consisting of 8 quay cranes, 17 straddle carriers, 12 terminal trucks, and 18 loaders is available for use.

2.5.15 Port of Deseado, Argentina

The Port of Deseado, which was established in 1780, is located on the southern Patagonia coast of Argentina in the capital (Puerto Deseado) of the Santa Cruz province. It is situated on the estuary at the mouth of the Deseado River and is a multi-purpose port facility handling fish, container and general cargo.

The port has four operational berthing fronts and an auxiliary dock. The four operational fronts are divided into six sites.

2.5.16 Port of Guaymas, Mexico

The Port of Guaymas is loacted in the Gulf of California in the southwestern area of the State of Sonora, Mexico. It is about 400 km south of the border with the United States.

The Port of Guaymas covers 83.7 hectares of land and 65.4 hectares of water. And it has a diverse infrastructure that allows the safe navigation of large-scale vessels, with an access channel, docking and 6 berthing positions in 2 bands: the south band with 360 m and the east band with 900 m. The berthing positions are frequently maintained and dredged in order to keep them in optimal conditions. Most of the land area is developed, containing cargo terminals and operating facilities. The Administración Portuaria Integral (API) de Guaymas, S.A. de C. V. is the port authority for the Port of Guaymas.

In 2019, the volume of cargo handled in the port of Guaymas amounted to 7.3 million metric tons. The major cargoes included containers, mineral bulk, agricultural bulk, general cargo, and fluids. Its shipyards also contribute to the Port of Guaymas activity, handling commercial vessels, passenger ships, yachts, and barges.

Containerized cargoes included general cargo, specialized machinery, furniture, computer and electrical parts, audio and medical equipment, and refrigerated cargoes and perishables like fish and wheat. Mineral bulk cargoes include copper concentrate, cement, magnetite, gypsum, barite, fertilizer, and molybdenum. Major agricultural bulk cargoes include wheat, soy, corn, safflower, sugar, vegetables, and livestock. General cargoes include wood and steel products, rods, pipes, and roll-on/roll-off cargoes. Fluid cargoes are petroleum, diesel, sulfuric acid, ammonia, and fish oil.

2.5.17 Port of Puerto Angamos, Chile

The Port of Puerto Angamos is located in the heart of the mining region of Chile, in the commune of Mejillones approximately 1400 km from Santiago and only 65 km from Antofagasta.

The port is situated close to the most important copper district in the world, where there are several worlds-renown mining operations such as Chuquicamata, Escondida, Spence, Radomiro Tomic, El Abra and El Tesoro, among others. Puerto Angamos has fast access by train and truck connecting the main mining operations of Chile, Argentina and Bolivia, with the port without the need to cross through densely populated areas.

The port has a multi-purpose, mono-operated terminal with four berths, maximum draft is 13.7 meters and there is capacity to receive ships of up to 155 thousand tonnes of displacement and 366 meters in length. Extensive storage capacity exists on site for containers, general/special cargo and bulk goods, as well as good interconnectivity options for transhipment via rail or road.

The port has 6 mobile harbour cranes with a lifting capacity of 100 tons, 12 reach stacker cranes for full containers, 5 top-lifter cranes for empty containers, 33 container trucks and 36 forklift trucks.

2.5.18 Port of San Antonio, Chile

The Port of San Antonio is Located on the shores of central Chile, which is nearest the country's capital, Santiago. It is Chile's largest port and the busiest port on South America's west coast. The port areas offer ship repair, fuel supply, motorboats, tugboats, as well as medical and repatriation services.

The Port of San Antonio contains 3 berths, measuring 3,051 feet / 930 meters. The Port has 8 ship-to-shore gantry cranes, 2 Panamax up to 40 mt, 2 post-Panamax up to 75 mt, 2 Post-Panamax up to 100 mt, and 2 Super Post-Panamax up to 100 mt. The Port has 4 warehouses measuring 11,000 square meters of covered space, with metal roofs, proper fencing and gates, excellent lighting for up to 6,000 TEUs.

The port covers 495 hectares, including 353 hectares of water and 142 hectares of land. Maximum depth of its waters is 15 meters. San Antonio Port has excellent access to roads and rail to Santiago, southern Chile, and Argentina. It is connected to Santiago by the Freeway of the Sun, a high-speed highway. In 2018, the Port of San Antonio handled 1.66 million TEUs of containerized cargo.

2.5.19 Port of Punta Arenas, Chile

The Port of Punta Arenas is located in Southern Chile, in the XII Region on the border of the Magellan Strait. It is operated by Empresa Portuaria Austral which is a Chilean Government Enterprise.

In Chile, port governance is influenced by a wide number of stakeholders – more than 30 organisations deal with the regulation of the port system. The main entities likely to generate or influence port policies include five ministries, these being: The Ministry of Transport and Telecommunication, The Ministry of Public Works, The Ministry of Defence, The Ministry of Finance and The Ministry of National Assets.

The port has four main dock berths in the port area, with a shore length of 1,122 mm and a maximum water depth of 13.5 m. Loading and unloading equipment has a variety of shore cranes, loaders and tugboats, as well as the diameter of 200 to 250 mm pipeline for loading and unloading use. There is also a ship buoy, the maximum can berth 80,000 tons of oil tankers. Loading and unloading efficiency is 2,000 tons of coal per hour, 100 tons of gasoline per hour. The water depth of the large ship anchor is 27 m.

2.5.20 Port of Nouakchott, Mauritania

The Port of Nouakchott is located near the West African Atlantic coast and was developed as the capital of Mauritania which accounting for approximately 96 % of all annual port traffic. The Port of Nouakchott port handles approximately 90 % of all annual imported goods, approximately 1.5 million tonnes, these goods include wheat, cement, clinker, flour, sugar, semolina, milk and general equipment. Exports include plaster from Samia, Mauritania's main producer, animal skins and fish. The Autonomous Port of Nouakchott (PANPA) manages the port.

The port consists of two quays, one for small vessels (Wharf Quay) with draft less than 5 m and a second quay for larger vessels with a maximum draft of 10.3 m, this quay stretches 585 m and is split into four berths, three of which are used for cargo handling and the fourth for servicing vessels. The main cargo quay is located 4 km south of the Quai Wharf and 15 km south-west of the city of Nouakchott.

Nouakchott uses an integrated AS400 computer system developed in co-operation with the Office d'Exploitation des Ports Marocains (ODEP). This offers management transparency and enhances the quality of service offered to international customers.

2.5.21 Port of Mombassa, Kenya

The Port of Mombasa is located near Fort Jesus at Mombasa Old Town, which is one of the busiest ports along the east African coastline and provides a gateway to east and central Africa. The port provides direct connectivity to over 80 ports worldwide and is well connected by road to a vast hinterland comprising Uganda, Rwanda, Burundi, Eastern Democratic Republic of Congo, Northern Kenya, Southern Sudan, Somalia and Ethiopia. A railway line also runs from the port into Uganda and Kenya.

The port has two container terminals namely the Mombasa Container Terminal and the newly built Kipevu Container Terminal with an annual total capacity of 1.65 million Twenty-foot Equivalent Units (TEUs) currently. Container operations at the Port of Mombasa entail discharging and loading of vessels, stacking and unstacking of containers in the yard and delivery/receipt of import and export containers.

The port is managed by the Kenya Port Authority (KPA). The KPA is authorised to manage and operate the Port of Mombasa and all scheduled seaports along Kenya’s coastline. In addition, the Authority manages inland waterways as well as inland container depots at Embakasi, Eldoret and Kisumu.

2.5.22 Port of Abidjan, Cote d'Ivoire

The Port of Abidjan is the main port of the Cote d’Ivoire (Ivory Coast) in Africa. Lying on the Ebrie Lagoon, it is linked to the Gulf of Guinea and Atlantic Ocean by the Vridi Plage sandbar. It is West Africa’s largest, most modern port. With a central location and a well-developed infrastructure, it is a major point for transhipments into West and Central Africa over the Cote d’Ivoire’s network of rail and road systems.

It has a total quay length of six kilometres and there are 34 berths dedicated for timber, cereals, fruits, petroleum products and containers. The port of Abidjan can accommodate vessels up to 260 meters long, depth at the harbor’s mouth is 10.5 m, and the depth at quay is 12.5 m. The port provides approximately 408 000 m2 of open storage and 144 m2 of covered warehouses and sheds. Three berths specialize in container-handling, and one berth is devoted to roll-on/roll-off cargoes.

2.5.23 Port of Aliaga, Turkey

The Port of Aliaga lies on the southern shores of the Bay of Aliaga off the Gulf of Candarli about 24 kilometers northwest of Izmir, Turkey. The port authority for the Port of Aliaga is Aliaga Liman Baskanligi. The port mainly consists of oil product terminals and refineries.The Port of Aliaga can accommodate vessels to 250 thousand deadweight tonnage (DWT) with maximum length of 338 meters and maximum draft of 16 meters.

The Petkim Terminal – Aliaga is operated by Petkim, Petro Kimya Holdings A.S. Pilotage is required for all vessels entering the harbor. The Port of Aliaga's Petkim Terminal contains six berths, three berths for products and gas ships, one berth for naphtha, one berth for caustic soda, and one berth for general cargo.

Berth 1 at the Port of Aliaga Petkim Terminal is a Tanker Quay 163 meters long with alongside depth of 7 meters. Berth 2 is also a Tanker Quay of 175 meters in length with alongside depth of 10 meters. Berth 2 loads/unloads chemicals like ammonia, fuel oil, benzene, ethylene glycols, ethylene oxide, wash oil, and choric hydrocarbons.

The Petkim Terminal at the Port of Aliaga Berth 3 specializes in cargoes of caustic soda. It is 60 meters long with alongside depth of 6 meters. At 90 meters long with alongside depth of 14 meters, Berth 4 (the Naphtha Quay) is currently out of service. The Salt Quay at the Petkim Terminal in the Port of Aliaga is 190 meters long with alongside depth of 6 meters, and it receives salt that is used at the nearby Chlorine Alkali Plant. Berth 5 is a Tanker Quay of 285 meters in length with alongside depth of 13 meters. Berth 5 handles naphtha, ammonia, benzene, caustic soda, and fuel oil.

The Port of Aliaga's Petkim Terminal Berth 6 handles general cargo, primarily raw petrochemicals. It is 338 meters long with alongside depths from 7 to 10 meters. Finally, the Petrol Ofisi Quay has two berths of 175 and 163 meters that handle petroleum products, materials, and equipment.

2.6 Road Transportation

2.6.1 Hebei Chengxin Transport Co., Ltd, China

Transportation from Chengxin's cyanide production facility to one of four Chinese Ports – Qingdao, Shanghai, Lianyungang or Tianjin occurs as part of the Supply Chain. All road transportation is carried out by Hebei Chengxin Transport Co., Ltd (a consignor, hereby "Chengxin Transport") an ICMC certified (Recertified January 2020) sister transport company of Hebei Chengxin Co., Ltd (the producer).

2.6.2 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 Chengxin's Supply Chain. Chengxin 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, MSC, Swire Shipping and Hamburg Süd) 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 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 Palmast, Canary Islands
  - Port of Louis Harbour, Mauritius

- Port of Sal Al Ah, Oman
- Port of Singapore.

- Swire Shipping
  - Port of Busan, South Korea
  - Port of Hong Kong
  - Port of Yokohama, Japan
  - Port of Manzanillo, Mexico
  - Port of Lazaro Cardenas, Mexico
  - Port of Buenaventura, Columbia
  - Port of Guayaquil, Ecuador
  - Port of Balboa, Panama
- Hamburg Süd
  - Port of Busan, South Korea
  - Port of Osaka, Japan
  - Port of Yokohama, Japan
  - Port of Auckland, New Zealand
  - Port of Apia, The Independent State of Samoa
  - Port of Rabaul, Independent State of Papua New Guinea
  - Port of Lae, Independent State of Papua New Guinea
  - Port of Moresby, Independent State of Papua New Guinea
  - Port of Honiara, Solomon Islands
  - Port of Noumea, New Caledonia
  - Port of Timaru, New Zealand
  - Port of Wellington, New Zealand
  - Port of Tauranga. New Zealand
  - Port of Madang, Independent State of Papua New Guinea
  - Port of Kimbe, Independent State of Papua New Guinea
  - Port of Noro, Solomon Islands

Global Marine Supply Chain		4 August 2020
Name of Facility	Signature of Lead Auditor	Date

- Port of Alotau, Independent State of Papua New Guinea
- Port of Oro Bay, Independent State of Papua New Guinea
- Port of Kavieng, Independent State of Papua New Guinea
- Port of Wewak, Independent State of Papua New Guinea
- Port of Darwin, Australia
- Port of Townsville, Australia
- Port of Noumea, New Caledonia
- Port of Suva, Fiji
- Port of Lautoka, Fiji
- Port of Tarawa, The Republic of Kiribati
- Port of Pago Pago, American Samoa
- Port of Papetee, Tahiti
- Port of Nukualofa, Tonga
- Port of Vila, Vanuatu
- Port of Santo, Vanuatu
- Port of Funafuti, Tuvalu
- Port of Rarotonga, The Cook Islands
- Port of Wallis Island, France
- Port of Nauru, Nauru

Global Marine Supply Chain		4 August 2020
Name of Facility	Signature of Lead Auditor	Date

2.7 Auditors Findings and Attestation

☒ **in full compliance with**

Chengxin 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 to Chengxin during the previous three-year audit cycle of Global Marine's Supply Chain.

Audit Company: Golder Associates Consulting Ltd.

Audit Team Leader: Hongtao Hu

Email: hhu@golder.com

2.8 Name and Signatures of Other Auditors

Name	Position	Signature	Date
Hongtao Hu	Lead Auditor		August 4 2020
Mike Woods	Transport Technical Specialist		August 4 2020

2.9 Dates of Audit

The re-certification audit of Chengxin's Supply Chain was undertaken between March and June of 2020, with the Detailed Audit Report being finalised in June 2020.

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.

Global Marine Supply Chain		4 August 2020
Name of Facility	Signature of Lead Auditor	Date

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**	
Chengxin is	☐ in substantial compliance with	**Transport Practice 1.1**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

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

Chengxin has developed and implemented a management system for transportation and there is a specific written procedure *HBCXQY-GLZD-011 Cyanide Route Assessment and Selection* 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, including the following elements:

- Carriers:
  - A carrier's designated route
  - A carrier's capacity to handle Dangerous Goods
  - Whether tracked container services are available
  - Vessel size and configuration
  - A carrier's prior performance/reputation
  - The cost of the transport
  - Client consultation
- Ports:
  - Location/proximity to customer
  - Security and safety
  - Handling/processing times
  - Whether tracked container services are available
  - Equipment suitable to handle Dangerous Goods
  - Ability to berth vessels
  - Accessibility and safety of routes in to/out of the Port

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

The international sales and exports of cyanide by Chengxin take into consideration the Ports and their extended infrastructure available to service the intended target area. Chengxin 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.

Chengxin utilises CMA CGM, Hapag-Lloyd, KMTC, Maersk, MSC, Swire Shipping and Hamburg Süd 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, MSC, Swire Shipping and Hamburg Süd provide a marine carrier service and handling of containers (on and off vessels) is undertaken by stevedoring companies at each Port.

Chengxin 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, MSC, Swire Shipping and Hamburg Süd to verify that the shipments are transported in accordance with the IMO DG and IMSBC Codes. Due diligence assessments were conducted by Golder (on behalf of Chengxin) between March and June 2020. The due diligence reports document measures to address risks identified for carriers and ports. Golder's due diligence assessments were accepted by Chengxin, concluded that there were no issues of concern with regards to the shipping of cyanide. The due diligence assessments provide that:

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

Completed Shipping due diligence assessments are reproduced in Appendix A.

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 were conducted by Golder (on behalf of Chengxin) between March and June 2020. The due diligence reports document measures to address risks identified for carriers and ports. Golder's assessments, accepted by Chengxin, found that there were no issues of concern regarding the handling of cyanide product by the ports. The due diligence assessments state that:

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

The above statement is applicable to all Ports within the Supply Chain.

Completed Port due diligence assessments are reproduced in Appendix A.

The requirement to seek input from communities, other stakeholders and applicable governmental agencies as necessary is not relevant to this Supply Chain.

The due diligence assessments indicate carriers do no present special safety or security concerns.

Global Marine Supply Chain		4 August 2020
Name of Facility	Signature of Lead Auditor	Date

The due diligence assessments indicate Ports, do no present special safety or security concerns.

The requirement to advise external responders, medical facilities and communities of their roles and/or mutual aid during an emergency is not relevant to the Supply Chain.

Chengxin utilises select ports and carriers along its Supply Chain and has undertaken due diligence reviews to verify that the shipments are managed in accordance with Chengxin's and the ICMC's requirements.

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**	
Chengxin is	☐ in substantial compliance with	**Transport Practice 1.2**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Chengxin 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.

Chengxin utilises CMA CGM, Hapag-Lloyd, KMTC, Maersk, MSC, Swire Shipping and Hamburg Süd 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, MSC, Swire Shipping and Hamburg Süd 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, MSC, Swire Shipping and Hamburg Süd 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.

Chengxin conducts periodical due diligence assessments of carriers used in the Supply Chain.

Chengxin 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 Chengxin 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 2018, and in particular the training requirements for shore-side personnel as described in section 1.3.1 of the IMO DG Code.

Chengxin conducts periodical due diligence assessments of Port facilities used in the Supply Chain.

The requirement to implement a procedure to assess cyanide handling or transport contractors is not relevant to the Supply Chain.

Chengxin utilises select Ports and carriers along its Supply Chain and has undertaken due diligence reviews to verify that the shipments are managed in accordance with Chengxin's and the ICMC's requirements.

Global Marine Supply Chain		4 August 2020
Name of Facility	Signature of Lead Auditor	Date

3.1.3 Transport Practice 1.3

Ensure that transport equipment is suitable for the cyanide shipment.

	☒ **in full compliance with**	
Chengxin is	☐ in substantial compliance with	**Transport Practice 1.3**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

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

Carriers and Ports used by Chengxin have equipment operation and maintenance capabilities and procedures that are not dependent on Chengxin. 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 Chengxin are performing dangerous goods handling duties in accordance with international and local regulations.

Chengxin utilises select Ports and carriers along its Supply Chain and has undertaken due diligence reviews to verify that the shipments are managed in accordance with Chengxin's and the ICMC's requirements.

Global Marine Supply Chain		4 August 2020
Name of Facility	Signature of Lead Auditor	Date

3.1.4 Transport Practice 1.4

Develop and implement a safety program for transport of cyanide.

	☒ **in full compliance with**	
Chengxin is	☐ in substantial compliance with	**Transport Practice 1.4**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Chengxin 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 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, (2009) and thereby meet the requirements of the political jurisdictions through which the loads will pass.

Product is packaged as follows:

- Solid product goes into plastic bags which are hermetically sealed and then placed into 50 kg capacity metal barrels. The barrels are locked and sealed and are then packaged and locked into a shipping container.
- Solid product goes into plastic bags which are hermetically sealed and then placed into 1 tonne capacity wooden crates. The crates are nailed and strapped to form an intermediate bulk container (IBC). These are then packaged and locked into a shipping container.

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, MSC, Swire Shipping and Hamburg Süd require from Chengxin, 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, MSC, Swire Shipping and Hamburg Süd 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, MSC, Swire Shipping and Hamburg Süd. Cyanide product remains sealed and packaged within locked shipping containers until it reaches the end use destination.

Chengxin conducts periodical due diligence assessments of carriers and Port facilities used in the Supply Chain.

Global Marine Supply Chain		4 August 2020
Name of Facility	Signature of Lead Auditor	Date

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.

Chengxin package 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, (2009) and thereby meet the requirements of the political jurisdictions through which the loads will pass.

All Chengxin packaged cyanide remains sealed within its initial packaging and container until its arrival at the final destination.

Chengxin utilises select Ports and carriers along its Supply Chain and has undertaken due diligence reviews to verify that the shipments are managed in accordance with Chengxin's and the ICMC's requirements.

3.1.5 Transport Practice 1.5

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

	☒ **in full compliance with**	
Chengxin is	☐ in substantial compliance with	**Transport Practice 1.5**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Chengxin 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, MSC, Swire Shipping and Hamburg Süd transport Chengxin cyanide by sea to various destination Ports. All packaging and transportation are carried out in accordance with the IMO DG and IMSBC Codes.

Due diligence assessments of CMA CGM, Hapag-Lloyd, KMTC, Maersk, MSC, Swire Shipping and Hamburg Süd were undertaken on behalf of Chengxin 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, MSC, Swire Shipping and Hamburg Süd.

Refer below to answers to questions posed within the Auditor Guidance.

a) *Is the cyanide shipment packaged as required by Part 4 of the IMO DG Code and according to the packaging instructions and packaging provisions indicated on the DG List?*

Chengxin package 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, (2009).

Chengxin's cyanide is packed into plastic bags and hermetically sealed, it is then placed into either 50 kg capacity metal barrels or 1 tonne capacity wooden crates (IBCs). The barrels are locked and sealed, and the wooden crates are nailed and strapped. In both cases the product is then placed inside a closed shipping container used solely for the transport of cyanide.

b) *Are cyanide packages marked as required by Section 5.2.1 of the IMO DG Code and according to labelling requirements indicated on the DG List?*

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

c) *Are cyanide packages labelled as required by Section 5.2.2 of the IMO DG Code and according to the labelling requirements on the DG List?*

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

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

Chengxin package and label all product in accordance with Chinese regulatory standards for the packing of solid cyanide. The Chinese standards were prepared to meet the requirements of the United Nations Recommendation on the Transport of Dangerous Goods – Model Regulations, (2009) and thereby meet the requirements of the political jurisdictions through which the loads will pass.

e) *Has a dangerous goods transport document been prepared with the information required under Chapter 5.4 of the DG Code?*

For each shipment, Chengxin prepares a dangerous goods transport document referenced as the Multimodal Dangerous Goods Form, commonly known as a MO41 Document.

This form meets the nine requirements of the International Convention for the Safety of Life at Sea (SOLAS) 74, Chapter VII, regulation 5 and International Convention for the Prevention of Pollution from Ships (MARPOL) 73/78, Annex III, Regulation 4 (commonly known as a MO41 Document).

f) *If the cyanide is packed or loaded into a container, has a container/vehicle packing certificate been prepared meeting the requirements of Section 5.4.2 of the DG Code?*

A container packing certificate is integrated into the MO41 Document.

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

Due diligence assessments confirmed that all packaging and transportation is in accordance with the IMO DG and IMSBC Codes. Carriers require that stevedoring personnel provide the vessel's Master with copies of the emergency response information, dangerous goods manifest (including stowage plan) and packaging certificates for each hazardous cargo transport unit loaded onto the ship at the Port of origin.

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

Due diligence assessments confirmed that all packaging and transportation is in accordance with the IMO DG and IMSBC Codes. Carriers require that stevedoring personnel provide the vessel's Master with copies of the emergency response information, dangerous goods manifest (including stowage plan) and packaging certificates for each hazardous cargo transport unit loaded onto the ship at the Port of origin.

i) *Does the ship comply with the stowage and separation requirements of Part 7 of the DG Code?*

The due diligence assessments confirm that CMA CGM, Hapag-Lloyd, KMTC, Maersk, MSC, Swire Shipping and Hamburg Süd comply with Part 7 of the IMO DG and IMSBC Codes.

MO41 Documentation provided by Chengxin for each container and the carriers' booking systems ensure that adequate information is available in order to identify the correct stowage and separation of dangerous goods. CMA CGM, Hapag-Lloyd, KMTC, Maersk, MSC, Swire Shipping and Hamburg Süd have multiple cross checking layers to verify that products arriving at the laydown areas match those provided on the booking and that containers being loaded onto the vessels match those stipulated on the loading (or stowage) plan.

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**	
Chengxin is	☐ in substantial compliance with	**Transport Practice 1.6**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

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

Chengxin communicates with CMA CGM, Hapag-Lloyd, KMTC, Maersk, MSC, Swire Shipping and Hamburg Süd onshore representatives by phone, fax and email.

The due diligence assessments for CMA CGM, Hapag-Lloyd, KMTC, Maersk, MSC, Swire Shipping and Hamburg Süd 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, MSC, Swire Shipping and Hamburg Süd 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) develops and implements policies, statutes and regulations governing the carriage of dangerous goods and other goods by ships in accordance with relative national and international requirements. This includes supervising the safety of ships carrying dangerous goods, processing declarations made by ships carrying dangerous goods, providing accreditation services for personnel involved in the declaration of dangerous goods and inspection of containers, and inspecting containers holding dangerous goods.

As a member of the IMO and to comply with the 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.

Global Marine Supply Chain		4 August 2020
Name of Facility	Signature of Lead Auditor	Date

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).

Chengxin'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.

Chengxin'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.

Each delivery carries with it a confirmation docket that includes inventory information such as:

- Dispatch date
- Cargo
- Weight
- Unique seal number
- Signature of receiver (obtained on arrival) and signature of sales coordinator (obtained on dispatch)

Seals with unique serial numbers are applied to containers at the point of loading.

Due diligence assessments of CMA CGM, Hapag-Lloyd, KMTC, Maersk, MSC, Swire Shipping and Hamburg Süd 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 CMA CGM, Hapag-Lloyd, KMTC, Maersk, MSC, Swire Shipping and Hamburg Süd.

Global Marine Supply Chain		4 August 2020
Name of Facility	Signature of Lead Auditor	Date

Chain of custody documentation is used by CMA CGM, Hapag-Lloyd, KMTC, Maersk, MSC, Swire Shipping and Hamburg Süd to prevent the loss of Chengxin cyanide during shipment. This documentation includes the MO41 Document, which accompanies each container, and the ships manifest, which identifies the location and content of each container on the vessel.

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.

Chengxin utilises select Ports and carriers along its Supply Chain and has undertaken due diligence reviews to verify that the shipments are managed in accordance with Chengxin's and the ICMC's requirements.

3.2 Principle 2 – Interim Storage

Design, construct and operate cyanide trans-shipping 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**	
Chengxin is	☐ in substantial compliance with	**Transport Practice 2.1**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

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

Chengxin does not operate trans-shipping or interim storage facilities within its Supply Chain, but circumstances may arise where trans-shipping 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.

Chengxin 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, MSC, Swire Shipping and Hamburg Süd) undertake the trans-shipping of product in accordance with the IMO DG Code and regulations for the handling of dangerous goods pertinent to that Port.

Carriers

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

Trans-shipping Ports were identified for each shipping service provider but not assessed as part of the due diligence assessments carried out on behalf of Chengxin. 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, MSC, Swire Shipping and Hamburg Süd – this extends to the carrier's ability to select a suitable Port for the purpose of trans-shipping when required.

Ports

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.

Buenos Aires, Argentina

The Port operates under a suite of International and National regulations that ensures its compliance with regards to the handling and storage of dangerous goods. Prefectura Naval Argentina (*PNA) Regulations 9/97 Transport*

by vessels of dangerous goods, safety standards for transport by charcoal vessels and 3/96 Standards for the approval of packaging and packaging containing dangerous goods outline the requirements for all Ports.

Shipping containers containing cyanide product are stored in a designated dangerous goods storage area (segregated according to the international segregation guidelines) and are placed on a concrete surface which has a safe floor loading factor in an open air area. The product remains in the containers that were packed at the sodium cyanide factory (the sodium cyanide packaging has a sealed plastic liner which stops the contact of product from moisture or humidity) ready for loading for onward transport to the final destination.

The due diligence assessed security measures at the Port and ascertained that the container storage area at the Port has full CCTV coverage and that security measures are present throughout the Port. The terminal adopts a range of strict internal controls and uses state-of-the-art technology to optimise operation and the safety. It is noteworthy that in 2009 the ISO 28000 certification (Supply Chain Security Management) was obtained.

Callao, Peru

Terminals have surveillance systems that monitor the security of goods via CCTV coverage. Terminals operate in a pedestrian free environment and are brightly lit at night. Safety signage and on-site security measures are evident. Containers are placarded in accordance with IMO DG labelling requirements and storage areas show relevant signage regarding no smoking, no open flames, eating and drinking is not permitted and the PPE requirements.

Containers are stored at the port with adequate ventilation to prevent build-up of hydrogen cyanide gas. The product remains sealed in containers at all times and the area of storage is suitable to effectively contain any spillage that may occur. Local specialized responders are on hand to provide assistance in the event of a serious incident.

During transhipping, manifests are handed over from the vessel to the terminal operators which include the weight and any hazards associated with the containers. This information is captured in the terminal operator's computer systems, which have the ability to identify dangerous goods consignments, determine the class of dangerous goods and establish the segregation requirements for that product as required by the IMO DG Code.

Manzanillo, Mexico

The Port must adhere to the requirements of Official Mexican standard *NOM-010-SCT2/2009, Compatibility and segregation provisions for the Storage and transportation of hazardous substances, materials and waste and NOM-023-SCT4-1995, Conditions for the management and Storage of dangerous goods in ports, terminals and sea units*.

These standards state that ports, terminals and offshore units must establish areas for management, storage and adequate segregation of dangerous goods in bulk or packed form, from other cargo. There is a compatibility and segregation table for dangerous substances, materials and waste. These storage areas must have the appropriate infrastructure, facilities and signage on display in accordance with the inherent risks of the products.

The port will also ensure that in such area's signage is displayed to show smoking is prohibited, sources of ignition are avoided and proper precautions are taken with regards to personal protective equipment for the handling of dangerous goods.

Valparaiso, Chile

The Port is managed through the International Ship and Port Facility Security Code (ISPS Code). The ISPS Code is implemented through chapter XI-2 Special measures to enhance maritime security in the International Convention for the Safety of Life at Sea (SOLAS). Since the ISPS Code is part of SOLAS, compliance is mandatory for all Contracting Governments to SOLAS. Chile is both a member of the IMO and a signatory of SOLAS.

The Port of Valparaiso operates under a suite of National regulations that ensure compliance with the above. In particular, for the handling and storage of dangerous goods, these regulations ensure that shipments of cyanide are authorized for discharge from the vessel, handled by appropriately trained personnel, stored in designated and secured areas, segregated according dangerous goods classes and removed from the port in a timely manner. Security requirements are also addressed under these National regulations and the Port of Valparaiso satisfies the conditions set out for security personnel and check points, monitoring and surveillance systems.

All transshipping operations are carried out in a dedicated dangerous goods area by suitably trained personnel. The transshipping operations are monitored by the port's CCTV system and the containers are tracked to record the positioning of the containers within the dangerous goods storage areas.

Conakry, Guinea

All solid sodium cyanide that transits the Port of Conakry is collected by the relevant carriers as soon as possible after arrival. Express clearances are initiated where possible to minimize the transit period. During periods of transit, containers of solid sodium cyanide are segregated from other containers and that the area is signed alerting the presence of the product and prohibiting smoking, drinking and eating outside set areas in the Port. All personnel, outside those operating top lift forklifts, are warned to keep away from the containers. All signage is provided in French, the national language of the country. All cyanide remains sealed within shipping containers at all times. The area of transit storage is well segregated and in an open area to prevent the build-up of hydrogen cyanide gas.

The Port is a secure area with an on-site security presence. Security watch is compulsory for all ships carrying cyanide. The Port's security personnel are armed and trained to deal with intruders. The Port's security presence is a facet of the Port's ISPS Code protocols.

Dakar, Senegal

The Port has made all financial and material arrangements to align its facilities and operations with the directives emanating from the International Convention for the Safety of Life at Sea (SOLAS) 1974, convention. Therefore, every ship applying for permission to enter, and every port facility operator working in the Port of Dakar must ensure compliance with the security and safety requirements for ships and port facilities as issued by the IMO. The Port has established security measures for access and the port enclosure with the setting up of a multi-purpose operational center equipped with high-tech surveillance equipment.

The Port has established security measures for access and the port enclosure with the setting up of a multi-purpose operational center equipped with high-tech surveillance equipment. And the Port also has real-time CCTV monitoring.

With this in mind the Port of Dakar has set up:

- A centralised navigation aid at the harbor lookout, equipped with an Automated Identification System (AIS) and functional mark-up structures
- A surveillance system for the harbor and the water plan using radars, remote monitoring systems and nautical patrols
- Security measures for access and the port enclosure with the setting up of a multi-purpose operational centre equipped with high-tech surveillance equipment.

Dar es Salaam, Tanzania

Cyanide on arrival at Dar es Salaam is placed in a segregated area awaiting relevant governmental clearances. This area, when cyanide is present, is clearly signed providing appropriate warning to all port personnel. Collection of the cargo by the approved carrier is direct from this area. Vehicles collecting cargo from the port environs are subject to port checks to ensure that approvals for collection are in place and that documentation and container details match prior to egress from the port. Additionally, signage is provided prohibiting smoking, consumption of foodstuffs and liquids in the specific area and the prohibition of open sources of ignition. The Port is accredited under the ISPS Code and is classed as a secure area, which has a full time security presence which includes armed patrols. Access to and from the container terminal is well controlled and areas used for cyanide storage are subject to an additional security presence. The Port security egress checkpoints check a driver's documentation to ensure approval has been granted for the removal of the container, that the container number physically matches with the documentation and that the seal is intact on the shipping container.

Tema, Ghana

The Port of Tema has restricted access and security processes, including biometric identify cards and CCTV. The port has perimeter fencing and terminal entry and exit gates are monitored on 24 hours basis. The harbour master has oversight of nautical operations within the port, including pilotage, towage, mooring and unmooring, and vessel traffic services.

The Port of Tema has dedicated storage areas for specialised products including dangerous goods, cyanide containers are segregated and stacked separately. All cyanide transited through the Port of Tema remains contained within its sealed containers at all times. Seals are individually numbered and tamper evident. The Port provides a dedicated area for workers to eat and drink which is well away from the area in which the product is located. Containers departing the port are checked against documentation for matching container numbers and product detail.

Qingdao, China

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

The Port of Qingdao has dedicated storage areas for specialised products including dangerous goods. The port operations for dangerous goods are registered and licensed by the government. Containers departing the port are checked against documentation for matching container numbers and product detail. All cyanide product transited through the Port of Qingdao remains contained within its sealed containers at all times.

Shanghai, China

The Port of Shanghai has a dedicated dangerous goods transit area for dangerous goods awaiting loading to arriving vessels. The port has in place minimum requirements for personal protective equipment that includes the requirements for suitable protective footwear, safety helmet where required and readily visible clothing. The Port is listed on the ISPS site as accredited. An electronic card access system is in place to enable only authorised access to the Port area. Containers departing the Port are checked against documentation for matching container numbers and product detail.

Shipping containers containing composite intermediate bulk containers (IBCs) are placarded in accordance with the IMO DG Code labelling requirements displaying relevant warning and safety information including the environmentally hazardous substance label. Signage prohibiting smoking, open flames and eating and drinking are in place, as well as PPE requirements.

Tianjin, China

The Port of Tianjin has restricted access. The Dispatch Center organizes ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring. The Port operations for dangerous goods are registered and licensed by the Government. All sodium cyanide transited through the Port of Tianjin remains within its sealed containers at all times.

The Tianjin Maritime Safety Bureau is the local agency of the MSA and is responsible for enforcing regulations on the MSA's behalf at the Port of Tianjin, this includes conducting inspections on containers holding dangerous goods.

The Regulation of Safety Management of Hazardous Chemical Enterprises in Tianjin City was put into practice on September 6, 2015, these regulations cover the detailed requirements of production, storage, use, operation and transportation of dangerous chemicals. The regulations now point out that dangerous chemicals shall be stored in specialized warehouses or storage rooms, that stored dangerous goods must be classified and segregated within the storage area and that maximum allowable storage limits for individual chemicals must not be exceeded.

Jakarta, Indonesia

The Port of Jakarta operates under a suite of national regulations which the Port of Jakarta is required to comply with. In particular, for the handling and storage of dangerous goods, these regulations ensure that shipments of cyanide are authorised for discharge from the vessel, handled by appropriately trained personnel, stored in designated and secured areas, segregated according to dangerous goods classes and removed from the port in a timely manner. The port has restricted access and the Dispatch Centre organises ship movements, tracks pilot operations, and supervises terminal operations via real-time CCTV monitoring. All sodium cyanide transited through the Port of Jakarta remains sealed within containers at all times. Security requirements are also addressed under National regulations and the Port of Jakarta satisfies the conditions set out for security personnel and check points, monitoring and surveillance systems.

Jeddah, Saudi Arabia

With regards to port security, the Port Authority states no person shall access any port area as defined by its boundaries, via water, air or land unless the person obtained a permit from the Port Authority for accessing a port. A Port Authority may have signs, fences or barriers arranged to ensure the security and safety of persons, ships

and property, the environmental protection or the management of the infrastructure and the services of Jeddah Port. Every person in Jeddah Port shall obey the instructions on signs posted and respect the functions of fences and barriers established by the port authority.

The Port of Jeddah has dedicated storage areas for specialised products including dangerous goods. The Seaport Authority has a process to ensure dangerous goods are registered and licensed by the government. Containers departing the port are checked against documentation for matching container numbers and product detail. All sodium cyanide transited through the Port of Jeddah remains sealed within containers.

Vostochny, Russia

The Port operates under a suite of International and National regulations that ensures its compliance with regards to the handling and storage of dangerous goods. The Port of has dedicated storage areas for specialised products including dangerous goods and operations for dangerous goods are registered and licensed by the government. Containers departing the port are checked against documentation for matching container numbers and product detail. All sodium cyanide transited through the Port of Vostochny remains sealed within containers at all times.

Deseado, Argentina

The Port operates under a suite of International and National regulations that ensures its compliance with regards to the handling and storage of dangerous goods. PNA Regulations No.9/97 Transport by vessels of dangerous goods, safety standards for transport by charcoal vessels and No.3/96 Standards for the approval of packaging and packaging containing dangerous goods outline the requirements for ports.

Cyanide transited through the port of Puerto Deseado is temporary and remains on site for less than a day. This is a management measure to minimize potential for accidental releases during storage. All sodium cyanide transited through the port of Deseado remains contained within its sealed containers at all times preventing contact with water and other incompatible materials.

Guaymas, Mexico

The port of Guaymas must adhere to the requirements of Official *Mexican Standard NOM-010-SCT2/2009, Compatibility and segregation provisions for the Storage and transportation of hazardous substances, materials and waste* and *NOM-023-SCT4-1995 Conditions for the management and Storage of dangerous goods in ports, terminals and sea units*.

These standards state that ports, terminals and offshore units must establish areas for management, storage and adequate segregation of dangerous goods in bulk or packed form from other cargo. There is a compatibility and segregation table for dangerous substances, materials and waste. These storage areas must have the appropriate infrastructure, facilities and signage on display in accordance with the inherent risks of the products. Surveillance equipment and protection system (automated CCTV systems) are equipped in the Port.

Puerto Angamos, Chile

The Port aims to have dangerous cargo placed directly onto a trailer and removed from the facility via an ICMI certified transporter, and under escort of the Port Authority. However, when this cannot occur, the port has a dedicated storage area for specialized products including dangerous goods; cyanide containers are segregated

and stacked separately according the provisions of the Code and all sodium cyanide remains sealed within its container at all times preventing contact with water and other incompatible materials.

San Antonio, Chile

The Port has a dedicated storage areas for specialized products including dangerous goods, cyanide containers are segregated and stacked separately according the provisions of the Code and all sodium cyanide remains sealed within its container at all times preventing contact with water and other incompatible materials. The Port has 4 warehouses measuring 11,000 square meters of covered space, with metal roofs, proper fencing and gates, and lighting for up to 6,000 TEUs.

Punta Arenas, Chile

The Port aims to have dangerous cargo placed directly onto a trailer and removed from the facility under escort of the Port Authority. However, when this cannot occur, the port has a dedicated storage area for specialized products including dangerous goods; cyanide containers are segregated and stacked separately according the provisions of the Code and all sodium cyanide remains sealed within its container at all times preventing contact with water and other incompatible materials.

The port has full CCTV coverage, is fully lit at night and the whole of the port area has controlled access.

Nouakchott, Mauritania.

The Port is accredited under the ISPS Code and has a continual security presence. Security is provided at the entrance and exit to the port and also includes armed security patrols. Cyanide products remains within the sealed containers at all times. Warning signage is erected prohibiting non-authorised personnel in the area where the contains are stored. The area in which containers are located, if warranted, is well segregated and ventilated to prevent the build- up of hydrogen cyanide gas.

Mombassa, Kenya

The Port has introduced a number of measures to make the port a safer and more secure place. They include:

- New electronic surveillance equipment including CCTV
- Coastguard surveillance of waters
- New search and rescue centre, set up jointly with the IMO
- More plain-clothes and uniformed security officers on patrol in port areas
- Strict controls on port entry with all port users and visitors required to display passes at all times
- Restricted entry to container terminal and other key sections
- Continuously manned watch towers in car handling area and container terminal
- New rapid response team to deal with urgent security matters in or near the port area
- New centralised verification areas at the container terminal
- New cargo scanning system to allow containers to be checked without stripping.

Cyanide is placed in a segregated area whilst awaiting relevant clearances. This area is clearly signed providing appropriate warning to all port personnel. Collection of the cargo by the approved carrier is direct from this area. Vehicles collecting cargo from the port environs are subject to port checks to ensure that approvals for collection are in place and that documentation and container details match prior to egress from the port. Additionally, signage is displayed prohibiting smoking and the consumption of foodstuffs and liquids in the areas where hazardous goods are being stored.

Abidjan, Cote d'Ivoire.

The port of Abidjan is also certified under OHSAS 18001 (health and security). There are regular security patrols, restricted points of access, video surveillance and the capability to call upon certain specialised State Defence and Security Forces.

When containers of dangerous goods cannot be placed directly onto onwards transportation, they are sent to a secure holding facility under escort of the Port Automome D'Abidjan (PAA). All handling of dangerous goods, on and off of vessels, must have prior authorisation by the Harbour Master who sets the timeframes that such handling may take place.

All solid sodium cyanide remains at all times within its sealed containers. Containers are in a segregated area which is open to the air to prevent the build-up of hydrogen cyanide gas. The area in which the containers are located is suitable to effectively contain any spillage that may occur. There are general dangerous goods warning signs throughout the port.

Aliaga, Turkey

The Port’s security is managed through the International Ship and Port Facility Security Code (ISPS Code). The ISPS Code is a comprehensive set of measures to enhance security of ships and port facilities. The ISPS Code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case.

The purpose of the ISPS Code is to provide a standardised, consistent framework for evaluating risk, enabling Governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures. The ISPS Code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case.

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**	
Chengxin is	☐ in substantial compliance with	**Transport Practice 3.1**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

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

Chengxin has an emergency response plan (ERP).

The ERP includes, but is not limited to, information on:

- Scope and targets
- Introduction
- Potential hazards evaluation and plausible cause
- Organization structure and responsibilities
- Prevention and warning
- Reporting process
- Emergency disposal
- Emergency rescue requirements
- Post-disposal after accidents
- Emergency facilities and resources
- Emergency rescue capability evaluation & ERP revision
- Emergency response training and drills
- ERP management
- Appendix 1: liquid cyanide traffic incident emergency rescue team member contacts
- Appendix 2: solid cyanide traffic incident emergency rescue team member contacts
- Appendix 3: emergency response equipment list
- Appendix 4: emergency equipment list on liquid cyanide vehicle
- Appendix 5: medical equipment list in emergency medical box
- Appendix 6: emergency equipment list for solid cyanide rescue

- Appendix 7: emergency equipment list on solid cyanide vehicle
- Appendix 8: national highway police number
- Appendix 9: emergency contact number along transportation route
- Appendix 10: emergency response procedure
- Appendix 11: cyanide transportation routes (partial)
- Appendix 12: cyanide SDS.

Carriers

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

Chengxin 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, MSC, Swire Shipping and Hamburg Süd 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.

Ports

The due diligence assessments found that the Ports used by Chengxin 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.

Individual Port due diligences identify the emergency response plans and outline additional information specific to the emergency response infrastructure and resources located at each Port.

3.3.2 Transport Practice 3.2

Designate appropriate response personnel and commit necessary resources for emergency response.

	☒ **in full compliance with**	
Chengxin is	☐ in substantial compliance with	**Transport Practice 3.2**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

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

Whilst Chengxin's product is embarked on carriers, all emergency response is governed by the vessel's captain. Chengxin 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 regard 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.

Carriers

Chengxin 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 diligences assessments found that CMA CGM, Hapag-Lloyd, KMTC, Maersk, MSC, Swire Shipping and Hamburg Süd 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 emergency situations involving cyanide and other dangerous goods at sea.

Ports

The due diligence assessments found that the Ports used by Chengxin have appropriate emergency response capabilities to deal with potential dangerous goods releases.

Individual Port due diligences identify the emergency response plans and outline additional information specific to the emergency response infrastructure and resources located at each Port.

3.3.3 Transport Practice 3.3

Develop procedures for internal and external emergency notification and reporting.

	☒ **in full compliance with**	
Chengxin is	☐ in substantial compliance with	**Transport Practice 3.3**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

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

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

Chengxin 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, MSC, Swire Shipping and Hamburg Süd carry out the shipping of dangerous goods in accordance with the requirements of the IMO DG Code.

Global Marine Supply Chain		4 August 2020
Name of Facility	Signature of Lead Auditor	Date

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**	
Chengxin is	☐ in substantial compliance with	**Transport Practice 3.4**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Chengxin 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.

Chengxin does not have control over response to cyanide releases that may occur in shipping and port operations but has conducted due diligence assessments.

Carriers

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

Chengxin 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, MSC, Swire Shipping and Hamburg Süd carry out the shipping of dangerous goods in accordance with the requirements of the IMO DG Code.

Ports

The due diligence assessments found that the Ports used by Chengxin have appropriate emergency response capabilities to deal with potential dangerous goods releases.

Individual Port due diligences identify the emergency response plans and outline additional information specific to the emergency response infrastructure and resources located at each Port.

3.3.5 Transport Practice 3.5

Periodically evaluate response procedures and capabilities and revise them as needed.

	☒ **in full compliance with**	
Chengxin is	☐ in substantial compliance with	**Transport Practice 3.5**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

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

Chengxin does not have control over response to cyanide releases that may occur in shipping and port operations but has conducted due diligence assessments.

Carriers

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

Chengxin 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, MSC, Swire Shipping and Hamburg Süd carry out the shipping of dangerous goods in accordance with the requirements of the IMO DG Code.

Ports

The due diligence assessments found that the Ports used by Chengxin have appropriate emergency response capabilities to deal with potential dangerous goods releases.

Individual Port due diligences identify the emergency response plans and outline additional information specific to the emergency response infrastructure and resources located at each Port.

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.

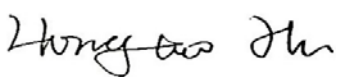
4.3 Auditor Review of Due Diligences

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

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

Signature Page

Golder Associates Consulting Ltd.



Hongtao Hu
ICMI Lead Auditor

Mike Woods
Transport Technical Specialist

HH/MW

https://golderassociates-my.sharepoint.com/personal/hhu_golder_com/documents/g-projects/chengxin/208515006task01 chengxin icmi supplier chain/report/final/208515006-01 -r-reva hebei global marine supply chain sar - 20200804.docx

APPENDIX A

Due Diligence Assessments

REPORT

Due Diligence for Buenos Aires 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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Buenos Aires, Argentina. This assessment was conducted by Environmental Engineer Sijia Liu and reviewed by 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 Buenos Aires's management of solid sodium cyanide product.

This assessment should not be a final acceptance of the Port of Buenos Aires for future work; rather it is recommended that Chengxin continues to review and monitor the Port of Buenos Aires's performance periodically and implement an adaptive management process.

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF BUENOS AIRES, ARGENTINA 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 11

5.0 CLOSING 12

6.0 REFERENCES 12

1.0 INTRODUCTION

This report provides the results of a due diligence assessment of the Port of Buenos Aires, Argentina, 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 Buenos Aires, Argentina, during March 2020. This assessment was conducted by Environmental Engineer Sijia Liu and reviewed by 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 Buenos Aires, Argentina. The Port of Buenos Aires is to be included in its 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 the Port of Buenos Aires.

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 Buenos Aires
- 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 BUENOS AIRES, ARGENTINA

The Port of Buenos Aires was constructed in 1536 which is located at South 34 40’ 00” latitude and West 58 22’ 00” longitude in Puerto Nuevo, Buenos Aires of Argentina. It is currently operated by the General Ports Administration, a state enterprise, and it is the leading transhipment point for the foreign trade of Argentina.

Puerto Buenos Aires, with a capacity of 1.5 million total cargo TEUs per year, connects Argentina with the world and operates more than 60% of the country's container cargo. It receives approximately 800 cargo ships (oceanic's and barges) per year. In addition, it operates the unloading of locomotives, wagons and rail equipment for the reactivation of the freight train network.

The sector called Puerto Nuevo comprises 6 docks that are used for port operations and for the attention of overseas and cabotage vessels. The area occupied by the 5 general cargo port terminals is approximately 92 ha, 7250 m dock length with 23 docking sites and a dock-foot depth of 10.05 m.

Terminals 1,2 and 3 are equipped with 3 mobile cranes, 25 cranes gantry on tyres, 3 front stackers, 4 reach stackers, 8 empty container scooters, 2 mobile dock cranes, 2 20-ton front lifts, 3 7.5-ton front lifts, 3 4.5-ton front lifts, 20 2.5-ton front lifts, 45 trucks and 48 trailers.

Terminal 4 is equipped with 5 dock cranes, 2 cranes on vias, 8 reach stackers, 3 front chargers for empty containers, 1 12-ton front lifts, 10 2.5-ton front lifts and 4 trucks.

Terminal 5 is equipped with 4 cranes on rails, 3 mobile cranes, 15 cranes gantry on tyres, 6 reach stackers, 6 empty container scooters, 17 front chargers, 18 trucks and 45 trailers.

Terminales Río de la Plata (TRP) operates Terminals 1 and 2 in Puerto Nuevo in Buenos Aires. The terminals have been remodeled to provide modern facilities and the latest in container-handling equipment and services. The two facilities make up the largest container terminal in the Port, with capacity for handling one million 20-foot equivalents (TEUs) of containerized cargo per year.

TRP's facility comprises three basins, providing up to five berths for vessel operations. TRP has significant reefer (refrigerated cargo) capacity, 1650 plugs, which accommodate the large volume of reefer exports from Argentina. The terminal handles deep-sea vessels from Europe, Asia and North America, as well as feeders to both the East and West Coast of South America and barges upriver to Rosario.

TRP has an integrated management system which is certified against international standards for quality (ISO 9001:2015), environment (ISO 14001:2015), and occupational safety and health (ISO 45.001:2018).

Overview of port operations:

A Harbour Master oversees the overall operation of the Port of Buenos Aires. A previously conducted due diligence (2015) indicates that:

- Management of the Port protocols exists for docking of vessels (e.g. use of Pilots, use of tugboats, management of different weather conditions, tides, currents and safety and general Port operations). This sees to the safe docking and turnaround of the vessels in and out of the Port.
- Entry into Port is controlled by the Port's Pilot who understands the Port protocols and any unique issues regarding the approach and docking of a vessel at the Port. The Ship's Captain works in conjunction with the Pilot as he understands his vessel and can implement and assist with the Pilot's instructions.
- The approach of the vessel to the Ports will take into any account any channels, special navigation points and as mentioned above the currents, tides and weather.
- Once a vessel is secure alongside the wharf the shipping activities changeover to Port activities. The vessels manifest of what containers are required to be unloaded from the vessel, including the manifest for containers for loading are handed over. This manifest will identify hazardous cargos and their UN number and classification and segregation requirements.

Stevedoring operations include:

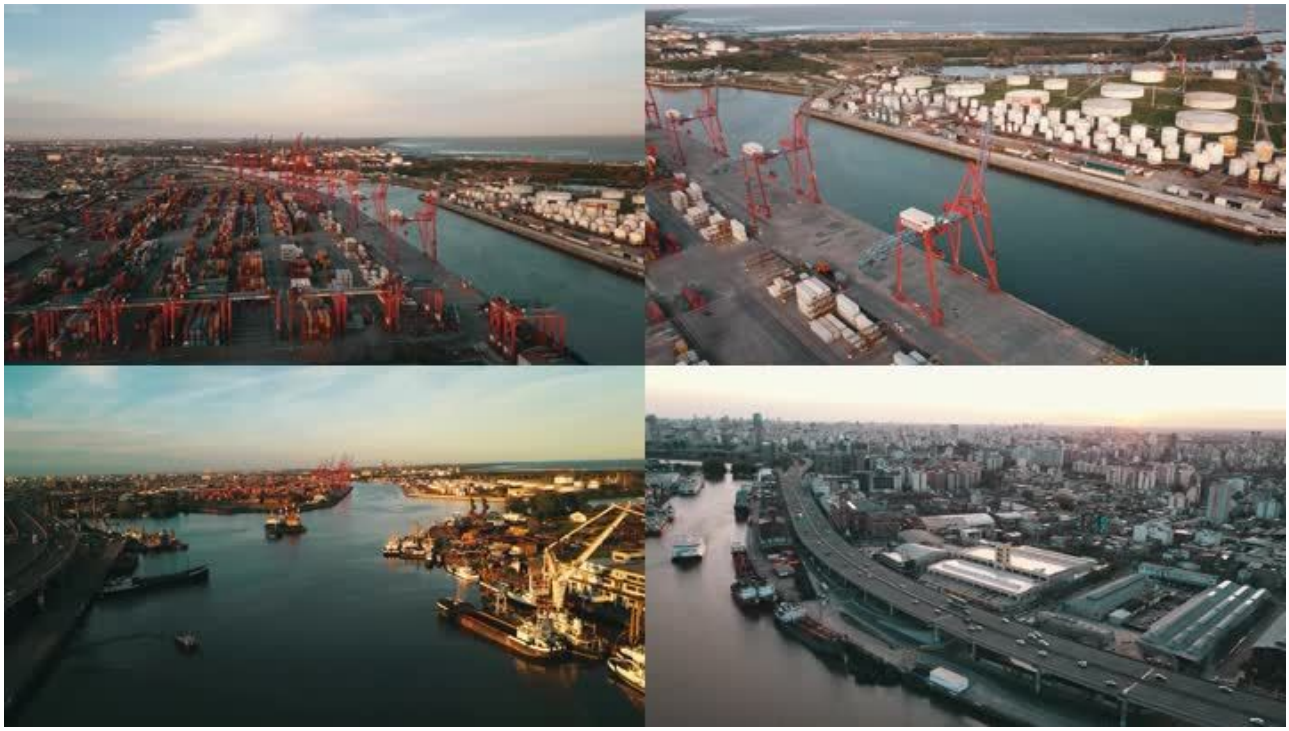
- The stevedoring company, TRP, manage the onshore (wharf) operations at the dedicated container terminal. This is the terminal currently used by other ICMI accredited transporters to facilitate the unloading of their vessels.

The stevedoring operations include:

- Handling of the containers whether full or empty on and off the vessels; container storage areas for general cargo, port security, control systems for companies and their vehicles collecting and or delivering containers.
- Software programs that control container placement and movement; these software packages identify each individual container placement area in designated stacks. The input information for the placement of containers comes from the vessel's manifest.

Containers of dangerous goods discharged by vessels at the container terminal are currently being moved by TRP to various areas within the Port for storage until customs clearance has been completed and transport is arranged. Containers of cyanide are segregated from other classes of dangerous goods. TRP are currently investigating the possibility of having a dedicated area for storage of all dangerous goods. This area will have minimal traffic flow and be large enough to allow space for appropriate segregation of different classes of dangerous goods.

ISPS Code Certificate has been obtained for the Port of Buenos Aires by full filling the provisions of the ISPS Code Contract. The Country Code for Port of Buenos Aires is ARENA.



Overview photo of the Buenos Aires Port

(Source: https://www.vjshi.com/watch/2759272.html)

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 theses 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 Buenos Aires 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.

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, (2009) 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.

The Ports activities are to remove the shipping containers from the vessel and place the shipping containers on the wharf or onto in-port transport for transfer to a designated storage area. Following final customs clearance, the containers will then be placed on road transport vehicles for the inland transport to the gold mine (final destination). These road transport vehicles will be from an ICMI certified transport company.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 and quantity.

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 certificates which meet 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"?*
Not applicable – vessel transportation is not within the scope of this due diligence.

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.

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

The Dispatch Centre organizes ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring.

As a member of the IMO and to comply with the IMSBC Code, vessels are required to declare dangerous cargo before arriving/leaving at the Port.

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

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

In general, Port and vessel security are managed through the International Ship and Port Facility Security Code (ISPS Code). The ISPS Code is a comprehensive set of measures to enhance security of ships and port facilities. All vessels calling at Russian Ports must meet ISPS requirements.

The purpose of the ISPS Code is to provide a standardized, consistent framework for evaluating risk, enabling Governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures. The ISPS Code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case.

The Port of Buenos Aires operates under a suite of International and National regulations that ensures its compliance with regards to the handling and storage of dangerous goods. *PNA Regulations 9/97 Transport by vessels of dangerous goods, safety standards for transport by charcoal vessels and 3/96 Standards for the approval of packaging and packaging containing dangerous goods* outline the requirements for all Ports.

Shipping containers containing cyanide product are stored in a designated dangerous goods storage area (segregated according to the international segregation guidelines) and are placed on a concrete surface which has a safe floor loading factor in an open air area. The product remains in the containers that were packed at the sodium cyanide factory (the sodium cyanide packaging has a sealed plastic liner which stops the contact of product from moisture or humidity) ready for loading for onward transport to the final destination. The containers are not opened and are kept sealed until they arrive at the mine site.

Security measures at the Port and ascertain the container storage area at the Port has full CCTV coverage and that security measures were evident throughout the Port. The terminal adopts a range of strict internal controls and uses state-of-the-art technology to optimize operation and the safety. In 2009 the ISO 28000 certification (Supply Chain Security Management) was obtained.

The due diligence review assessed the capacity of the Port of Buenos Aires to contain any spilled cyanide materials and minimize the extent of a release and ascertained that the Port possessed an Emergency Procedure Guide especially developed for cyanide and a copy of the Material Safety Data Sheet. The Port undertakes regular emergency response exercises, though it was noted that these were not cyanide specific.

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

Argentina has been a member State of the IMO Council since 1974, it complies with the requirements of the IMO DG Code.

The PNA is the competent authority (specifically the Directorate for Environmental Protection) and administers the National Contingency Plan (NCP) for dealing with pollution by oil and other noxious substances in marine and freshwater environments. The PNA consists of two branches; one section deals with policy and implementing the international Conventions; the other has an operational role and is responsible for planning and responding to pollution incidents. This department has 19 Rescue, Firefighting and Environmental Protection stations located in the principal ports.

The Port of Buenos Aires is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

It should be noted that at the time of this due diligence there was no evidence to show that the port of Buenos Aires had been certified under the Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances (HNS), 2000 (OPRC-HNS Protocol) – an extension of the OPRC 90 to include hazardous chemicals. However, they have acknowledged this and contingency arrangements are incorporated into the current NCP.

The PNA, with the support of private contractors, manages the response to and monitoring of an HNS incident and some equipment is already available (such as PPE, respirators, pumps, power packs and air monitoring equipment). The PNA is currently engaged in a program of training and exercises in preparation for spills of both oil and HNS.

PNA Regulation 05-11 Obligatory Training Standards for Land Personnel Linked to Maritime, Fluvial and Hazardous Goods Shipping ensures minimum standards of preparedness and response are adhered to.

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 Buenos Aires Port within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Buenos Aires'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 Buenos Aires Port for all future work; rather it is recommended that Chengxin continues to review and monitor Buenos Aires Port's performance periodically 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.

6.0 REFERENCES

Puerto Buenos Aires. Available at: https://www.argentina.gob.ar/transporte/puerto-buenos-aires; accessed on March 19, 2020.

Buenos Aires. Available at: http://www.sofreight.com/ports/ar/arena; accessed on March 19, 2020.

Buenos Aires. Available at: https://www.searates.com/port/buenos_aires_ar.htm; accessed on March 19, 2020.

Port of Buenos Aires. Available at: http://www.worldportsource.com/ports/commerce/ARG_Port_of_Buenos_Aires_47.php; accessed on March 19, 2020.

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1.

Annual Buenos Aires Port Due Diligence Review Records, August 2, 2019.

Image: https://www.vjshi.com/watch/2759272.html; accessed on March 19, 2020.

Signature Page

Golder Associates Consulting Ltd.

Sijia Liu
EHS Engineer

Mike Woods
Transport Technical Specialist

SL, MW

golder.com

REPORT

Due Diligence for Port of Callao

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.

Submitted by:

Golder
Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Callao, Peru. 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 Callao's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF CALLAO, PERU 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 11

5.0 CLOSING 11

6.0 REFERENCES 11

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Callao, Peru, 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 of the Port of Callao, Peru, during March 2020. 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 for Port of Callao, Peru. The Port of Callao is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

The scope of this due diligence includes the management, interim storage and emergency response in relation to cyanide transported through the Port of Callao.

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 Callao
- 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 CALLAO, PERU

The Port of Callao is located at South 12 03’ 00” latitude and West 70 10’00” longitude which is 12 km away from Lima, the country’s capital. It was initially constructed in 1537. The Port is governed by Peru’s National Port Authority and is maintained and administered by La Empresa Nacional De Puertos S.A. (ENAPU). ENAPU

is a public agency under the Ministry of Transport and Communications. The Port of Callao handles three-quarters of Peru's imports and one-fourth of its exports (about 1,050,000 TEUs).

The Port of Callao is on the northwest bank of the city of Callao, with two north-south artificial breakwaters. The northern breakwater is approximately 1300 m in length and the southern breakwater is approximately 400 m in length.

The Port of Callao covers over 43 ha and contains over 3.6 km of moorings at a depth of about 11 meters (23 berths). The port contains almost 26.5 ha of storage space, including 2.1 ha of roofed area and 24.3 ha for containers, and has a capacity for storing 25.8 thousand metric tons of grain. In 2007, over 20.7 million metric tons of cargo passed through the Port of Callao, with 16.4 million of those through the Callao terminal. The Port of Callao handled 1.2 million TEUs of containerized cargo, one million of those handled through the Callao Terminal.

Major international shipping companies such as Hamburg SUD, Maersk and MSC transport their shipments to the Port of Callao. Loading services in the Port of Callao are provided by ENAPU and private companies. The Port of Callao is well-equipped to handle the full range of cargoes. It operates eight tugboats with from 170 to 1600 horsepower. The Port of Callao has twelve 30-ton tractors, nineteen elevators with capacity for from 0.7 to 3.5 t, two bobcats, and nine cranes with capacity for from 16 to 50 t. Container-handling equipment in the Port of Callao includes ten handlers for full containers with capacity for from 32 to 45 t and three empty handlers with capacities from 3 to 12 t. The Port of Callao has a 210-t locomotive and forty-two line cars with capacity for from 10 to 50 t. Furthermore, the Port of Callao has seventy-seven trucks with capacities of 15 and 28 t.

The "Terminal Portuario Callao" TPC is owned and operated by ENAPU S.A. and operated by two dealers: APM Terminals and DP World. The terminal averages 30 gross moves per hour per crane and is ranked as the top container terminal facility in South America by several of its shipping line customers.

The Port of Callao Harbour Master oversees all port operations. This includes:

a) Management of port protocols for vessel docking
b) Entry to port by pilots
c) Vessel approaches
d) Shipping activities to port activities changeover.

Stevedoring operations include:

a) Handling of full/empty containers on and off vessels, container storage areas for general cargo, port security, etc.
b) Management programmes for container placement and movement including identification of hazardous cargoes.

ISPS Code Certificate has been obtained for the Port of Callao by full filling the provisions of the ISPS Code Contract. The Country Code for Port of Callao is PECLL.

Overview photo of the Port of Callao

(Source: https://www.britannica.com/place/Callao-Peru)

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 theses 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

International sales and exports of cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 transports 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 Port of Callao is selected on the basis that it is the closest port to the customer that 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.

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, (2009) 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:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 three sides with the diamond pictogram, UN number, National Fire Protection Association (NFPA) number, and Department of Transport diamond number placards.

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 and quantity.

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 certificates which meet 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"?*
Not applicable – vessel transportation is not within the scope of this due diligence.

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.

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

As a member of the IMO and to comply with the IMSBC Code, vessels are required to declare dangerous cargo before arriving/leaving the Port.

Chain of custody documentation is used by shipping companies to prevent the loss of cargo during shipment. This documentation includes the vessel manifest, 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).

All transshipping operations are carried out in a dedicated dangerous goods area by suitably trained personnel. The transshipping operations are monitored by the port's CCTV system and the containers are tracked using GPS to record the positioning of the containers within the dangerous goods storage areas.

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

Both the DP World and APM Terminals have surveillance systems that monitor the security of goods via CCTV coverage. Both terminals operate in a pedestrian free environment and are brightly lit at night. Safety signage and on-site security measures are evident. Containers are placarded in accordance with IMDG labelling requirements and storage areas show relevant signage regarding no smoking, no open flames, eating and drinking is not permitted and the PPE requirements.

During transshipping, manifests are handed over from the vessel to the terminal operators which include the weight and any hazards associated with the containers. This information is captured in the terminal operator's computer systems, which has the ability to identify dangerous goods consignments, determine the class of dangerous goods and establish the segregation requirements for that product as required by the IMO DG Code.

Containers are stored at the port with adequate ventilation to prevent build-up of hydrogen cyanide gas. The product remains sealed in containers at all times and the area of storage is suitable to effectively contain any spillage that may occur. Local specialized responders are on hand to provide assistance in the event of a serious incident.

The Port of Callao operator procedure calls for confirmation that the United Nations ID numbers, Department of Transport and National Fire Protection Association (NFPA) diamond number placards are present on the three visible sides of cyanide containers before they can be transferred to trucks and dispatched. This is required by Perúvian law when transporting hazardous materials.

Transshipping depots and interim storage sites are associated with the Port of Callao. During unloading, containers of cyanide may be stored temporarily in designated transshipping depots within the confines of the Port. These depots are managed and administered by the terminal operators DP World and or APM respectively. It is the policy of the Port that all containers of sodium cyanide are to be removed from the Port within forty-eight hours following discharge of the vessel.

Should the containers of cyanide not be cleared through customs within the forty-eight-hour period, the terminal operators may transfer the containers to an inland clearance depot operated by Licsa under the authority of the Peruvian National Customs and Tax Administration (SUNAT). The Clearance Depot is located a short distance outside of the Port confines. The containers remain under customs control until clearance has been arranged and collection from the Clearance Depot can be made by the importers.

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

Peru has been a Member State of the IMO Council since 1968, it complies with the requirements of the IMO DG Code.

The Port of Callao is equipped with emergency response teams who are trained to respond to emergency situations. Medical facilities are available on site and include access to a doctor, paramedics and an ambulance. Firefighting trucks are present just outside of the port area and are able to mobilise to the port where required. APM (one of the terminal operators) holds two emergency response exercises per year and DP World Terminal holds three.

The Port of Callao is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Co-operation 1990 (OPRC 90). States which 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.

It should be noted that at the time of this due diligence there was no evidence to show that the Port of Callao is certified under the Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol) – an extension of the OPRC 90 to include hazardous chemicals.

Previous due diligence assessments indicate that safety and security measures are present throughout the port, including upon entry and exiting of the port. The due diligence ascertained the port has suitable procedures and resources in place for handling emergency situations.

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 Port of Callao within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Port of Callao'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 Port of Callao for all future work; rather it is recommended that Chengxin continues to review and monitor Port of Callao's performance periodically 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.

6.0 REFERENCES

Port of Callao. Available at: http://www.worldportsource.com/ports/portCall/PER_Port_of_Callao_1477.php; accessed on March 18, 2020.

Callao. Available at: http://port.sol.com.cn/result.asp?id=jddki; accessed on March 18, 2020.

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1.

Annual Callao Port Due Diligence Review Records, August 2, 2019.

Image: https://www.britannica.com/place/Callao-Peru; accessed on March 18, 2020.

Signature Page

Golder Associates Consulting Ltd.

Sijia Liu
EHS Engineer

Mike Woods
Transport Technical Specialist

SL, MW

golder.com

REPORT

Due Diligence for Port of Manzanillo

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 the Port of Manzanillo, Mexico. 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 with regards to the Port of Manzanillo's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF THE PORT OF MANZANILLO, MEXICO 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 10

5.0 CLOSING 10

6.0 REFERENCES 11

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Manzanillo, Mexico, 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 of the Port of Manzanillo, Mexico, during March 2020. 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 of the Port of Manzanillo, Mexico. The Port of Manzanillo is to be included in its 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 the Port of Manzanillo.

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 Manzanillo
- 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 THE PORT OF MANZANILLO, MEXICO

Port of Manzanillo (North 19 03’ 30” latitude and West 104 18’ 30” longitude) was constructed in 1825 and is situated in the State of Colima, about 250 kilometers northwest of Puerto de Lázaro Cárdenas in the Republic of Mexico.

The Administración Portuaria Integral (API) de Manzanillo S.A. de C.V. is an organization of the Federal Government, it was constituted in December of 1993 and was granted by the Secretariat of Communications and Transports, with the purpose of carrying out, amongst others, the functions to administrate, promote, construct, develop and maintain the infrastructure of the Port of Manzanillo.

The volume of container cargo handled in the port of Manzanillo amounted to 3.08 million TEUs in 2018, up from 2.83 million TEUs a year earlier. The port of Manzanillo had the third largest throughput in Latin America in 2018.

The Port of Manzanillo is Mexico's seventh busiest seaport, and it is a major transhipment point for trade with the United States and Central and South America.

The Port of Manzanillo covers 437 ha, including water, docks, and storage areas. The port has 19 docks, 14 hectares of storage areas, 13.5 km of railway lines, and 5.4 kilometers of roads. Within the Port of Manzanillo, 14 docks are dedicated for commercial traffic, 3 docks handle hydrocarbons, and 2 docks are devoted to cruise traffic. Private operators also have 14 terminals and a double-stack train service in the Port of Manzanillo.

The Port of Manzanillo's access channel is 500 m long and up to 15.2 m deep. The northern turning basin contains 3 docking positions which can receive vessels up to 300 meters long. The southern turning basin contains three docking positions accommodating vessels up to 300 m long with 14 m draft.

The Port of Manzanillo has 14 privately-operated terminals and specialized installations for handling all types of cargo.

The specialized container terminal (TEC) at the port has an operating capacity of up to three ships simultaneously and productivity of up to 120 boxes per ship hour. The TEC has 25 ha devoted to storage of containers with capacity for 19 thousand TEUs, including 344 reefer outlets. TEC also has 0.53 ha of storage for general cargo and 1.5 ha of inspection area. This Port of Manzanillo terminal is served by three rail tracks, each of 500 meters. The truck gate has four inbound and four outbound lanes.

The TEC is equipped with two super-post-Panamax, four post-Panamax, and three Panamax cranes. It has 32 rubber-tyred gantry cranes, 15 top- and side-loaders, 79 container chassis, and 104 bomb carts.

Overview photo of the Port of Manzanillo

(Source: https://www.freightwaves.com/news/port-report-mexico-eyes-new-box-terminal-for-manzanillo)

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 theses 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

International sales and exports of sodium cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 transports Chengxin's 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 Port of Manzanillo 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.

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, (2009) 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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 diamond pictograms showing 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 and quantity.

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 certificates which meet 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"?*
Not applicable – vessel transportation is not within the scope of this due diligence.

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.

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

The port operator is aware (as per NOM-033-SCT4-1996) when cyanide containers are due to arrive at the port. The stevedores receive the vessel's manifest, which includes dangerous goods unloading and handling information and this information is then captured in the terminal operator's container terminal software program.

All unloading operations are carried out in a dedicated dangerous goods area by trained personnel. The transhipping operations are monitored by the port's CCTV system and the containers are tracked to record the positioning of the containers within the dangerous goods storage areas.

Following final clearance, the consignment is placed on road transport vehicles for the inland transportation leg to the relevant end destination. These road transport vehicles are owned by the ICMI accredited transport company providing the road transport service.

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 Material Safety Data Sheets (MSDS).

Mexican Standard NOM-012-SCT4-2007 *Guidelines for the Elaboration of the Contingency Plan for Boats Transporting Hazardous Goods* requires that vessels carrying dangerous goods must have a means of maintaining contact between the vessel and the appropriate bodies on land at all times.

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

The Port of Manzanillo must adhere to the requirements of Official Mexican standard NOM-010-SCT2/2009, Compatibility and segregation provisions for the Storage and transportation of hazardous substances, materials and waste and NOM-023-SCT4-1995, Conditions for the management and Storage of dangerous goods in ports, terminals and sea units.

These standards state that ports, terminals and offshore units must establish areas for management, storage and adequate segregation of dangerous goods in bulk or packed form, from other cargo. There is a compatibility and segregation table for dangerous substances, materials and waste. These storage areas must have the appropriate infrastructure, facilities and signage on display in accordance with the inherent risks of the products.

Additionally, the port or terminal operator must ensure that the areas where goods are handled and stored be monitored at all times and that personnel involved in such operations have received adequate training. The operator shall keep a permanent record of any dangerous goods encountered in the port area and will ensure that in the areas where the products are handled and stored, personnel have accessible information on emergency procedures.

It will also ensure that in such area's signage is displayed to show smoking is prohibited, sources of ignition are avoided and proper precautions are taken with regards to personal protective equipment for the handling of dangerous goods.

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

Mexico has been a Member State of the IMO Council since 1954, it complies with the requirements of the IMO DG Code. The Mexican Government also has official national standards in place for the transportation, handling and storage of hazardous substances which applies to all ports, terminals and offshore facilities where dangerous goods may be stored.

Official Mexican NOM-005-SCT2/1994, Emergency Information for the Transportation of hazardous substances, materials and waste and NOM-023-SCT4-1995, Conditions for the management and Storage of dangerous goods in ports, terminals and sea units both contain provisions for ensuring preparedness in the event of an emergency situation. Essentially these standards require that the port administration form and maintain (via training) an emergency response team, ensure emergency response equipment is available and well maintained and have in place appropriate emergency incident notification and reporting mechanisms.

Additionally, the Port of Manzanillo is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which are party to OPRC 90 protocol are required to establish a national system for responding to oil and hazardous/noxious substances (HNS) 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.

It should be noted that at the time of this due diligence there was no evidence to show that the Port of Manzanillo is certified under the Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol) – an extension of the OPRC 90 to include hazardous chemicals.

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 the Port of Manzanillo within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to the Port of Manzanillo'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 Port of Manzanillo for all future work; rather it is recommended that Chengxin continues to review and monitor the Port of Manzanillo's performance periodically 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.

6.0 REFERENCES

Puerto de Manzanillo. Available at: http://www.worldportsource.com/ports/commerce/MEX_Puerto_de_Manzanillo_234.php; accessed on March 20, 2020.

Infrastructure. Available at: https://www.puertomanzanillo.com.mx/engs/0000203/infrastructure; accessed on March 20, 2020.

Port of Manzanillo (Mexico). Available at: https://www.searates.com/port/manzanillo_mx.htm; accessed on March 20, 2020.

Mexico-Manzanillo. Available at: http://www.100allin.com/ports/MANZANILLO.html; accessed on March 20, 2020.

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1

Annual Manzanillo Port Due Diligence Review Records, August 2, 2019

Volume of container cargo handled in the port of Manzanillo, Mexico from 2012 to 2018. Available at: https://www.statista.com/statistics/729959/manzanillo-mexico-container-port-cargo-volume/, accessed on May 21, 2020.

Image: https://www.freightwaves.com/news/port-report-mexico-eyes-new-box-terminal-for-manzanillo.

Signature Page

Golder Associates Consulting Ltd.

Sijia Liu
EHS Engineer

Mike Woods
Transport Technical Specialist

SL, MW

golder.com

REPORT

Due Diligence for Port of Valparaiso

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Valparaiso, Chile. 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. 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 with regards to the Port of Valparaiso's management of solid cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF VALPARAISO, CHILE 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 6

4.0 CONCLUSION 9

5.0 CLOSING 10

6.0 REFERENCES 10

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Valparaiso, Chile, 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 of the Port of Valparaiso, Chile, during March 2020. 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 for Port of Valparaiso, Chile. The Port of Valparaiso is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

The scope of this due diligence includes the management, interim storage and emergency response in relation to cyanide transported through the Port of Valparaiso.

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 Valparaiso
- 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 VALPARAISO, CHILE

Port of Valparaiso was constructed in 1810 and is located at South 33 02’ 00” latitude and West 71 39’00” longitude. It lies on the coast of central Chile about 140 kilometres north-west of the country’s capital, Santiago and on the shores where a coastal mountain range forms a rocky peninsula and a sheltered bay. In 2003, the city’s historic quarter was designated a UNESCO World Heritage Site. The city is one of Chile’s most important ports and an important cultural center.

The Port of Valparaiso has been administered by various state agencies. The most emblematic was born on April 6, 1960, called Empresa Portuaria de Chile, Emporchi, a central and autonomous administrative entity, in charge of the operation and administration of state ports. Empresa Portuaria of Valparaiso (EPV) owns eight terminals (out of a total of 10) inside the port, the total marine area covers about 50 hectares. Wharves lengths total 1404 meters with alongside depths ranging from 6.2 to 11.4 meters.

In 2019, the Port of Valparaiso handled 9.4 million tons of cargo, including 7.7 million tons of containerized cargo, and 1.7 million tons of loose cargo. Of that total, 5 million tons were exports, and 3.5 million tons were imports. The main exports are copper, fruit, wine, wood, fish products, beans and wool, imported goods are mainly machinery, aluminum, paper, grain, crude oil, frozen meat and dairy products.

There are two terminals and 10 berths at the main docks, with a shore length of 1,685m and a maximum water depth of 10.5 m. Loading and unloading equipment has a variety of shore crane, hydraulic crane, floating crane, container crane and tugboat, among which the maximum lifting capacity of hydraulic crane is 70 tons, floating lifting of up to 100 tons,

In Chile, Port governance is influenced by a wide number of stakeholders – more than 30 organizations deal with the regulation of the port system. The main entities likely to generate or influence port policies include five ministries, these being: The Ministry of Transport and Telecommunication, The Ministry of Public Works, The Ministry of Defense, The Ministry of Finance and The Ministry of National Assets.

ISPS Code Certificate has been obtained for the Port of Valparaiso by full filling the provisions of the ISPS Code Contract. The Country Code for Port of Valparaiso is CLVAP.

Overview photo of the Port of Valparaiso

(Source: https://www.puertovalparaiso.cl/?lang=eng)

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 theses 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

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 transports 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 Port of Valparaiso 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.

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, (2009) 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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 diamond 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 and quantity.

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 certificates which meet the requirements of Section 5.4.2 of the IMO DG Code.

g) *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 – transport via shipping is not within the scope of this due diligence.

h) *Does the ship carrying the cyanide have emergency response information, as required under Section 5.4.3.2 of the DG Code?*
Not applicable – transport via shipping is not within the scope of this due diligence.

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

Port Operators are fully aware when cyanide containers are to arrive at the Port. The stevedores receive the vessel's manifest along with other shipping information prior to arrival. This includes unloading and handling information of dangerous goods for the Port, this information is then captured in the terminal operator's advanced information management system allowing for the complete traceability of cargoes within the port.

Chile has National regulations in place for the minimum requirements for radio-communication and ship tracking in Chilean waters and port facilities, the Port of Valparaiso ensures all vessels satisfy and abide by these regulations.

All transshipping operations are carried out in a dedicated dangerous goods area by suitably trained personnel. The transshipping operations are monitored by the port's CCTV system and the containers are tracked to record the positioning of the containers within the dangerous goods storage areas.

Following final clearance, the consignment is placed on road transport vehicles for the inland transportation leg to the relevant end destination.

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 Material Safety Data Sheets (MSDS).

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

In general, Port and vessel security are managed through the International Ship and Port Facility Security Code (ISPS Code). The ISPS Code is a comprehensive set of measures to enhance security of ships and port facilities. All vessels calling at Chilean Ports must meet ISPS requirements.

The purpose of the ISPS Code is to provide a standardized, consistent framework for evaluating risk, enabling Governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures. The ISPS Code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case.

The ISPS Code is implemented through chapter XI-2 Special measures to enhance maritime security in the International Convention for the Safety of Life at Sea (SOLAS). Since the ISPS Code is part of SOLAS, compliance is mandatory for all Contracting Governments to SOLAS. Chile is both a member of the IMO and a signatory of SOLAS.

The Port of Valparaiso operates under a suite of National regulations that ensure compliance with the above. In particular, for the handling and storage of dangerous goods, these regulations ensure that shipments of cyanide are authorized for discharge from the vessel, handled by appropriately trained personnel, stored in designated and secured areas, segregated according dangerous goods classes and removed from the port in a timely manner.

Security requirements are also addressed under these National regulations and the Port of Valparaiso satisfies the conditions set out for security personnel and check points, monitoring and surveillance systems.

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

Chile has been a member State of the IMO Council since 1972, it complies with the requirements of the IMO DG Code. The Chilean Government also has official national standards in place for the transportation, handling and storage of hazardous substances.

The Port of Valparaiso is certified under both the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90) and its extension, the Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol). States which are party to OPRC 90 protocol are required to establish a national system for responding to oil and Hazardous and Noxious Substances (HNS) 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.

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 Port of Valparaiso within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Port of Valparaiso'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 Port of Valparaiso for all future work; rather it is recommended that Chengxin continues to review and monitor Port of Valparaiso's performance periodically 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.

6.0 REFERENCES

Port of Valparaiso Introduction. Available at: https://www.b2bers.com/big5/guide/trans/port/VALPARAISO.html; accessed on March 23, 2020.

Port of Valparaiso (Chile). Available at: https://www.searates.com/port/valparaiso_cl.htm; accessed on March 23, 2020.

Empresa Portuaria Valparaiso. Available at: http://www.worldportsource.com/shipping/ports/CHL_Empresa_Portuaria_Valparaiso_114.php; accessed on March 23, 2020.

Puerto Valparaiso. Available at: https://www.puertovalparaiso.cl/puerto/estadisticas; accessed on March 23, 2020.

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1.

Annual Valparaiso Port Due Diligence Review Records, August 2, 2019.

Image: https://www.puertovalparaiso.cl/?lang=eng.

Signature Page

Golder Associates Consulting Ltd.

Sijia Liu
EHS Engineer

Mike Woods
Transport Technical Specialist

SL, MW

golder.com

REPORT

Due Diligence for Port of Conakry

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Conakry, Guinea. 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 Conakry's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF CONAKRY, GUINEA 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 10

5.0 CLOSING 10

6.0 REFERENCES 10

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Conakry, Guinea, 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 of the Port of Conakry, Guinea, during March 2020. 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 for Port of Conakry, Guinea. The Port of Conakry is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

The scope of this due diligence includes the management, interim storage and emergency response in relation to cyanide transported through the Port of Conakry.

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 Conakry
- 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 CONAKRY, GUINEA

Port of Conakry is the main port of Guinea and is located on the South Coast of Guinea (North 9 31’ 00” latitude and West 13 43’00” longitude).

There are main 9 berths in the port area with a length of 1,904m and a maximum water depth of 11 m. Loading and unloading equipment consists of a variety of car cranes, forklifts, conveyors, floating cranes, tugboats and

rolling facilities. The lifting capacity is 50 tons and increasing to 60 tons for floating cranes. Tugboat power has been recorded at 1400 kW. The warehouse area of the port area is 59,000 m^2, and the warehouse area is 25,000 m^2.

The port has a 20 ha container yard and container storage capacity of 8000 twenty-foot equivalent units (TEUs). The theoretical annual capacity of the Port of Conakry is 600 000 TEUs. The container terminal is jointly operated by Bolloré Ports and the Port Authority of Conakry. The port operates a continuous loading and unloading service and is linked to road and rail systems.

The Port of Conakry Harbour Master oversees all port operations, including:

Management of port protocols for vessel docking

- Entry to port by pilots
- Vessel approaches
- Shipping activities to port activities changeover.

Stevedoring operations include:

- Handling of full/empty containers on and off vessels, container storage areas for general cargo, port security, etc.
- Management programs for container placement and movement including identification of hazardous cargoes.

Guinea is a member of the International Maritime Organization (IMO) Council and the Abuja Memorandum of Understanding, and as such performs its Port State obligations, supervises foreign ships that berth at Conakry, and promotes compliance with international conventions among Flag States through Port State Control.

ISPS Code Certificate has been obtained for the Port of Conakry by fulfilling the provisions of the ISPS Code Contract. The Country Code for Port of Conakry is GNCON.

Overview photo of the Conakry Port

(Source: https://conakryport.com/wp-content/uploads/2019/07/3.jpg)

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 theses 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

International sales and exports of sodium cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 transports 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 Conakry 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. The Port of Conakry is located in relatively close proximity to end use destinations in Guinea and the West Africa region. The Port is connected to a transportation system consisting of railways and highways.

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, (2009) 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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 diamond 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 and quantity.

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 certificates which meet 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"?*
Not applicable – vessel transportation is not within the scope of this due diligence.

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.

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

As a member of the IMO and to comply with the IMSBC Code, vessels are required to declare dangerous cargo before arriving/leaving the Port.

The Dispatch Centre organizes ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring.

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).

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

All solid sodium cyanide that transits the Port of Conakry is collected by the relevant carriers as soon as possible after arrival. Express clearances are initiated where possible to minimize the transit period. During periods of transit, containers of solid sodium cyanide are segregated from other containers and that the area is signed alerting the presence of the product and prohibiting smoking, drinking and eating outside set areas in the Port. All personnel, outside those operating top lift forklifts, are warned to keep away from the containers. All signage is provided in French, the national language of the country.

Guinea requires a pre-shipment inspection for all imports into the country. This is implemented at the point of loading of the container and the inspection agency seals the container with their own specific seal in addition to the manufacturers own seal provisions.

The Port of Conakry is a secure area with an on-site security presence. Security watch is compulsory for all ships carrying sodium cyanide. Security at the port are armed and trained to deal with intruders. The Port's security presence is a facet of the Port's ISPS Code protocols.

All cyanide remains within its sealed containers at all times. The area of transit storage is well segregated and in an open area to prevent the build-up of hydrogen cyanide gas.

Only solid sodium cyanide is transited via the Port of Conakry. A previous due diligence assessment indicated that the area in which the containers are located whilst transiting the Port is suitable to effectively contain any spillage of solid sodium cyanide that may occur.

Emergency response is affected by external response agencies which are located close by to the Port. The Port itself has a limited emergency response capability than can assist the external agencies. In an emergency situation, the Port's security presence initiates a lock down of the Port to prevent access to the Port except for authorized emergency services responding to the emergency situation.

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

Guinea member of the IMO Council and complies with the accordance with the IMO DG Code. Although not specifically addressed in the due diligence the Port of Conakry has a basic emergency response by following the IMO DG Code requirements.

The Port of Conakry is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

It should be noted that at the time of this due diligence there was no evidence to show that the Port of Conakry is certified under the Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol) – an extension of the OPRC 90 to include hazardous chemicals.

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 Conakry Port within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Conakry 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 Conakry Port for all future work; rather it is recommended that Chengxin continues to review and monitor Conakry's Port's performance periodically 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.

6.0 REFERENCES

Conakry. Available at: http://port.sol.com.cn/result.asp?id=djkfi; accessed on March 24, 2020.

Port of Conakry. Available at: http://www.sofreight.com/ports/gn/gncon; accessed on March 24, 2020.

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1.

Annual Conakry Port Due Diligence Review Records, August 2, 2019.

Image: https://conakryport.com/wp-content/uploads/2019/07/3.jpg.

Signature Page

Golder Associates Consulting Ltd.

Sijia Liu
EHS Engineer

Mike Woods
Transport Technical Specialist

SL, MW

golder.com

REPORT

Due Diligence for Port of Dakar

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Dakar, Senegal. 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 Dakar's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF DAKAR, SENEGAL 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 6

4.0 CONCLUSION 10

5.0 CLOSING 10

6.0 REFERENCES 10

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Dakar, Senegal, 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 of the Port of Dakar, Senegal, during March 2020. 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 for Port of Dakar, Senegal. The Port of Dakar is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

The scope of this due diligence includes the management, interim storage and emergency response in relation to cyanide transported through the Port of Dakar.

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 Dakar
- 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 DAKAR, SENEGAL

Port of Dakar, established in 1857, is located at North 14 40’ 56” latitude and West 17 26’48” longitude in the State of Colima, in the Republic of Senegal. The port is strategically located at the intersection of the main sea routes serving the West African coast and at the intersection of carrier lines linking Europe to South America,

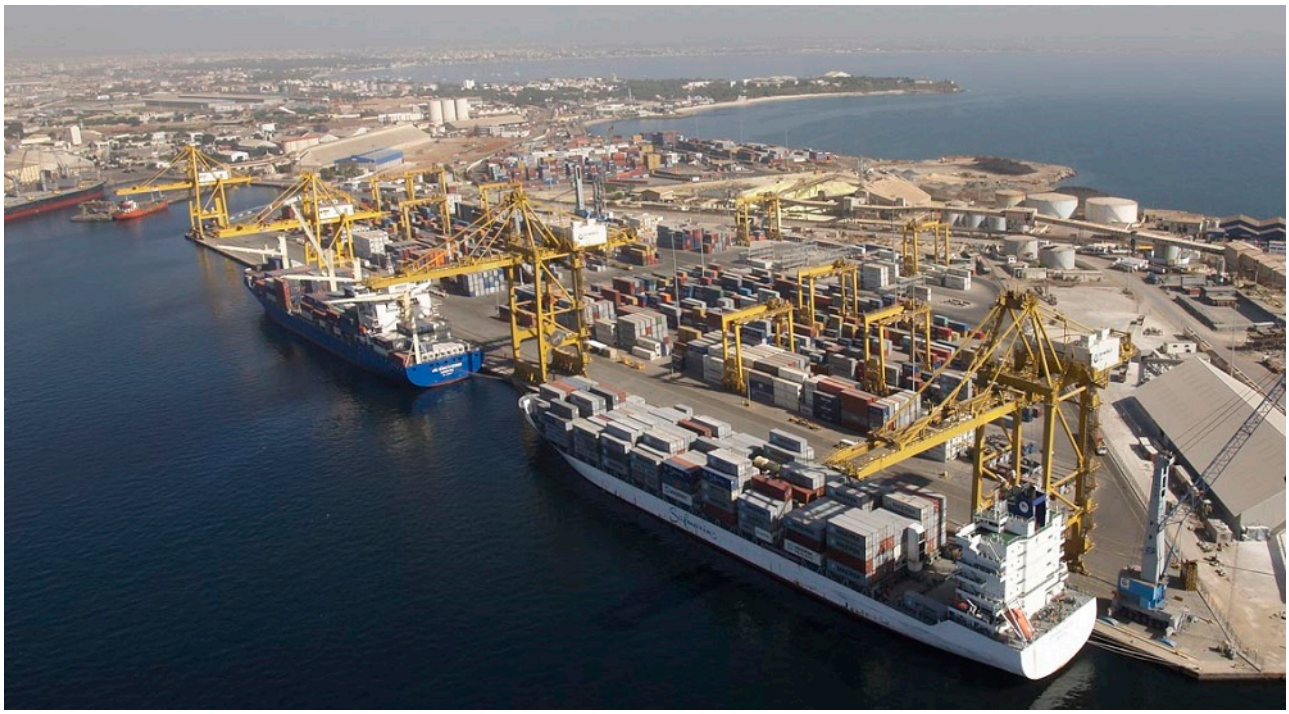
and North America to South Africa. It is an international port of transit and serves as the gateway for Mali thus offering the possibility of additionally serving Niger and Burkina Faso.

The port is divided into two separate trading zones (North and South) separated by a military zone, ship repair shops and a fishing port. The container terminal in the North Zone of the Port of Dakar covers a total area of 24 ha. It has a linear quay of 700 metres in length with three berths ranging from 12 to 13 metres in depth. Modern equipment is used for handling, including 2 platform docks of Panamax Tandem handling, 2 platform gantries of Post Panamax Tandem handling, 10 gantry cranes (RTG), 3 mobile cranes, 2 automatic spreaders, 6 self-locking spreaders, 15 Reach Stackers, 4 forks (Empty Handlers), 32 Tractor and Trailer Parks and 560 connection points for refrigerated containers.

DP World is the operator of the container terminal and it oversees annual traffic of approximately 300 000 twenty-foot equivalent units (TEUs). The port also has separate terminals for bulk goods and hydrocarbons.

Vessels carrying hazardous and/or strong-smelling cargoes must declare to the Harbour Master, at least 48 hours before vessel's arrival, the nature/quantity/packing of these goods, as well as their stowage on board. Same applies for arms and ammunitions.

An ISPS Code Certificate has been obtained for the Port of Dakar by fulfilling the provisions of the ISPS Code Contract. The Country Code for Port of Dakar is SNDAK.



Overview photo of Port of Dakar

(Source: https://www.portdakar.sn/en/nous-decouvrir/projets/container-terminal)

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 theses 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

International sales and exports of sodium cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 transports 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 Port of Dakar is selected on the basis that it is the closest port to the customer that 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.

The port is strategically well placed, located at the most advanced point of the West African coast, and at the intersection of carrier lines linking Europe to South America, and North America to South Africa. It is an international port of transit and serves as the gateway for Mali thus offering the possibility of additionally serving Niger and Burkina Faso.

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, (2009) 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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 diamond 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 and quantity.

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 certificates which meet 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"?*
Not applicable – vessel transportation is not within the scope of this due diligence.

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.

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

The Dispatch Center organizes ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring.

As a member of the IMO and to comply with the IMSBC Code, vessels are required to declare dangerous cargo to the Port Authority before arriving/leaving the port.

Chain of custody documentation is used by shipping companies to prevent the loss of cargo during shipment. This documentation includes the vessel manifest – 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).

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

The Senegal Port Authority states that the Port of Dakar has made all financial and material arrangements to align its facilities and operations with the directives emanating from the International Convention for the Safety of Life at Sea (SOLAS) 1974, convention. Therefore, every ship applying for permission to enter, and every port facility operator working in the Port of Dakar must ensure compliance with the security and safety requirements for ships and port facilities as issued by the IMO.

The Port of Dakar has established:

- A centralized navigation aid at the harbor lookout, equipped with an Automated Identification System (AIS) and functional mark-up structures.
- A surveillance system for the harbor and the water plan using radars, remote monitoring systems and nautical patrols.
- Security measures for access and the port enclosure with the setting up of a multi-purpose operational center equipped with high-tech surveillance equipment.

Additionally, 2016 saw the strengthening of security provisions at Dakar with the establishment of a corps of 450 officers trained in ISPS code standards and the reinforcing of the perimeter and access point security measures.

The Port of Dakar has an integrated Quality, Safety and Environment (QSE) management system, taking into account the environmental, health and safety aspects of the workplace. Thus, in April 2015, the International Maritime Station of Dakar is certified in conformity with the requirements of the references ISO 9001version 2008, ISO 14001 version 2004 and OHSAS 18001 version 2007. Naval assets for maritime and ground surveillance (patrol vehicles, video surveillance at the port facilities) have been put in place. The Port of Dakar aims to have ISO 28000 certification by 2023 and has recently contracted a private enterprise to begin putting in place the required equipment, materials and maintenance protocols to achieve certification.

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

The Port of Dakar is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

It should be noted that at the time of this due diligence there was no evidence to show that the Port of Dakar is certified under the Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol) – an extension of the OPRC 90 to include hazardous chemicals.

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 Port of Dakar within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Port of Dakar'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 Port of Dakar for all future work; rather it is recommended that Chengxin continues to review and monitor Port of Dakar's performance periodically 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.

6.0 REFERENCES

Port of Dakar. Available at: http://www.worldportsource.com/ports/commerce/SEN_Port_of_Dakar_2295.php; accessed on March 24, 2020.

Dakar. Available at: https://www.findaport.com/port-of-dakar; accessed on March 24, 2020.

Port Autonome de Dakar. Available at: https://www.portdakar.sn/en/nous-decouvrir/notre-de-marche-qse; accessed on March 24, 2020.

Dakar. Available at: http://port.sol.com.cn/result.asp?id=hei; accessed on March 24, 2020.

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1.

Annual Dakar Port Due Diligence Review Records, August 2, 2019.

Image: https://www.portdakar.sn/en/nous-decouvrir/projets/container-terminal.

Signature Page

Golder Associates Consulting Ltd.

Sijia Liu
EHS Engineer

Mike Woods
Transport Technical Specialist

SL, MW

golder.com

REPORT

Due Diligence for Dar es Salaam 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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Dar es Salaam, Tanzania. This assessment was conducted by EHS Consultant Chloe Wang 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 regards to the Port of Dar es Salaam's management of solid sodium cyanide product.

This assessment should not be a final acceptance of the Port of Dar es Salaam for future work; rather it is recommended that Hebei continue to review and monitor the Port of Dar es Salaam's performance periodically and implement an adaptive management process.

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF DAR ES SALAAM, TANZANIA 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 10

5.0 CLOSING 10

6.0 REFERENCES 11

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Dar es Salaam, Tanzania, 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 of the Port of Dar es Salaam, Tanzania, during March 2020. This assessment was conducted by EHS Consultant Chloe Wang 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 for Port of Dar es Salaam, Tanzania. The Port of Dar es Salaam is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

The scope of this due diligence includes the management, interim storage and emergency response in relation to cyanide transported through the Port of Dar es Salaam.

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 Dar es Salaam
- 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 DAR ES SALAAM, TANZANIA

The Port of Dar es Salaam is the principle port of Tanzania located on the East Coast of Africa (South 6 81'64"latitude and East 39 30'42"longitude). The Port of Dar es Salaam handles approximately 95% of the Tanzania international freight and serves landlocked countries such as Malawi, Zambia, Democratic Republic of Congo, Burundi, Rwanda and Uganda. The port is strategically placed to serve as a convenient freight linkage

not only to and from East and Central Africa countries but also to middle east, China, Europe, Australia and America.

The Port of Dar es Salaam has a rated capacity of 4.1 million (dwt) dry cargo and 6.0 million (dwt) bulk liquid cargo. The Port has a total quay length of 2600 m with eleven deep-water berths.

The Tanzania Ports Authority (TPA) operates the Port of Dar es Salaam, however all containerised cargo is handled by the Tanzania International Container Terminal Services Ltd (TICTS), which is located in the Port of Dar es Salaam and is the largest container terminal in Tanzania. TICTS are owned by Hutchison Port Holdings. The terminal has four berths totalling 725 m in length with a capacity to handle in excess of 500,000 twenty-foot equivalent units (TEUs) per year which includes many classes of Dangerous Goods cargo.

A Harbour Master oversees the operation of the overall port operations. This includes:

- Management of the Port of Dar es Salaam's protocols for docking for vessels, e.g. use of Pilots; use of tug boats; different weather conditions, tides, currents; safety; and general port operations. This sees to the safe docking and turnaround of the vessels in and out of the port.
- Entry into Port of Dar es Salaam is controlled by the Port's Pilot who understands the Port protocols and any unique issues regarding the approach and docking of a vessel at the Port. The Ship's Captain works in conjunction with the Pilot as he understands his vessel and can implement and assist with the Pilot's instructions.
- The approach of the vessel to the Port of Dar es Salaam will take into any account any channels, special navigation points and as mentioned above the currents, tides and weather.
- Once the vessel is secure alongside the wharf the shipping activities changeover to port activities. The vessels manifest of what containers are required to be unloaded from the vessel, including the manifest for containers for loading are handed over. This manifest will identify hazardous cargos and their UN number and classification, segregation requirements.

The stevedoring company TICTS operate under a long term lease agreement with the port authorities manage the on-shore (wharf) operations at the dedicated container terminal. This is the terminal currently used by the Mediterranean Shipping Company to facilitate the unloading of their vessels. The stevedoring operations include:

- Handling of the containers whether full or empty on and off the vessels; container storage areas for general cargo, port security, control systems for companies and their vehicles collecting and or delivering containers.
- Software programs that control container placement and movement; these software packages identify each individual container placement area in designated stacks. The input information for the placement of containers comes from the vessel's manifest.

Containers of dangerous goods discharged by vessels at the container terminal are moved by TICTS to a dedicated dangerous goods storage area within the port confines for storage until customs clearance has been completed and transport is arranged. Containers of cyanide are segregated from other classes of dangerous goods. This area has minimal traffic flow and is large enough to allow space for appropriate segregation of different classes of dangerous goods.

Overview photo of the Dar es Salaam Port

(Source: https://www.marinetraffic.com/en/ais/details/ports/2730/Tanzania_port:DAR%20ES%20SALAAM)

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 theses 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

International sales and exports of sodium cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 transports 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.

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, (2009) 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:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 diamond 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 and quantity.

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"?*
Chengixn prepares container packing certificates which meet 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.

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

The Dispatch Center organises ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring.

As a member of the IMO and to comply with the IMSBC Code, vessels are required to declare dangerous cargo before arriving/leaving at the port.

Chain of custody documentation is used by shipping companies to prevent the loss of cargo during shipment. This documentation includes the vessel manifest – 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).

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

Cyanide on arrival at Dar es Salaam is placed in a segregated area awaiting relevant governmental clearances. This area, when cyanide is present, is clearly signed providing appropriate warning to all port personnel. Collection of the cargo by the approved carrier is direct from this area. Vehicles collecting cargo from the port environs are subject to port checks to ensure that approvals for collection are in place and that documentation and container details match prior to egress from the port. Additionally, signage is provided prohibiting smoking, consumption of foodstuffs and liquids in the specific area and the prohibition of open sources of ignition.

The Port of Dar es Salaam is accredited under the ISPS Code and is classed as a secure area. The port has a full time security presence which includes armed patrols. Access to and from the container terminal is well controlled and areas used for cyanide storage are subject to an additional security presence. The port's security checks a driver's documentation to ensure approval has been granted for the removal of the container, that the container number physically matches with the documentation and that the seal is intact on the shipping container.

The port has a minimum standard of personnel protective equipment requirement which includes the wearing of relevant safety footwear, clearly visible clothing and protective headwear in specific areas. This personal

protective equipment requirement is suitable for cyanide that remains contained within sealed containers at all times.

All solid cyanide remains at all times within its sealed containers. Containers are in a segregated area which is open to the air to prevent the build-up of hydrogen cyanide gas. The area in which the containers are located is suitable to effectively contain any spillage that may occur.

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

The United Republic of Tanzania has been a Member State of the IMO Council since 1974, it complies with the requirements of the IMO DG Code.

The Port of Dar es Salaam has both fire and ambulance stations on site and that the port was well run and efficient in its emergency operations. Safety and security measures were evident throughout the Port.

Both TICTS and the Tanzania Port Authority state their total commitment to ensuring that all DG containers are handled to ensure that no incidents of any nature occur. In preparation for such incidents, mock dangerous goods exercises are held once every year to test the emergency response procedures, although these are not cyanide specific. A cyanide awareness training course has been conducted by a certified freight company in the past and it is planned to make this an annual occurrence.

The Port of Dar es Salaam is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

The Tanzanian Guidelines for Management of Environmental Emergencies (Section 4.0 Anthropogenic activities and natural sources contributing to environmental emergencies) also provides guidelines and procedures for the preparedness and response to emergency situations involving hazardous materials.

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 Dar es Salaam Port within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Dar es Salaam 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 Dar es Salaam Port for all future work; rather it is recommended that Chengxin continues to review and monitor Dar es Salaam's Port's performance periodically 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.

6.0 REFERENCES

ICMC Due Diligence Assessment for the Port of Dar es Salaam, Tanzania prepared by Golder, dated February 2nd, 2017. Reference No. 1668932-011-L-Rev0, accessed on March 13th, 2020.

Annual Dar es Salaam Port Due Diligence Review Records, August 2, 2019.

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx; accessed on March 13th, 2020.

International Maritime Organisation. Member States. Available at: http://www.imo.org/en/About/Membership/Pages/MemberStates.aspx; accessed March 13th, 2020.

International Tanker Owners Pollution Federation [ITOPF] (2008). Tanzania Country Profile. Available at: http://www.itopf.org/knowledge-resources/countries-territories-regions/countries/tanzania/; accessed on March 13th, 2020.

Tanzania Port Authority (2020). Dar es Salaam Port. Available at: http://www.tanzaniaports.com/index.php/en/ports/ports; accessed on March 13th ,2020.

Tanzania International Container Terminal Services (2019). *TICTS – Company Profile*. Available at: http://ticts.net/about-ticts/; accessed on March 13th, 2020.

Image: https://www.marinetraffic.com/en/ais/details/ports/2730/Tanzania_port:DAR%20ES%20SALAAM

Signature Page

Golder Associates Consulting Ltd.

Chloe Wang
EHS Consultant

Mike Woods
Transport Technical Specialist

CW, MW

golder.com

REPORT

Due Diligence for Tema 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.

Submitted by:

Golder
Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 the Port of Tema, Ghana. This assessment was conducted by EHS Consultant Chloe Wang 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 with regards to the Port of Tema's management of solid cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF TEMA, GHANA 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 11

5.0 CLOSING 11

6.0 REFERENCES 12

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Tema, Ghana, 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 of the Port of Tema, Ghana, during March 2020. This assessment was conducted by EHS Consultant Chloe Wang 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 for Port of Tema, Ghana. The Port of Tema is to be included in its 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 the Port of Tema.

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 Tema
- 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 TEMA, GHANA

The Port of Tema is the largest port in Ghana and located 30 km from Accra, which is located at North 5° 38' latitude and East 0° 01' longitude. The Port handles about 17 million tonnes of cargo annually and receives over 1464 vessel calls per year, including container vessels, general cargo vessels, tankers, Ro-Ro and cruise

vessels. Construction of Tema Port began in 1954 by Sir William Halcrow and partners. By 1958 construction was advanced enough to enable a cargo vessel the “Oti River” to berth. Regular traffic however started after the commissioning in 1962.

The Port of Tema is the main container Port servicing Ghana and its neighbouring landlocked countries. In 2017, the Port began to reach maximum capacity and a USD 1.0 billion investment in infrastructure, equipment and manpower training was initiated. The first phase was inaugurated in June 2019. Completion of Phase II is expected by end of 2020, two years earlier than initially planned.

With a depth of 18 meters, the new entrance channel to the Port is one of the deepest in Africa, allowing the worlds’ biggest vessels to enter both today and in the coming years. The harbour basin provides the space to dredge deeper and build additional wharves if required. It can currently accommodate up to 20 berths (depending on vessel size) with MPS operating on 4 berths. The 7 new Super Post Panamax ship-to-shore cranes are not only some of the largest Ship-to-Shore cranes in the world, but also amongst the most advanced. The Port also operates a fleet of 20 eRTG (Electric Rubber Tyre Gantries) capable of stacking containers 7 wide and 1 over 5 high in the container yards.

Cyanide manufacturers and suppliers have the ability to ship product to the Port from different parts of the world. The Port allows unloading of the shipments for the final road transport to mining operations in Ghana and landlocked countries within the West Africa region.

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

- Management of the Port protocols for docking for vessels, e.g. use of Pilots; use of tug boats; different weather conditions, tides, currents; safety; and general Port operations. This sees to the safe docking and turnaround of the vessels in and out of the Port.
- Entry into Port is controlled by the Port’s harbour master who understands the Port protocols and unique issues regarding the approach and docking of a vessel at the Port. The harbour master has oversight of nautical operations within the Port. This comprises operational tasks related to the safety and efficiency of vessel management within the boundaries of the port. The harbour master’s office allocates berths and coordinates all services necessary to berth and un-berth a vessel. These services include pilotage, towage, mooring and unmooring, and vessel traffic service.
- The Ship’s Captain works in conjunction with the harbour master as he understands his vessel and can implement and assist with the harbour master’s instructions.
- The approach of the vessel to the Port will take into any account any channels, special navigation points and as mentioned above the currents, tides and weather.
- The GPHA manages the handling of dangerous goods through the Port of Tema.

Stevedoring services are provided by twenty-two (22) private stevedoring companies. GPHA controls 25% of all stevedoring. The remaining 75% is performed by the private companies.

The dedicated container terminal is operated by Meridian Port Services (MPS). MPS operations include:

- Handling of the containers whether full or empty on and off the vessels; container storage areas; port security, emergency response, control systems for companies and their vehicles collecting and or delivering containers
- Software programs control container movement in the Port. In the case of the sodium cyanide containers on arrival the Ports, the containers are stacked separately and segregated from other containers. The software also monitors the restricted time allowed for dangerous goods to be handled through the Port and allows the Port to charge penalty rates for goods not cleared and taken from the Port within a defined time.

Ghana is a member of the International Maritime Organization (IMO) Council and is party to the Abuja Memorandum of Understanding, and as such performs its Port State obligations, supervises foreign ships that berth at Ghana ports, and promotes compliance with international conventions among Flag States through Port State Control. GPHA operates an integrated management system in line with requirements of ISO 9001: 2015, ISO 14001: 2015 and OHSAS 18001:2007. GPHA went through and passed an IMS audit in December 2016

Overview photo of the Port of Tema

(Source: https://www.marinetraffic.com/en/ais/details/ports/21965/Ghana_port:TEMA%20ANCH)

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 theses 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

International sales and exports of 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 transports Chengxin product through larger ports with modern facilities and management systems.

The Port of Tema is located in relative close proximity to mining operations in Ghana and landlocked countries within the West Africa region. The Port is serviced by major international shipping companies with the ability to offer scheduled container services and provide the correct manifest documentation to the destination port which provides them with a list of the cargo types and in the case of sodium cyanide and any other hazardous cargo the number and reference of the containers.

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, (2009) 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.

Labels attached to the cyanide containers illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 diamond 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 and quantity.

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 certificates which meet the requirements of Section 5.4.2 of the IMO DG Code.

g) *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.

h) *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

The Port requires advance notice of 72 hours prior to the estimated arrival of vessels. The harbour master has oversight of nautical operations within the Port, including pilotage, towage, mooring and unmooring, and vessel traffic services. Software programs control container movement through the Ports.

Port stevedores receive the vessels manifest on arrival, which includes the containers for unloading and handling by them. This information is then captured in the stevedore's management systems, which assists with the location where each container from the vessel is to be placed after unloading. Transport from the unloading berth to the interim storage facility is controlled by documentary checks detailing the container details and contents. MPS utilises a terminal operating system to manage container movement, vessel discharges and yard allocations to minimise delays. Containers are tracked using differential global positioning systems.

The clearance process at Tema Port comprises:

- Declaration of cargo data

- Customs Document Verification, System Validation, cargo Classification and Valuation, Risk Assessment and quality assurance, payment of duty, cargo verification
- Release by the Shipping Agent
- Delivery by the port and other receipt delivery service providers
- Customs physical examination or scanning of cargo before cargo is allowed to exit the port.

Vessels are required to declare dangerous cargo before arriving/leaving at the port and all dangerous goods need to be properly manifested.

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).

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

The Port of Tema has restricted access and security processes, including biometric identify cards and CCTV. The port has perimeter fencing and terminal entry and exit gates are monitored on 24 hour basis. The harbour master has oversight of nautical operations within the port, including pilotage, towage, mooring and unmooring, and vessel traffic services. Software programs control container movement through the Ports.

The Port of Tema has dedicated storage areas for specialised products including dangerous goods, cyanide containers are segregated and stacked separately. Containers departing the port are checked against documentation for matching container numbers and product detail.

All cyanide transited through the Port of Tema remains contained within its sealed containers at all times. Import of cyanide through the Port of Tema is limited to a specific customer. Solid cyanide is only held at the Port of Tema for a short period to enable completion of specific Ghanaian governmental customs and quarantine clearances.

Whilst at the Port, temporary signage is provided to warn of the presence of solid sodium cyanide and the safety requirements whilst the product is located here, including the a ban on the consumption of food and beverages and open sources of ignition, including smoking, in the specific area and the specific personal protective equipment required in this specific area. The area into which the containers are placed awaiting clearance is well ventilated to prevent the build-up of hydrogen cyanide gas.

The Port has a specialist team in place to ensure that no other containers are located near containers containing cyanide. Importers are penalised substantial charges should any delay in remove of the product occurs.

The Port provides a dedicated area for workers to eat and drink which is well away from the area in which the product is located.

The Port of Tema is accredited under the ISPS Code. This is maintained by the GPHA which reports to the appropriate central Ghana government minister. The port has an on-site security presence which is present at all times and includes a mobile security team. Port security personnel stationed at the access to the port check the authority of drivers accessing the port area.

Collection from the port of containers is via a representative system. Prior to collection, end user representatives (e.g. a freight forwarder) must arrange for timings for collection to occur. Collection is initiated with applicable representative in attendance as a security measure to ensure that only allocated containers are collected.

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

The Port of Tema has emergency response procedures by following the IMDG Code requirements. The Port has an internal emergency response and first aid capabilities that is supported by external sources. Training is provided to personnel in dangerous goods awareness and procedures.

Ghana has a National Oil Spill Contingency Plan (NOSCP) which is periodically updated. The lead agency for dealing with oil spills is the Environment Protection Agency (EPA) of the Ministry of Environment, Science and Technology, which works in conjunction with the Ghana Maritime Authority (GMA). The Chief of the Ghana Navy would provide the on-scene commander to coordinate military involvement in spill reconnaissance and clean-up at sea.

The Maritime Pollution Act was passed into law in 2016 and provides for the prevention, regulation and control of pollution within Ghana's territorial waters and incorporates most of the marine pollution conventions ratified by Ghana.

The Port of Tema is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

It should be noted that at the time of this due diligence there was no evidence to show that the port of Tema is certified under the Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol) – an extension of the OPRC 90 to include hazardous chemicals.

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 Tema Port within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to the Port of Tema management of solid cyanide products and additional management measures by the consigner are not considered necessary.

This assessment should not be a final acceptance of Tema Port for all future work; rather it is recommended that Chengxin continues to review and monitor Tema's Port's performance periodically 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.

6.0 REFERENCES

Ghana Maritime Authority (2020). *Functions*. Available at: https://www.ghanamaritime.org/about_page.php?id=16; accessed March 25th, 2020.

Ghana Maritime Authority (2020). *Maritime Security.* Available at: https://www.ghanamaritime.org/services_page.php?id=25; accessed March 25th, 2020.

Ghana Ports and Harbours Authority (2020). *Ghana Ports Handbook*. Available at: https://ghanaports.gov.gh/page/index/4/ZE4GGQFA/Welcome-to-Port-Of-Tema; accessed on March 24th, 2020.

Ghana Ports and Harbours Authority (2020). *Tema Port Services.* Available at: https://ghanaports.gov.gh/page/index/9/KWVX9CGJ/Services; accessed on March 24th, 2020.

APM Terminals. Meridian Port Services (MPS), Tema. Available at:

https://www.apmterminals.com/en/tema/about/our-terminal; accessed on March 24th, 2020

Annual Tema Port Due Diligence Review Records, August 2, 2019.

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx ; accessed on March 20th, 2020.

International Maritime Organisation. *Member States*. Available at: http://www.imo.org/en/About/Membership/Pages/MemberStates.aspx; accessed on March 20th, 2020.

The Memorandum of Understanding on Port State Control for West and Central African Region. *Members. Available at: http://abujamou.org/index.php?pid=sgdf7dfg5f7fdfw4y;* accessed on March 20th, 2020.

International Tanker Owners Pollution Federation [ITOPF] (2018). Ghana Country Profile. Available at: http://www.itopf.org/knowledge-resources/countries-territories-regions/countries/ghana/; accessed on March 20th, 2020.

Image: https://www.marinetraffic.com/en/ais/details/ports/86/Ghana_port:TEMA; accessed on March 20th, 2020.

Signature Page

Golder Associates Consulting Ltd.

Chloe Wang
EHS Consultant

Mike Woods
Transport Technical Specialist

CW, MW

golder.com

REPORT

Due Diligence for Port of Qingdao

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Qingdao, 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 with regards to the Port of Qingdao's management of solid cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF QINGDAO, CHINA 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 10

5.0 CLOSING 10

6.0 REFERENCES 10

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Qingdao, 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 of the Port of Qingdao, China, during March 2020. 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 for Port of Qingdao, China. The Port of Qingdao is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

The scope of this due diligence includes the management, interim storage and emergency response in relation to cyanide transported through the Port of Qingdao.

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 Qingdao
- 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 QINGDAO, CHINA

The Port of Qingdao, which was constructed in 1892. The Port of Qingdao is located at North 35 99’ 8’’ latitude and East 120 34’ 01’’ longitude. It is situated between the Bohai Rim port region and the Yangtze River Delta port region and is an important hub for international trade and transportation in the West Pacific, maintaining

shipping routes to over 450 ports in over 130 countries and regions around the world. Port of Qingdao has achieved 20 million TEUs in container throughput in 2019

The Port of Qingdao is composed of four primary port areas:

- Dagang Port Area –it is operated by Dagang Company, part of the Port of Qingdao Group, six terminals with 26 berths operated by the Dagang Company, primarily for handling home-trading of containers, import of bulk grains, import and export of steel materials, agricultural products, and passenger services.
- Qianwan Port Area – eleven terminals with 36 berths operated through the Qiangang Branch (joint venture between Qingdao Qianwan Container Terminal Company Ltd. and West United), primarily for containers, metal ore, coal, pulp and other general cargo. Qiangang Port has 3 most advanced unloading machine, 25 portal cranes, and 6 stackers.
- Huangdao Oil Port Area – five terminals with 11 berths operated through the joint venture Qingdao Shihua, primarily for liquid bulk cargo. The capacity for liquid transportation is 30 million tons/year, with an annual container loading and unloading capacity of about 200,000 TEUs.
- Qingdao New Port Area (Dongjiakou Port Area) has six terminals with 26 berths operated by the joint venture Huaneng Qingdao, primarily for handling metal ore, coal, crude oil and other general cargo. 37 of the world's leading large-scale operating equipment and matching mobile machinery. Dongjiakou Port is equipped with 4 of the world's most advanced unloading machines, each with a rated discharge rate of 3500 tons per hour. Supporting more than 21,000 meters of belt flow through all the yard. Discharge rate is 10500 tons/hour.

Port of Qingdao is primarily operated by Qingdao Port Group Co., Ltd. providing port-related services ranging from basic port services, such as stevedoring and storage services, to ancillary and extended services such as logistics services and financing-related services. The Port of Qingdao also serves as a container transhipment hub for ports in the Bohai Rim region, along the Yangtze River, as well as in Japan and South Korea.

In addition to stevedoring services, the Port of Qingdao provides assorted port services for containers, including short-term storage, vanning and de-vanning, and container repair services. Specialised storage services for containers with non-standard goods, such as frozen goods and hazardous substances are also offered at the Port of Qingdao.

China is a Category A member of the International Maritime Organization (IMO) Council and a signatory to the Tokyo MoU, and as such performs its Port State obligations, supervises foreign ships in Chinese waters, and promotes compliance with international conventions among Flag States through Port State Control (PSC).

ISPS Code Certificate has been obtained for the Port of Qingdao by full filling the provisions of the ISPS Code Contract. The Country Code for Port of Qingdao is CNQDG.

Overview photo of the Port of Qingdao

(Source: http://image.baidu.com/search/index?tn=baiduimage&ps=1&ct=201326592&lm=-1&cl=2&nc=1&ie=utf-8&word=%E9%9D%92%E5%B2%9B%E6%B8%AF)

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 theses 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

International sales and exports of 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. The Port of Qingdao is located in relative close proximity to the cyanide manufacturers, is connected to a well-developed intermodal transportation system consisting of railways, highways, waterways and pipelines,

and is serviced by shipping companies that have routes to over 450 ports in 130 countries, including routes to South America.

The Port of Qingdao 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.

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, (2009) 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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 diamond 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 and quantity.

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"?*
Chengixn prepares container packing certificates which meet the requirements of Section 5.4.2 of the IMO DG Code.

g) *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 – transport by ship is not within the scope of this due diligence.

h) *Does the ship carrying the cyanide have emergency response information, as required under Section 5.4.3.2 of the DG Code?*
Not applicable – transport by ship is not within the scope of this due diligence.

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

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

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

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

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

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

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

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

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

China is a Category A member of the IMO Council and complies with the accordance with the IMO DG Code.

Emergency response plans are in place at the Port of Qingdao. The Logistics Branch of Qingdao Port International is responsible for developing and implementing emergency response plans including the Production Safety Emergency Response Plan and Dangerous Goods Yards Safety Emergency Response. The Safety Production Supervision and Administration Bureau of Qingdao Municipality reviews emergency response plans to ensure they are in compliance with statutory requirements. According to the 2015 Annual Report of Qingdao Port International, 142 specialized training classes on dangerous goods for working staff and 26 emergency drills have been carried out in 2015.

Qianwan Port Area conducts emergency response drills to maintain the preparedness capabilities and quick response times of Emergency Response Personnel in the event of a Dangerous Goods Leakage situation.

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

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

This assessment should not be a final acceptance of Port of Qingdao for all future work; rather it is recommended that Chengxin continues to review and monitor Port of Qingdao's performance periodically 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.

6.0 REFERENCES

The world's 10 biggest ports. Available at: https://www.ship-technology.com/features/feature-the-worlds-10-biggest-ports/; accessed on March 16, 2020.

Qingdao Port Introduction. Available at: https://www.b2bers.com/guide/trans/port/QINGDAO.html; accessed on March 16, 2020.

Port of Qingdao. Available at: https://www.ufsoo.com/port/qingdao%20pt/; accessed on March 16, 2020.

Port of Qingdao. Available at: http://www.worldportsource.com/ports/commerce/CHN_Port_of_Qingdao_408.php; accessed on March 16, 2020.

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1.

Annual Qingdao Port Due Diligence Review Records, August 2, 2019.

Image: http://image.baidu.com/search/index?tn=baiduimage&ps=1&ct=201326592&lm=-1&cl=2&nc=1&ie=utf-8&word=%E9%9D%92%E5%B2%9B%E6%B8%AF

Signature Page

Golder Associates Consulting Ltd.

Sijia Liu
EHS Engineer

Mike Woods
Transport Technical Specialist

SL, MW

golder.com

REPORT

Due Diligence for Port of Shanghai

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.

Submitted by:

Golder
Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 the Port of Shanghai, 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. 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 with regards to the Port of Shanghai's management of solid cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF SHANGHAI, CHINA 6

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 10

5.0 CLOSING 11

6.0 REFERENCES 11

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Shanghai, 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 of the Port of Shanghai, China, during March 2020. 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 the Port of Shanghai, China. The Port of Shanghai is to be included in its 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 Port of Shanghai.

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 Shanghai
- 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 SHANGHAI, CHINA

The Port of Shanghai, was opened for international trade and became a treaty port under the Treaty of Nanjing in 1842. The Port of Shanghai is located at North 31 40' 57" latitude and East 121 54'47" longitude. It is situated in the middle of the 18,000km-long Chinese coastline and includes a deep seaport and a river port. It is the meeting point in the T-shaped waterway network composed by the east-west Yangtse River and the south-north coastline and is also China's largest comprehensive port and one of the country's most important gateways for foreign trade. The port handled 43.6 million twenty-foot equivalent unit (TEU) containers and 542.46 million tonnes of cargo in 2019.

The Port of Shanghai is composed of multiple port areas which are designated as follows:

- The shore of Huangpu River: such as Wusongkou, Zhanghuabang, Jungong Road, Gongqing, Baoshan and Longwu port areas etc.
- The south shore of Yangtze River: such as Baoshan, Luojing, and Waigaoqiao port areas etc.
- Hangzhou Bay: Yangshan Port Area.

Shanghai International Port Group (SIPG) is responsible for operating and managing the public terminals in the port. SIPG handles domestic, national and international cargo transportation. It is also responsible for maintaining, manufacturing and leasing containers, as well as building, managing and operating port facilities. In addition to stevedoring services, the Port of Shanghai provides assorted port services for containers, including short-term storage, vanning and de-vanning and transfer services. Specialised storage services for containers with non-standard goods, such as frozen goods and hazardous substances are also offered at the Port of Shanghai.

Wusongkou, Waigaoqiao and Yangshan are the three main container port areas of the Port of Shanghai. The container terminals have over 13km-long quay length, 43 berths and 156 quay cranes.

The Wusongkou area is managed by Shanghai Container Terminals Company (SCT), a joint venture of Hutchison Port Holdings Limited (HPH) and SIPG. Zhanghuabang Terminal, Jungong Road Terminal and Baoshan Terminal are the three container terminals operated by SCT. The facilities provided by the company include container cleaning and management, storage and transport, inland goods storage, and electronic data interchange.

The Waigaoqiao area is operated by Shanghai Pudong International Container Terminals, SIPG Zhendong Container Terminal Branch, Shanghai East Container Terminal Company and Shanghai Mingdong Container Terminals Limited. Shanghai Pudong operates in 500,000m² and has 147 container handling equipment and machinery, 36 RTG, 10 quay cranes, 73 container trucks and 11 forklifts. Shanghai Mingdong facilitates container handling, storage and transfer. Other works carried out by the company include maintaining, cleaning and stripping of containers.

Shanghai Shengdong International Container Terminal Company is responsible for operating Yangshan Deepwater Port. The port's activities are carried out by 34 container quay cranes and 120 RTG. The terminal can handle containerized cargo of 2.2 million TEU. The port is also facilitated by non-container terminals located on the Huangpu River. These terminals act as distribution centers for the remote areas of the port and contribute the financial development of Yangtze River Valley.

ISPS Code Certificate has been obtained for the Port of Shanghai by full filling the provisions of the ISPS Code Contract. The Country Code for Port of Shanghai is CNSHA. China is a Category A member of the International Maritime Organization (IMO) Council and a signatory to the Tokyo MoU, and as such performs its Port State obligations, supervises foreign ships in Chinese waters, and promotes compliance with international conventions among Flag States through Port State Control (PSC)

Overview photo of the Port of Shanghai

(Source: https://www.ship-technology.com/projects/portofshnaghai/)

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 theses 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

International sales and exports of 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 transports 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 Port of Shanghai 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.

The Port of Shanghai is situated in the middle of the Chinese coastline. Internally, waterways, road, and railway transportation networks are very convenient for the Port of Shanghai. The transport networks stretch to the Yangtze River Basin and even the whole country. Externally, the Port is close to the global routes. It is serviced by shipping companies that have routes to over 200 countries.

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, (2009) 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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 and quantity.

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 certificates which meet the requirements of Section 5.4.2 of the IMO DG Code.

g) *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.

h) *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

Port stevedores receive the vessels manifest on arrival which includes the containers for unloading and handling by them. This information is then captured in the stevedore's management systems which assists with the location where each container from the vessel is to be placed after unloading. Transport from the unloading berth to the interim storage facility is controlled by documentary checks detailing the container details and the containers contents.

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

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

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

Shipping containers containing composite intermediate bulk containers (IBCs) are placarded in accordance with the IMO DG Code labelling requirements displaying relevant warning and safety information including the

environmentally hazardous substance label. Signage prohibiting smoking, open flames and eating and drinking are in place, as well as PPE requirements.

The Port of Shanghai has a dedicated dangerous goods transit area for dangerous goods awaiting loading to arriving vessels. Appropriate signage, as outline in 1.5, is displayed in this area. The port operations for dangerous goods are registered and licensed by the government. The port has in place minimum requirements for personal protective equipment that includes the requirements for suitable protective footwear, safety helmet where required and readily visible clothing.

The port is listed on the International Ship and Port Facility Security (ISPS) site as accredited. An electronic card access system is in place to enable only authorised access to the Port area. Containers departing the port are checked against documentation for matching container numbers and product detail.

All cyanide transited through the Port of Shanghai remains within its sealed containers at all times and are placed in an area that is well ventilated to prevent the build-up of hydrogen cyanide gas. The area where the containers are placed is considered suitable to contain effectively any spillage that may happen.

The Port has implemented measures for the management of dangerous goods, including:

- Inspecting the licenses of operators and equipment
- Inspecting and replenishing the emergency supplies
- Inspecting and maintaining the fire protection equipment, CCTV, and fence for dangerous goods
- Training staff involving dangerous goods on emergency equipment using, and
- Conducting emergency drills

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

China is a Category A member of the IMO Council and complies with the accordance with the IMO DG Code.

The Port of Shanghai has a basic emergency response by following the IMO DG requirements. Additionally, the Port of Shanghai has facility specific emergency response plans indicating that the port has an internal emergency response capability that can provide basic response to incidents involving dangerous goods.

Dangerous goods are stored in the Yangshan Port area. Yangshan Port has an established emergency management committee to manage emergency related issues, such as establishing emergency response plans, conducting regular emergency drills, assessing and controlling the risks associated with handling dangerous goods and preparing emergency supplies. The Safety Production Supervision and Administration Bureau of Shanghai Municipality reviews emergency response plans to ensure they are in compliance with statutory requirements.

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

This assessment should not be a final acceptance of Port of Shanghai for all future work; rather it is recommended that Chengxin continues to review and monitor Port of Shanghai's performance periodically 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.

6.0 REFERENCES

Port of Shanghai. Available at: https://www.ship-technology.com/projects/portofshnaghai/; accessed on March 13, 2020.

The Port of Shanghai. Available at: https://www.shiphub.co/port-of-shanghai/; accessed on March 13, 2020.

SIPG. Available at: http://www.portshanghai.com.cn/jtwbs/webpages/services.jsp; accessed on March 13, 2020.

Shanghai Port Introduction. Available at: https://www.b2bers.com/guide/trans/port/SHANGHAI.html; accessed on March 13, 2020.

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1.

Annual Shanghai Port Due Diligence Review Records, August 2, 2019.

Image: https://www.ship-technology.com/projects/portofshnaghai/

Signature Page

Golder Associates Consulting Ltd.

Sijia Liu
EHS Engineer

Mike Woods
Transport Technical Specialist

SL, MW

golder.com

REPORT

Due Diligence for Port of Tianjin

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Tianjin, 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 Port of Tianjin's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF TIANJIN, CHINA 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 6

4.0 CONCLUSION 10

5.0 CLOSING 10

6.0 REFERENCES 11

1.0 INTRODUCTION

This letter provides the results of a due diligence assessment of the Port of Tianjin, 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 Port of Tianjin, China, during March 2020. 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 Tianjin, China. The Port of Tianjin is to be included in its 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 the Port of Tianjin.

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 Tianjin
- 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 TIANJIN, CHINA

Port of Tianjin, which was constructed in 1952 is located at North 39 00’ 34” latitude and East 117 27’37” longitude. It is the largest manmade seaport in mainland China and forms and important trade port between northern China and north-east, central and western Asia. Located 160 km from Beijing and 60 km from the city centre of Tianjin, it covers a land area of 131 square km, and land and sea area of 336 square km.

The Port of Tianjin is composed of four primary port areas:

- Tianjin North Port – operation of containers and general cargoes
- Tianjin South Port – dry bulk and liquid bulk cargoes
- Tianjin East Port – container terminal operation and modern services of international shipping, logistics, trade, off-shore finance and cruise terminal
- Haihe River Port Area – cargo vessels below 5000 tons

There are 173 different vessel berths in Port of Tianjin. In 2013, the cargo throughput of Port of Tianjin exceeded 500 million tonnes and container throughput exceeded 13 million twenty-foot equivalent units (TEU). By 2018, the cargo throughput of Port of Tianjin exceeded 450 million tonnes and container volume will surpass 20 million TEUs in 2020.

China is a Category A member of the International Maritime Organization (IMO) Council and a signatory to the Tokyo MoU, and as such strictly performs its Port State obligations, supervises foreign ships in Chinese waters and promotes compliance with international conventions among Flag States through Port State Control (PSC).

Tianjin Port (Group) Co Ltd (TPG) is the main body of Port of Tianjin and owns the majority of the Port of Tianjin's main terminals. The Port of Tianjin's terminals are operated by autonomous companies that are mostly either fully owned by, or are joint ventures with, Tianjin Port Holdings Company (TPC) or Tianjin Port Development Company (TPD).

The TPG's Operations Department coordinates the operation of the Port and must be informed of all ship movements and major operations. The production schedule (ship movement plan) is arranged by the TPG Dispatch Control Center in coordination with the wharf operators, the MSA, and the pilot center. The Dispatch Center organises ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring.

ISPS Code Certificate has been obtained for the Port of Tianjin by full filling the provisions of the ISPS Code Contract. The Country Code for Port of Tianjin is CNTXG.

Overview photo of Port of Tianjin

(Source: http://www.ptacn.com/detailcontentAction.do?searchFlag=1&typeId=45)

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 theses 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 Port of Tianjin is located in relative close proximity to the cyanide manufacturers, is connected to a well-developed intermodal transportation system consisting of railways, highways, waterways and pipelines, and is serviced by shipping companies that have routes to over 600 ports in 180 countries, including routes to South America.

The Port of Tianjin 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.

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, (2009) 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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 and quantity.

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"?*

Chengixn prepares container packing certificates which meet 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"?*
Not applicable – vessel transportation is not within the scope of this due diligence.

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.

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

The TPG's Operations Department coordinates the operation of the Port and must be informed of all ship movements and major operations. The production schedule (ship movement plan) is arranged by the TPG Dispatch Control Center in coordination with the wharf operators, the MSA, and the pilot center. The Dispatch Center organizes ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring.

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

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

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

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

The Port operations for dangerous goods are registered and licensed by the Government. Containers departing the Port are checked against documentation for matching container numbers and product detail. All sodium cyanide transited through the Port of Tianjin remains within its sealed containers at all times.

The Tianjin Maritime Safety Bureau is the local agency of the MSA and is responsible for enforcing regulations on the MSA's behalf at the Port of Tianjin, this includes conducting inspections on containers holding dangerous goods.

The Accident Investigation Report relating to the August 12, 2015 fire and explosions at the Port of Tianjin, recommended, amongst other things, changes to port security, and stricter regulation and monitoring of hazardous chemicals. It was also noted that hazardous chemicals had previously been stored in areas not designated to hold such materials.

The Regulation of Safety Management of Hazardous Chemical Enterprises in Tianjin City was put into practice on September 6, 2015, these regulations cover the detailed requirements of production, storage, use, operation and transportation of dangerous chemicals. The regulations now point out that dangerous chemicals shall be stored in specialized warehouses or storage rooms, that stored dangerous goods must be classified and segregated within the storage area and that maximum allowable storage limits for individual chemicals must not be exceeded.

The Port developed and commissioned an autonomous air quality monitoring system in December 2015. Captured monitoring data is now publicly available via an official website of the Municipal Environmental Protection Bureau.

After the incident on 12 August 2015, the government of Tianjin City has implemented several emergency environmental response activities, these are:

a) Gridding monitoring, conducted for atmosphere and soil samples to confirm the contamination level and spread,
b) Treatment by hydrogen peroxide for areas affected by the leaked cyanide,
c) Blockage of stormwater and sewage discharge points to avoid cyanide-contaminated water being discharged to the sea or other water bodies,
d) Development of an emergency wastewater treatment facility (WWTF) built for the cyanide-contaminated water generated in the incident, and
e) Continuity monitoring regimes for stormwater, wastewater, wastewater treatment plant outlets and surrounding water bodies.

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

China is a Category A member of the IMO Council and complies with the requirements of the IMO DG Code.

The Tianjin Emergency Response Plan for Hazardous Chemical Incidents at Sea was established by the City of Tianjin, this plan covers emergency response procedures for the incidents of fire, explosion and leakage during the transportation of hazardous chemicals at sea. The Plan details the procedures for evacuation, maintaining vigilance, rescue methods, traffic and fire control, leakage containment, monitoring and pollutant clean-up in the event of an emergency.

The Tianjin Maritime Safety Bureau is the local agency of the MSA and must be contacted in all incidents of hazardous substance spills.

The Tianjin Maritime Search and Rescue Center is responsible for coordinating all search and rescue activities inside the Port. The Port of Tianjin PSB Fire Services Detachment holds the fire-fighting equipment and is responsible for fire prevention duties for both the land and water areas of the Port of Tianjin. The Port of Tianjin Hospital is the primary provider of emergency medical care and resources.

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 Port of Tianjin within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Port of Tianjin'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 Port of Tianjin for all future work; rather it is recommended that Chengxin continues to review and monitor T Port of Tianjin's performance periodically 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.

6.0 REFERENCES

Port Overview. Available at: http://www.ptacn.com/detailcontentAction.do?searchFlag=1&typeId=45; accessed on March 17, 2020.

Port of Tianjin. Available at: https://baike.baidu.com/item/天津港/1377597?fr=aladdin; accessed on March 17, 2020.

Tianjin Port. Available at: https://www.vesseltracker.com/en/Port/tianjin/Dashboard.html; accessed on March 17, 2020.

Tianjin Port- Port Introduction. Available at: https://www.leadtochina.com/travel/cruise-port/tianjin-port-port-introduction-5?page=2; accessed on March 17, 2020.

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1.

Annual Tianjin Port Due Diligence Review Records, August 2, 2019.

Image: http://www.ptacn.com/detailcontentAction.do?searchFlag=1&typeId=45.

Signature Page

Golder Associates Consulting Ltd.

Sijia Liu
EHS Engineer

Mike Woods
Transport Technical Specialist

SL, MW

golder.com

REPORT

Due Diligence for Jakarta 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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 the Port of Jakarta, Indonesia. This assessment was conducted by EHS Consultant Chloe Wang 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 with regards to the Port of Jakarta's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF JAKARTA, INDONESIA 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 6

4.0 CONCLUSION 10

5.0 CLOSING 10

6.0 REFERENCES 10

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Jakarta, 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 of the Port of Jakarta, Indonesia, during March 2020. This assessment was conducted by EHS Consultant Chloe Wang 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 of the Port of Jakarta, Indonesia. The Port of Jakarta is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

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

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 Jakarta
- 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 THE PORT OF JAKARTA, INDONESIA

The Port of Jakarta (also known as Tanjung Priok) (South 6 6’20” latitude, and East106 51’38” longitude)is situated on the north-west coast of the island of Java at the mouth of the Ciliwung River, about 116 nautical miles east south-east of the Port of Panjang on the island of Sumatra.

The Port of Jakarta is the busiest port in Indonesia. It handles more than 30% of non-oil-and-gas cargo in the country, and around 50% of goods into and out of Indonesia. The comprehensive intermodal transport and modern technology facilities at the port allow it to connect to all cities in Indonesia.

The Port of Jakarta contains twenty terminals devoted to general, dry bulk, liquid bulk and containerised cargoes. Specialised terminals handle oil, chemicals, scrap and passengers. The Port of Jakarta has 76 berths and a quay area totalling 16,800 m^2. The Port of Jakarta also contains storage areas of 661,800 m^2 with capacity to store over 401,400t of cargo.

Overview photo of the Port of Jakarta

(Source: https://www.marinetraffic.com/en/ais/details/ports/1613/Indonesia_port:JAKARTA)

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 theses 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

International sales and exports of cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 transports Chengxin's 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 Port of Jakarta 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.

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, (2009) 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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 diamond pictograms showing 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 and quantity.

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"?*
Chengixn prepares container packing certificates which meet 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"?*
Not Applicable – Vessel transportation is not within the scope of this due diligence.

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.

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

The port operator is aware when sodium containers are due to arrive at the port. The stevedores receive the vessel's manifest along with other shipping information prior to arrival. This includes dangerous goods unloading and handling information, this information is then captured in the terminal operator's advanced information management system allowing for the complete traceability of cargoes within the port.

Indonesia has national regulations in place for the minimum requirements for radio-communication and ship tracking in Indonesian waters and port facilities. The Port of Jakarta is required to comply with these regulations.

All transhipping operations are carried out in a dedicated dangerous goods area by trained personnel. The transhipping operations are monitored by the port's CCTV system and the containers are tracked to record the positioning of the containers within the dangerous goods storage areas.

Following final clearance, the consignment is placed on road transport vehicles for the inland transportation leg to the relevant end destination. These road transport vehicles are owned by the ICMI accredited transport company providing the road transport service.

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

In general, port and vessel security are managed through the International Ship and Port Facility Security Code (ISPS Code). The ISPS Code is a comprehensive set of measures to enhance security of ships and port facilities. All vessels calling at Indonesian Ports must meet ISPS requirements.

The purpose of the ISPS Code is to provide a standardised, consistent framework for evaluating risk, enabling Governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures. The ISPS Code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case.

The ISPS Code is implemented through chapter XI-2 Special measures to enhance maritime security in the International Convention for the Safety of Life at Sea (SOLAS). Since the ISPS Code is part of SOLAS, compliance is mandatory for all Contracting Governments to SOLAS. Indonesia is both a member of the IMO and a signatory of SOLAS.

The Port of Jakarta operates under a suite of national regulations which the Port of Jakarta is required to comply with. In particular, for the handling and storage of dangerous goods, these regulations ensure that shipments of cyanide are authorised for discharge from the vessel, handled by appropriately trained personnel, stored in designated and secured areas, segregated according to dangerous goods classes and removed from the port in a timely manner.

The port has restricted access and the Dispatch Centre organises ship movements, tracks pilot operations, and supervises terminal operations via real-time CCTV monitoring. All sodium cyanide transited through the Port of Jakarta remains sealed within containers.

Security requirements are also addressed under national regulations and the Port of Jakarta satisfies the conditions set out for security personnel and check points, monitoring and surveillance systems.

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

Indonesia has been a Member State of the IMO Council since 1961, it complies with the requirements of the IMO DG Code. The Indonesian Government also has official 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. 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 NGOs. The National Team through its Command and Control Centre would also carry out the response, using personnel, equipment and materials belonging to its member organisations in the vicinity.

The Director General of Sea Transportation (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 which could be utilised for Hazardous and Noxious Substances (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 the Port of Jakarta within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to the Port of Jakarta'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 Port of Jakarta for all future work; rather it is recommended that Chengxin continues to review and monitor Jakarta's Port's performance periodically 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.

6.0 REFERENCES

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1

Annual Jakarta Port Due Diligence Review Records, August 2, 2019.

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx; accessed on March 17th, 2020.

International Maritime Organisation. Member States. Available at: http://www.imo.org/en/About/Membership/Pages/MemberStates.aspx; accessed March 17th, 2020.

International Maritime Organisation [IMO] (2016). Pollution Preparedness and Response. Available at: http://www.imo.org/en/OurWork/Environment/PollutionResponse/Pages/Default.aspx; accessed March 17th, 2020.

A general view of the Port of Jakarta. Available at: https://www.indonesiaport.co.id/tanjung-priok-port; accessed on March 17th, 2020.

Capacities and Services. Available at: http://www.worldportsource.com/ports/commerce/IDN_Port_of_Jakarta_266.php; accessed on March 17th, 2020.

International Tanker Owners Pollution Federation [ITOPF] (2015). Indonesia Country Profile. Available at: http://www.itopf.org/knowledge-resources/countries-territories-regions/countries/indonesia/; accessed on March 17th, 2020.

Image: https://www.marinetraffic.com/en/ais/details/ports/1613/Indonesia_port:JAKARTA; March 17th, 2020.

Signature Page

Golder Associates Consulting Ltd.

Chloe Wang
EHS Consultant

Mike Woods
Transport Technical Specialist

CW, MW

golder.com

REPORT

Due Diligence for Jeddah 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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 the Port of Jeddah, Saudi Arabia. This assessment was conducted by EHS Consultant Chloe Wang and reviewed by 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. 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 with regards to the Port of Jeddah's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF JEDDAH, SAUDI ARABIA 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 10

5.0 CLOSING 11

6.0 REFERENCES 11

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Jeddah, Saudi Arabia, 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 of the Port of Jeddah, Saudi Arabia, during March 2020. This assessment was conducted by EHS Consultant Chloe Wang 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 for the Port of Jeddah, Saudi Arabia. The Port of Jeddah is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

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

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 Jeddah
- 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 JEDDAH, SAUDI ARABIA

The Port of Jeddah was constructed in 647 AD and is located on the Red Sea coast (North 21° 27' 31" latitude and East 39° 9' 51" longitude). The Port of Jeddah is the Kingdom of Saudi Arabia’s principal port serving the

holy cities of Makkah and Madinah and it is in the middle of the major east - west international shipping route. The port handles 59% of the Kingdom's imports by sea.

The Kingdom established the Seaport Authority in September 1976, at which point it started expanding the Port of Jeddah from 10 operational berths to the current 58 berths.

The port provides handling services for all types of cargo by means of a highly specialized cargo terminals, distributed as follows:

- container terminals
- bulk grain terminals
- bulk edible oil terminal
- ro-ro cargo terminals
- general cargo terminals
- livestock terminals
- chilled and frozen cargo terminals
- passenger terminal.

The port of Jeddah is a congestion free harbour that occupies a 10.5 km2 footprint, it has 58 deep water quays and an overall quay length of 11.2 km. Maximum draft reaches 16 m, which can accommodate the latest generation of large container vessels (with a capacity of 6500 TEUs).

Overview photo of the Port of Jeddah

(Source: https://www.marinetraffic.com/en/ais/details/ports/807/Saudi_Arabia_port:JEDDAH)

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 theses 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

International sales and exports of cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 transports Chengxin's 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 Port of Jeddah 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.

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, (2009) 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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 diamond pictogram showing 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 and quantity.

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"?*
Chengixn prepares container packing certificates which meet 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"?*
Not Applicable – Vessel transportation is not within the scope of this due diligence.

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.

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

The Seaport Authority is aware when cyanide containers are due to arrive at the port. As per changes to the Port of Jeddah's operational procedures (12 November 2015), port management states that discharge of any hazardous chemicals from vessels in the port will not be allowed unless prior approval is granted by Customs. The required regulatory forms must be obtained from the consignee and submitted to the Seaport Authority along with hazardous cargo manifests before the arrival of the ship.

Any chemical cargo on board a vessel that has not complied with this pre-clearance procedure will be denied discharge and the cargo will be returned on the same ship.

As a member of the IMO and to comply with the International Maritime Solid Bulk Cargoes (IMSBC) Code, vessels are required to declare dangerous cargo before arriving/leaving at the port.

Chain of custody documentation is used by shipping companies to prevent the loss of cargo during shipment. This documentation includes the vessel manifest – 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).

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

The Saudi Arabia Port Authority states that every ship applying for a permission to enter a port and every port facility operator within a port must ensure compliance with the security requirements for ships and port facilities of the International Convention for the Safety of Life at Sea (SOLAS), 1974, issued by the IMO.

Every authority controlling a port under these regulations is encouraged to pursue the objectives of the IMO and International Labour Organization (ILO) Code of Practice on Security in Ports, 2004, offering guidance to governments, employers, workers and other stakeholders to reduce the risk to ports from the threat posed by unlawful acts.

With regards to port security, the Port Authority states no person shall access any port area as defined by its boundaries, via water, air or land unless the person obtained a permit from the Port Authority for accessing a port. A Port Authority may have signs, fences or barriers arranged to ensure the security and safety of persons, ships and property, the environmental protection or the management of the infrastructure and the services of Jeddah Port. Every person in Jeddah Port shall obey the instructions on signs posted and respect the functions of fences and barriers established by the port authority.

The Port of Jeddah has dedicated storage areas for specialised products including dangerous goods. The Seaport Authority has a process to ensure dangerous goods are registered and licensed by the government.

Containers departing the port are checked against documentation for matching container numbers and product detail. All sodium cyanide transited through the Port of Jeddah remains sealed within containers.

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

Saudi Arabia has been a member State of the IMO Council since 1969, it complies with the requirements of the IMO DG Code.

The Presidency of Meteorology and Environment (PME) of the Saudi Arabian Ministry of Defence and Aviation is responsible for all environmental matters in the Kingdom, including planning for the conservation of natural marine and coastal resources. The PME also ensures that reporting, surveillance and response capabilities are available to deal with spills in Saudi Arabian waters. These are outlined in a National Contingency Plan for Combating Marine Pollution by Oil and Other Harmful Substances in Emergencies.

This Plan establishes two Area Operations Committees and two Environmental Protection Coordinating Committees, one of each for the Red Sea coast and for the Gulf Coast. These committees are chaired by PME with representation from interested authorities including: The Ministry of Interior (Coast Guard and Civil Defence Authorities); Ministry of Defence and Aviation; Ministry of Petroleum and Mineral Affairs; Ministry of Industry and Electricity; Ministry of Municipality and Rural Resources; the Saudi Ports Authority; the General Organisation for Distillation of Saline Water; the Royal Navy and the Royal Commission for Jubail and Yanbu. Amongst their responsibilities is the preparation of area plans, including local plans for marine and coastal oil facilities, identification of necessary manpower and equipment, and training staff in response activities.

PME stores equipment at the Port of Jeddah for responding to spills from shipping accidents. The Saudi Arabia Port Authority holds sizeable amounts of equipment in all Saudi Ports on the Red Sea and Arabian Gulf.

The Port of Jeddah is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

It should be noted that at the time of this due diligence there was no evidence to show that the Port of Jeddah is certified under the Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol) – an extension of the OPRC 90 to include hazardous chemicals.

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

This assessment should not be a final acceptance of the Port of Jeddah for all future work; rather it is recommended that Chengxin continues to review and monitor the Port of Jeddah's performance periodically 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.

6.0 REFERENCES

Compass Forwarding Co. Inc. New hazardous materials regulations for shipments to Saudi Arabia Available at: http://www.compassfwd.com/news/new-hazardous-materials-regulations-for-shipments-to-saudi-arabia/; accessed on March 19th, 2020

Find a Port – the online port information specialists. General Information for Saudi Arabia. Available at: http://www.findaport.com/country/saudi-arabia; accessed on March 19th, 2020

World Port Source [WPS]. Available at: http://www.worldportsource.com/ports/review/SAU_Jeddah_Islamic_Port_281.php; accessed on March 19th, 2020

Top 10: Logistics Middle East's global port challenge. Available at: https://www.logisticsmiddleeast.com/article-7149-top-10-logistics-middle-easts-global-port-challenge; accessed on March 19th, 2020

Saudi's top shipping ports. Available at: https://www.arabianbusiness.com/saudi-s-top-shipping-ports--362304.html; accessed on March 19th, 2020

Golder Associates (2015). International Cyanide Management Code Production Verification Audit. Hebei Chengxin Co Ltd Production Facility Summary Audit Report. Report number- 1537090

Annual Jeddah Port Due Diligence Review Records, August 2, 2019.

ICMC Due Diligence Assessment for the Port of Jeddah, Saudi Arabia prepared by Golder, dated February 2nd, 2017. Reference No. 1668932-014-L-Rev0, accessed on March 19th, 2020

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx ;accessed on March 19th 2020.

International Maritime Organisation [IMO]. Member States. Available at: http://www.imo.org/en/About/Membership/Pages/MemberStates.aspx; accessed on March 23rd 2020.

International Maritime Organisation [IMO]. Pollution Preparedness and Response. Available at: http://www.imo.org/en/OurWork/Environment/PollutionResponse/Pages/Default.aspx; accessed on March 23rd 2020.

International Tanker Owners Pollution Federation [ITOPF] (2009). Saudi Arabia Country Profile. Available at: http://www.itopf.org/knowledge-resources/countries-territories-regions/countries/saudi-arabia/; accessed on March 23rd 2020

OOCL (2017). Operational Restrictions – Dangerous Goods Requirements. Available at: http://www.oocl.com/middleeast/eng/localinformation/operationalrestrictions/saudiarabia/Pages/default.aspx?site=middleeast&lang=eng; accessed on March 23rd 2020

Image: https://www.marinetraffic.com/en/ais/details/ports/807/Saudi_Arabia_port:JEDDAH; accessed on March 23rd 2020

Signature Page

Golder Associates Consulting Ltd.

Chloe Wang
EHS Consultant

Mike Woods
Transport Technical Specialist

CW, MW

golder.com

REPORT

Due Diligence for Vostochny 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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Vostochny, Russia. This assessment was conducted by EHS Consultant Chloe Wang 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. 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 with regards to the Port of Vostochny's management of solid cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF VOSTOCHNY, RUSSIA 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 6

4.0 CONCLUSION 10

5.0 CLOSING 10

6.0 REFERENCES 10

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Vostochny, Russia, 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 of the Port of Vostochny, Russia, during March 2020. This assessment was conducted by EHS Consultant Chloe Wang 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 for Port of Vostochny, Russia. The Port of Vostochny is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

The scope of this due diligence includes the management, interim storage and emergency response in relation to cyanide transported through Port of Vostochny.

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 Vostochny
- 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 VOSTOCHNY, RUSSIA

The Port of Vostochny was constructed in 1974.The Port of Vostochny is located at North 42°44'36" latitude and East 133° 4' 38" longitude. The Port is situated in the South Primorsky region in the gulf of Nakhodka, Vrangel Bay. Vostochny is a natural deep-water and year-round ice-free port on Russia’s Pacific Coast, on the Sea of Japan.

The Vostochnaya Stevedoring Company (VSC) is the largest container terminal by capacity in the Russian Far East, with an annual throughput capacity of 550 000 TEUs. Located at the eastern end of the Trans- Siberian Railway, VSC offers a full range of stevedoring, cargo forwarding and warehouse services, including the assembly and dispatch of container block trains with the use of its own stock of railway platforms. The facility also handles Ro/Ro vessels and offers storage and servicing of refrigerated containers.

The Terminal has four berths at 13.5 metres depth and a total quay length of 1284 metres, the Port area covers 72 hectares with 110 reefer plugs and 269 rail flatcar capacity in three rail storage areas. The Universal handling complex of Vostochny Port is equipped with machinery made by leading Japanese, European and Russian manufacturers. A specialised machinery fleet consisting of 8 quay cranes, 17 straddle carriers, 12 terminal trucks, and 18 loaders is available for use.

Overview photo of the Port of Vostochny

(Source: https://www.marinetraffic.com/en/ais/details/ports/2242/Russia_port:VOSTOCHNYY)

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 theses 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

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 transports 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 Port is selected on the basis that it is the closest port to the customer and that it meets all 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, (2009) 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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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"?*
Chengixn prepares container packing certificates which meet the requirements of Section 5.4.2 of the IMO DG Code.

g) *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.

h) *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

The Russian Federal Agency for Marine and River Transport develops and implements policies and regulations governing the carriage of dangerous goods and other goods by ships in accordance with relative national and international requirements. This includes supervising the safety of ships carrying dangerous goods, processing declarations made by ships carrying dangerous goods, providing accreditation services for personnel involved in the handling of dangerous goods and inspection of containers holding dangerous goods.

As a member of the IMO and to comply with the IMSBC Code, vessels are required to declare dangerous cargo to the Vostochny Stevedores before arriving/leaving at the Port.

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

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

In general, Port and vessel security are managed through the International Ship and Port Facility Security Code (ISPS Code). The ISPS Code is a comprehensive set of measures to enhance security of ships and port facilities. All vessels calling at Russian Ports must meet ISPS requirements.

The purpose of the ISPS Code is to provide a standardised, consistent framework for evaluating risk, enabling Governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures. The ISPS Code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case.

The ISPS Code is implemented through chapter XI-2 Special measures to enhance maritime security in the International Convention for the Safety of Life at Sea (SOLAS). Since the ISPS Code is part of SOLAS, compliance is mandatory for all Contracting Governments to SOLAS. Russia is both a member of the IMO and a signatory of SOLAS.

The Port of Vostochny operates under a suite of International and National regulations that ensures its compliance with regards to the handling and storage of dangerous goods. The Port of has dedicated storage areas for specialised products including dangerous goods and operations for dangerous goods are registered and licensed by the government. Containers departing the port are checked against documentation for matching container numbers and product detail.

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

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

Russia has been a member State of the IMO Council since 1958, it complies with the requirements of the IMO DG Code.

According to requirements of Russian legislation, in 2008 the Port of Vostochny approved and put into operation a plan on the Prevention and Liquidation of Emergency Oil and Oil Products Leaks in order to enable readiness, prompt reaction and organisation of works in the Port of Vostochny region. In order to manage emergency leaks of oil, oil products, and other hazardous chemicals in the water areas of the seaports of Vostochny and Nakhodka, an off-duty emergency response and rescue team was also created in Vostochny.

In accordance with this plan, the emergency response and rescue team members of the Port of Vostochny regularly take professional development courses that help them to maintain operational readiness and to develop their professional skills. The Port undertakes regular emergency response exercises, although these are not cyanide specific.

The Port of Vostochny is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

It should be noted that at the time of this due diligence there was no evidence to show that the Port of Vostochny is certified under the Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol) – an extension of the OPRC 90 to include hazardous chemicals.

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 Port of Vostochny within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Port of Vostochny management of solid cyanide products and additional management measures by the consigner are not considered necessary.

This assessment should not be a final acceptance of Port of Vostochny for all future work; rather it is recommended that Chengxin continues to review and monitor Port of Vostochny's performance periodically 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.

6.0 REFERENCES

ICMC Due Diligence Assessment for the Port of Vostochny, Russia prepared by Golder, dated February 2nd, 2017. Reference No. 1668932-015-L-Rev0

APM Terminals (2020). Russian and Baltic Operations, Vostochny- About Us. Available at: https://www.apmterminals.com/en/vostochny/about/our-terminal; accessed on March 26th, 2020

Federal Agency of Marine and River Transport [RF Ministry of Transport] (n.d.). Laws and Regulations. Available at: http://www.morflot.ru/dokumentyi/normativno_pravovoe_regulirovanie.html; accessed on March 26th, 2020

Federal State Unitary Enterprise [FSUE]. Environmental Protection during Current Economic Activities, Subsection 5. Available at: http://www.rosmorport.com/services/ecology/; accessed on March 26th, 2020

Annual Vostochny Port Due Diligence Review Records, August 2, 2019.

International Dangerous Goods and Container Association [IDGCA]. Laws and Regulatory Acts. Available at: http://www.idgca.org/lawintere.html; accessed on March 26th, 2020

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx; accessed on March 25th, 2020

International Maritime Organisation [IMO]. Member States. Available at: http://www.imo.org/en/About/Membership/Pages/MemberStates.aspx; accessed on March 25th, 2020

International Maritime Organisation [IMO]. Pollution Preparedness and Response. Available at: http://www.imo.org/en/OurWork/Environment/PollutionResponse/Pages/Default.aspx; accessed on March 25th, 2020

Independent Survey Company (2002-2020). Russian Register of Dangerous Goods Legislation. Available at: http://www.rusregister.com/dangerous_goodse.html; accessed on March 25th, 2020

International Tanker Owners Pollution Federation [ITOPF] (2013). Russia Country Profile. Available at: http://www.itopf.org/knowledge-resources/countries-territories-regions/countries/russian-federation/; accessed on March 25th, 2020

Port Management Company (2015). Vostochny Port- General Information. Available at: http://www.vostport.ru/en/company/info/; accessed on March 25th, 2020

United Nations (2010). Economic Commission for Europe [ECE] Committee on Inland Transport – European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) – Volume 1.

Image: https://www.marinetraffic.com/en/ais/details/ports/2242/Russia_port:VOSTOCHNYY; accessed on March 25th, 2020

Signature Page

Golder Associates Consulting Ltd.

Chloe Wang
EHS Consultant

Mike Woods
Transport Technical Specialist

CW, MW

golder.com

REPORT

Due Diligence for Port of Deseado

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.

Submitted by:

Golder
Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Deseado, Argentina. 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 Deseado's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF DESEADO, ARGENTINA 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 10

5.0 CLOSING 10

6.0 REFERENCES 10

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Deseado, Argentina, 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 of the Port of Deseado, Argentina, during March 2020. 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 for Port of Deseado, Argentina. The Port of Deseado is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

The scope of this due diligence includes the management, interim storage and emergency response in relation to cyanide transported through the Port of Deseado.

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 Deseado
- 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 DESEADO, ARGENTINA

Port of Deseado, which was established in 1780, is located on the southern Patagonia coast of Argentina in the capital (Puerto Deseado) of the Santa Cruz province. It is situated on the estuary at the mouth of the Deseado River and is a multi-purpose port facility handling fish, container and general cargo.

The port has four operational berthing fronts and an auxiliary dock. The four operational fronts are divided into six sites.

Overview of port operations:

- Port protocols exist for docking of vessels (e.g. use of Pilots, use of tugboats, management of different weather conditions, tides, currents and safety and general port operations). This sees to the safe docking and turnaround of the vessels in and out of the port.
- Entry into port is controlled by the port's Pilot who understands the port protocols and any unique issues regarding the approach and docking of a vessel at the port. The ship's Captain works in conjunction with the Pilot as he understands his vessel and can implement and assist with the Pilot's instructions.
- The approach of the vessel to the ports will take into any account any channels, special navigation points and as mentioned above the currents, tides and weather.
- Once a vessel is secure alongside the wharf the shipping activities changeover to port activities. The vessels manifest of what containers are required to be unloaded from the vessel, including the manifest for containers for loading are handed over. This manifest will identify hazardous cargos and their UN number and classification and segregation requirements.

Stevedoring is undertaken by third-party contractors. Stevedoring operations include:

- Handling of the containers whether full or empty on and off the vessels; container storage areas for general cargo, port security, control systems for companies and their vehicles collecting and or delivering containers.
- Software programs that control container placement and movement; these software packages identify each individual container placement area in designated stacks. The input information for the placement of containers comes from the vessel's manifest.

International Ship and Port Facility Security (ISPS) Code Certificate has been obtained for the Port of Deseado by fulfilling the provisions of the ISPS Code Contract. The Country Code for Port of Deseado is ARPUD.

Overview photo of the Port of Deseado

(Source: https://www.vesseltracker.com/en/Port/puertodeseado/Dashboard.html)

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 theses 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

International sales and exports of sodium cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 transports 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 Port of Deseado is selected on the basis that it is the closest port to the customer that 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.

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, (2009) 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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 diamond 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 and quantity.

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 certificates which meet the requirements of Section 5.4.2 of the IMO DG Code.

g) *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.

h) *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, Puerto Angamos has not been put into use for cyanide transportation by Chengxin.

As a member of the IMO and to comply with the IMSBC Code, vessels are required to declare dangerous cargo before arriving/leaving the Port.

The Dispatch Centre organizes ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring.

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).

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

In general, port and vessel security are managed through the ISPS Code which is a comprehensive set of measures to enhance security of ships and port facilities.

The purpose of the ISPS Code is to provide a standardized, consistent framework for evaluating risk, enabling Governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures. The ISPS Code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case.

The port of Puerto Deseado operates under a suite of International and National regulations that ensures its compliance with regards to the handling and storage of dangerous goods. PNA Regulations No.9/97 Transport by vessels of dangerous goods, safety standards for transport by charcoal vessels and No.3/96 Standards for the approval of packaging and packaging containing dangerous goods outline the requirements for ports.

Cyanide transited through the port of Deseado is temporary and remains on site for less than a day. This is a management measure to minimize potential for accidental releases during storage. All sodium cyanide transited through the port of Deseado remains contained within its sealed containers at all times preventing contact with water and other incompatible materials.

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

Argentina has been a member State of the IMO Council since 1953, it complies with the requirements of the IMDG Code.

The PNA is the competent authority (specifically the Directorate for Environmental Protection) and administers the National Contingency Plan (NCP) for dealing with pollution by oil and other noxious substances in marine and freshwater environments. The PNA consists of two branches; one section deals with policy and implementing the international Conventions; the other has an operational role and is responsible for planning and responding to pollution incidents. This department has 19 Rescue, Firefighting and Environmental Protection stations located in Argentina's principal ports.

The port of Puerto Deseado is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

The PNA, with the support of private contractors, manages the response to and monitoring of a Hazardous and Noxious Substances (HNS) incident and some equipment is readily available (such as PPE, respirators, pumps, power packs and air monitoring equipment). The PNA is currently engaged in a programme of training and exercises in preparation for spills of both oil and HNS.

PNA Regulation No.05-11 Obligatory Training Standards for Land Personnel Linked to Maritime, Fluvial and Hazardous Goods Shipping ensures minimum standards of preparedness and response are maintained.

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 Port of Deseado within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Port of Deseado'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 Port of Deseado for all future work; rather it is recommended that Chengxin continues to review and monitor Port of Deseado's performance periodically 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.

6.0 REFERENCES

Puerto Deseado. Available at: http://port.sol.com.cn/result.asp?id=heaki; accessed on March 26, 2020.

Puerto Deseado. Available at: http://www.e-puerto.com/; accessed on March 26, 2020.

Port of Deseado (Argentina). Available at: https://www.searates.com/port/deseado_ar.htm; accessed on March 26, 2020.

Port of Deseado. Available at: http://www.worldportsource.com/ports/ARG_Port_of_Puerto_Deseado_1293.php; accessed on March 26, 2020.

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1.

Annual Deseado Port Due Diligence Review Records, August 2, 2019.

Image: https://www.vesseltracker.com/en/Port/puertodeseado/Dashboard.html.

Signature Page

Golder Associates Consulting Ltd.

Sijia Liu
EHS Engineer

Mike Woods
Transport Technical Specialist

SL, MW

golder.com

REPORT

Due Diligence for Port of Guaymas

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Guaymas, Mexico. 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. 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 Guaymas's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF GUAYMAS, MEXICO 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 10

5.0 CLOSING 10

6.0 REFERENCES 10

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Guaymas, Mexico, 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 of the Port of Guaymas, Mexico, during March 2020. 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 of the Port of Guaymas, Mexico. The Port of Guaymas is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

The scope of this due diligence includes the management, interim storage and emergency response in relation to cyanide transported through the Port of Guaymas.

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 Guaymas
- 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 GUAYMAS, MEXICO

The Port of Guaymas (North 27 55’ 13” latitude and West 110 52’ 35” longitude), which was established in 1859, is situated in in the Gulf of California in the southwestern area of the State of Sonora, Mexico. It is about 400 km south of the border with the United States.

The Port of Guaymas covers 83.7 hectares of land and 65.4 hectares of water. The Port of Guaymas has a diverse infrastructure that allows the safe navigation of large-scale vessels, with an access channel, docking and 6 berthing positions in 2 bands: the south band with 360 m and the east band with 900 m. The berthing positions are frequently maintained and dredged in order to keep them in optimal conditions. Most of the land area is developed, containing cargo terminals and operating facilities. The Administración Portuaria Integral (API) de Guaymas, S.A. de C. V. is the port authority for the Port of Guaymas.

In 2019, the volume of cargo handled in the port of Guaymas amounted to 7.3 million metric tons. The major cargoes included containers, mineral bulk, agricultural bulk, general cargo, and fluids. Its shipyards also contribute to the Port of Guaymas activity, handling commercial vessels, passenger ships, yachts, and barges.

Containerized cargoes included general cargo, specialized machinery, furniture, computer and electrical parts, audio and medical equipment, and refrigerated cargoes and perishables like fish and wheat. Mineral bulk cargoes include copper concentrate, cement, magnetite, gypsum, barite, fertilizer, and molybdenum. Major agricultural bulk cargoes include wheat, soy, corn, safflower, sugar, vegetables, and livestock. General cargoes include wood and steel products, rods, pipes, and roll-on/roll-off cargoes. Fluid cargoes are petroleum, diesel, sulfuric acid, ammonia, and fish oil.

In May 2006 the Port of Guaymas obtained its re-certification in ISO 9001:2000 and the certification of the new version ISO 14001:2004. Port of Guaymas in June 2004 was certified in the International Code for the Protection of Ships and Port Facilities (PBIP Code), offering its customers a security protection service during their stay at the port. On January 14, 2014, the new version ISO 9001:2008 was certified. As well as the re-certification of ISO 14001:2004 granted by the British Standards Institution (BSI).

International Ship and Port Facility Security Code (ISPS Code) Certificate has been obtained for the Port of Guaymas by fulfilling the provisions of the ISPS Code Contract. The Country Code for Port of Guaymas is MXGYM.

1	Instalación de Contenedores
2	Instalación de Apasco
3	Instalación Concentrados
4	Instalación Agrícola
5	Área Multipropósitos
6	Área Multimodal
7	Terminal Pemex
8	Fluidos
9	Carga General
10	Instalación Mittal Steel
11	Instalación Granel Mineral
12	Instalación Fertilizante
13	Instalación Mexicana de Cobre
14	Instalación Fluidos
15	Terminal Cemex
16	Instalación Astillero
17	Terminal Cruceros
18	Área de desarrollo de 6ha

Overview photo of the Port of Guaymas

(Source: https://www.puertodeguaymas.com.mx/inicio)

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 theses 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

International sales and exports of cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 transports of Chengxin's 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 Port of Guaymas is selected on the basis that it is the closest port to the customer that 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.

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, (2009) 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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 diamond 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 and quantity.

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 certificates which meet the requirements of Section 5.4.2 of the IMO DG Code.

g) *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.

h) *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 Guaymas has not been used for the transportation of cyanide products by Chengxin.

As a member of the IMO and to comply with the IMSBC Code, vessels are required to declare dangerous cargo before arriving/leaving the Port.

Chain of custody documentation is used by shipping companies to prevent the loss of cargo during shipment. This documentation includes the vessel manifest, 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).

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

The port of Guaymas must adhere to the requirements of Official *Mexican Standard NOM-010-SCT2/2009, Compatibility and segregation provisions for the Storage and transportation of hazardous substances, materials and waste* and *NOM-023-SCT4-1995 Conditions for the management and Storage of dangerous goods in ports, terminals and sea units*.

These standards state that ports, terminals and offshore units must establish areas for management, storage and adequate segregation of dangerous goods in bulk or packed form from other cargo. There is a compatibility and segregation table for dangerous substances, materials and waste. These storage areas must have the appropriate infrastructure, facilities and signage on display in accordance with the inherent risks of the products.

Available services applied to Port of Guaymas are:

- Accesses, entrances, perimeter fences, anchorages, maneuver areas and berthing.

- Facilities for cargo, storage areas and load handling equipment.

- System of electrical distribution networks, telecommunications and computer networks.

- Vessels serving the port (tugs)

- Surveillance equipment and protection system (automated CCTV systems)

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

As a Member State of the IMO Council and complies with the accordance with the IMO DG Code. Although not specifically addressed in the due diligence, the Port of Guaymas has a basic emergency response by following the IMO DG Code requirements.

The Mexican Government has national standards in place for the transportation, handling and storage of hazardous substances which applies to all ports, terminals and offshore facilities where dangerous goods may be stored.

Mexican Standard *NOM-005-SCT2/1994, Emergency Information for the Transportation of hazardous substances, materials and waste* and *NOM-023-SCT4-1995, Conditions for the management and Storage of dangerous goods in ports, terminals and sea units* both contain provisions for ensuring preparedness in the event of an emergency situation. Essentially these standards require that the port administration form and maintain (via training) an emergency response team, ensure emergency response equipment is available and well maintained and have in place appropriate emergency incident notification and reporting mechanisms.

Additionally, Mexico is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90), which states are party to OPRC 90 protocol are required to establish a national system for responding to oil and hazardous/noxious substances (HNS) 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.

The Navy's Marine Environment Protection Division is the competent authority and administers the National Contingency Plan (NCP) for dealing with pollution by oil and other noxious substances in marine and freshwater environments.

The Navy, with the support of private contractors, manages the response to and monitoring of a Hazardous and Noxious Substances (HNS) incident and some equipment is readily available (such as PPE, respirators, pumps, power packs and air monitoring equipment).

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 Port of Guaymas within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Port of Guaymas'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 Port of Guaymas for all future work; rather it is recommended that Chengxin continues to review and monitor Guaymas's Port's performance periodically 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.

6.0 REFERENCES

ITOPF. Available at: http://www.itopf.org/knowledge-resources/countries-territories-regions/countries/mexico/; accessed on March 27, 2020.

Reglas de Operación del Puerto de Guaymas. Available at: https://www.puertodeguaymas.com.mx/marketing_/api/reglasdeoperacion.pdf; accessed on March 27, 2020.

Certificaciones. Available at: https://www.puertodeguaymas.com.mx/certificaciones; accessed on March 27, 2020.

Puerto de Guaymas. Available at: http://www.worldportsource.com/ports/portCall/MEX_Puerto_de_Guaymas_262.php; accessed on March 27, 2020.

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1.

Annual Guaymas Port Due Diligence Review Records, August 2, 2019.

Image: https://www.puertodeguaymas.com.mx/inicio.

Signature Page

Golder Associates Consulting Ltd.

Sijia Liu
EHS Engineer

Mike Woods
Transport Technical Specialist

SL, MW

golder.com

REPORT

Due Diligence for Port of Puerto Angamos

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Puerto Angamos, Chile. 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. 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 with regard to the Port of Puerto Angamos's management of solid sodium cyanide product.

This assessment should not be a final acceptance of the Port of Puerto Angamos for future work; rather it is recommended that Chengxin continues to review and monitor the Port of Puerto Angamos performance periodically and implement an adaptive management process.

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF PUERTO ANGAMOS, CHILE 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 10

5.0 CLOSING 10

6.0 REFERENCES 11

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Puerto Angamos, Chile, 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 of the Port of Puerto Angamos, Chile, during March 2020. 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 for Port of Puerto Angamos, Chile. The Port of Puerto Angamos is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

The scope of this due diligence includes the management, interim storage and emergency response in relation to cyanide transported through the Port of Puerto Angamos.

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 Puerto Angamos
- 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 PUERTO ANGAMOS, CHILE

The Port of Puerto Angamos was established in 1999. It is located in the heart of the mining region of Chile, in the commune of Mejillones approximately 1400 km from Santiago and only 65 km from Antofagasta.

The port is situated close to the most important copper district in the world, where there are several worlds-renown mining operations such as Chuquicamata, Escondida, Spence, Radomiro Tomic, El Abra and El Tesoro,

among others. Angamos has fast access by train and truck connecting the main mining operations of Chile, Argentina and Bolivia, with the port without the need to cross through densely populated areas.

The port has a multi-purpose, mono-operated terminal with four berths, maximum draft is 13.7 meters and there is capacity to receive ships of up to 155 thousand tonnes of displacement and 366 meters in length. Extensive storage capacity exists on site for containers, general/special cargo and bulk goods, as well as good interconnectivity options for transhipment via rail or road.

The port has 6 mobile harbour cranes with a lifting capacity of 100 tons, 12 reach stacker cranes for full containers, 5 top-lifter cranes for empty containers, 33 container trucks and 36 forklift trucks.

The Bay of Mejillones offers natural protection that provides exceptional conditions for most of the year against the tides coming from the south of the country. Meanwhile, its deep waters ensure availability to larger vessels and the ability to work safely.

In Chile, port governance is influenced by a wide number of stakeholders – more than 30 organisations deal with the regulation of the port system. The main entities likely to generate or influence port policies include five ministries, these being: The Ministry of Transport and Telecommunication, The Ministry of Public Works, The Ministry of Defence, The Ministry of Finance and The Ministry of National Assets.

Overview of port operations:

- Port protocols exist for docking of vessels (e.g. use of Pilots, use of tugboats, management of different weather conditions, tides, currents and safety and general port operations). This sees to the safe docking and turnaround of the vessels in and out of the port.
- Entry into port is controlled by the port's Pilot who understands the port protocols and any unique issues regarding the approach and docking of a vessel at the port. The Ship's Captain works in conjunction with the Pilot as he understands his vessel and can implement and assist with the Pilot's instructions.
- The approach of the vessel to the ports will take into any account any channels, special navigation points and as mentioned above the currents, tides and weather.
- Once a vessel is secure alongside the wharf the shipping activities changeover to port activities. The vessels manifest of what containers are required to be unloaded from the vessel, including the manifest for containers for loading are handed over. This manifest will identify hazardous cargos and their UN number and classification and segregation requirements.

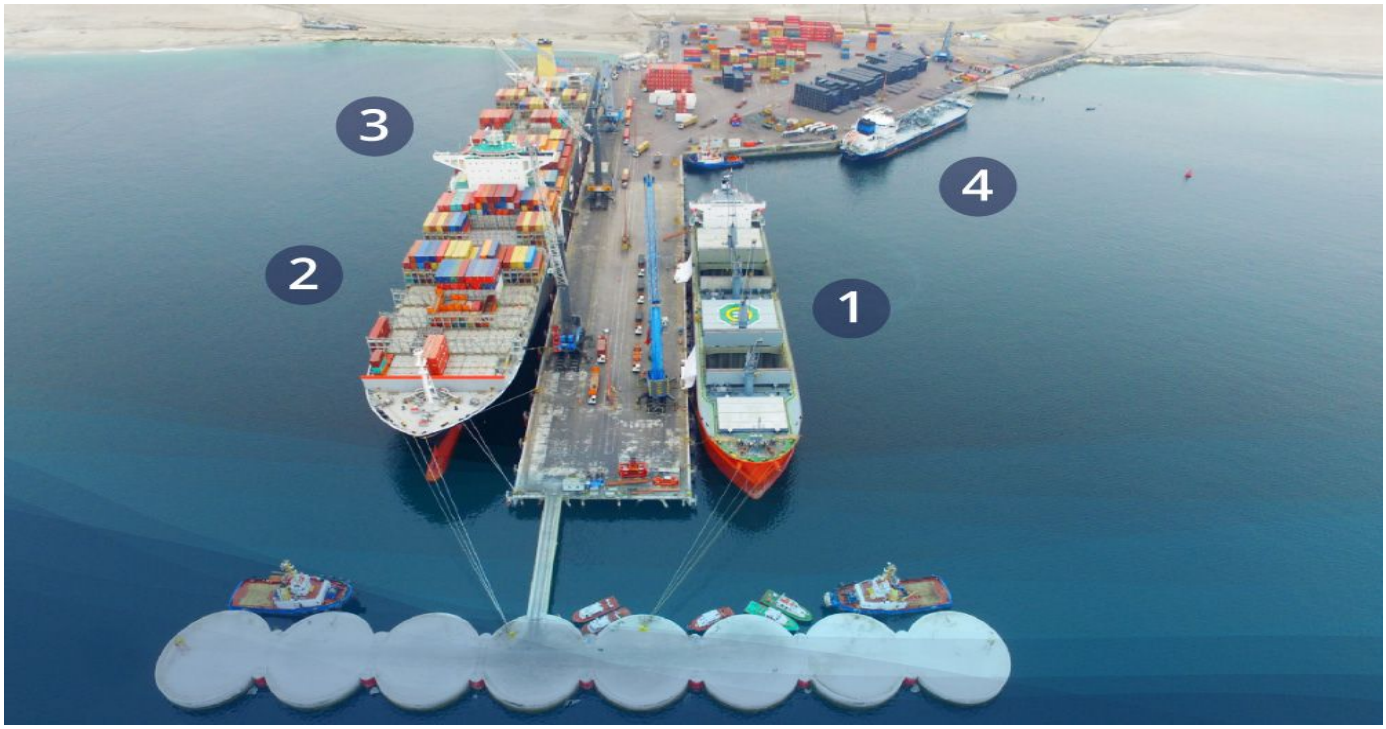
Third party stevedores manage the onshore (wharf) operations at the dedicated container terminal.

Stevedoring operations include:

- Handling of the containers whether full or empty on and off the vessels; container storage areas for general cargo, port security, control systems for companies and their vehicles collecting and or delivering containers.
- Software programs that control container placement and movement; these software packages identify each individual container placement area in designated stacks. The input information for the placement of containers comes from the vessel's manifest.

Containers of dangerous goods discharged by vessels at the terminal are currently placed directly onto onward forms of ICMI accredited transportation and removed from the port area.

ISPS Code Certificate has been obtained for the Port of Puerto Angamos by fulfilling the provisions of the ISPS Code Contract. The Country Code for Port of Puerto Angamos is CLANG.



Overview photo of the Port of Puerto Angamos

(Source: https://www.puertoangamos.cl/en/port-infrastructure-and-equipment/)

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 theses 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

International sales and exports of 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 transports 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 Port of Puerto Angamos 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.

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, (2009) 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.

Chile is both an IMO Member State (1972) and SOLAS Signatory Nation (1980), thereby requiring the port of Punta Arenas to adhere to the international regulations for the transportation and handling of dangerous goods as set out in the IMDG Code (Parts 4, 5 and 7) and SOLAS Convention ((1974) Chapter 7).

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 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 and quantity.

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 certificates which meet the requirements of Section 5.4.2 of the IMO DG Code.

g) *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 – shipping activities not within the scope of this due diligence.

h) *Does the ship carrying the cyanide have emergency response information, as required under Section 5.4.3.2 of the DG Code?*
Not applicable – shipping activities 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, The Port of Puerto Angamos had not been used for cyanide transportation by Chengxin.

The Dispatch Centre organizes ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring.

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 Material Safety Data Sheets (MSDS).

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

In general, port and vessel security are managed through the International Ship and Port Facility Security Code (ISPS Code). The ISPS Code is a comprehensive set of measures to enhance security of ships and port facilities.

The purpose of the ISPS Code is to provide a standardized, consistent framework for evaluating risk, enabling Governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures. The ISPS Code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case.

The Port of Puerto Angamos aims to have dangerous cargo placed directly onto a trailer and removed from the facility via an ICMI certified transporter, and under escort of the Port Authority. However, when this cannot occur, the port has a dedicated storage area for specialized products including dangerous goods; cyanide containers are segregated and stacked separately according the provisions of the Code and all sodium cyanide remains sealed within its container at all times preventing contact with water and other incompatible materials.

In 2013, Port of Puerto Angamos reaffirmed its commitment to safety, security, protection of the Environment and the occupational health of its workers through obtaining the certification of the ISPS code, and international standards ISO 9001, 14001 and OHSAS 18001.

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

The Port of Puerto Angamos is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

Responsibility for marine pollution rests with the Department for Territorial Waters and Merchant Marine (DGTMMM), a branch of the Chilean Navy. Responsibility is delegated to 16 Maritime governing regions and to the 57 Captains of the Port located at the main ports. The Chilean National Contingency Plan embodies five Regional Contingency Plans covering the entire length of the Chilean coastline. Each region has a Coordination Centre.

The responsibility for Hazardous and Noxious Substance (HNS) response would fall to the DGTMMM and would follow the same procedures as oil spill response. A national contingency plan for HNS incidents is currently being drafted by the authorities. Some private port facilities already have approved contingency plans for HNS on a local and regional scale. Available oil spill response equipment would also be used for HNS 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 Port of Puerto Angamos within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Port of Puerto Angamos's management of solid cyanide products and additional management measures by the consigner are not considered necessary.

This assessment should not be a final acceptance of Port of Puerto Angamos for all future work; rather it is recommended that Chengxin continues to review and monitor Port of Puerto Angamos's Port's performance periodically 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.

6.0 REFERENCES

Puerto Angamos. Available at: https://www.puertoangamos.cl/en/port-infrastructure-and-equipment/; accessed on March 26, 2020.

Puerto Angamos. Available at: port.yunfei89.com/country43/clang.html; accessed on March 26, 2020.

Puerto Angamos. Available at: http://www.sofreight.com/ports/cl/clang; accessed on March 26, 2020.

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1.

Annual Puerto Angamos Port Due Diligence Review Records, August 2, 2019.

Image: https://www.puertoangamos.cl/en/port-infrastructure-and-equipment/.

Signature Page

Golder Associates Consulting Ltd.

Sijia Liu
EHS Engineer

Mike Woods
Transport Technical Specialist

SL, MW

golder.com

REPORT

Due Diligence for Port of San Antonio

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 San Antonio, Chile. This assessment was conducted by Environmental Engineer Sijia Liu and reviewed by 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 San Antonio's management of solid sodium cyanide product.

This assessment should not be a final acceptance of the Port of San Antonio for future work; rather it is recommended that Chengxin continues to review and monitor the Port of San Antonio performance periodically and implement an adaptive management process.

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF SAN ANTONIO, CHILE 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 6

4.0 CONCLUSION 9

5.0 CLOSING 10

6.0 REFERENCES 10

1.0 INTRODUCTION

This letter provides the results of a due diligence assessment of the Port of San Antonio, Chile, 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 San Antonio, Chile, during March 2020. 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 for Port of San Antonio, Chile. The Port of San Antonio is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

The scope of this due diligence includes the management, interim storage and emergency response in relation to cyanide transported through the Port of San Antonio 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 San Antonio
- 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 SAN ANTONIO, CHILE

The Port of San Antonio, which was established in 1910, is Chile’s largest port and the busiest port on South America’s west coast. Located on the shores of central Chile, it is nearest the country’s capital, Santiago. The Port of San Antonio is located at South 33 35’ 15” latitude and West 71 37’ 08” longitude.

The port areas offer ship repair, fuel supply, motorboats, tugboats, as well as medical and repatriation services.

The Port of San Antonio contains 3 berths, measuring 3,051 feet / 930 meters. The Port has 8 ship-to-shore gantry cranes, 2 Panamax up to 40 mt, 2 post-Panamax up to 75 mt, 2 Post-Panamax up to 100 mt, and 2 Super Post-Panamax up to 100 mt. The Port has 4 warehouses measuring 11,000 square meters of covered space, with metal roofs, proper fencing and gates, excellent lighting for up to 6,000 TEUs.

San Antonio Port covers 495 hectares, including 353 hectares of water and 142 hectares of land. Maximum depth of its waters is 15 meters. San Antonio Port has excellent access to roads and rail to Santiago, southern Chile, and Argentina. It is connected to Santiago by the Freeway of the Sun, a high-speed highway. In 2018, the Port of San Antonio handled 1.66 million TEUs of containerized cargo.

ISPS Code Certificate has been obtained for the Port of San Antonio by fulfilling the provisions of the ISPS Code Contract. The Country Code for Port of San Antonio is CLSAI.

Overview photo of the Port of San Antonio

(Source: https://www.ssamarine.com/locations/san-antonio-terminal-internacional/)

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 theses 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

International sales and exports of sodium cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 transports 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 Port of San Antonio 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. The Port of San Antonio is connected to a transportation system consisting of railways and highways.

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, (2009) 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.

Labels attached to the containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 and quantity.

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 certificates which meet the requirements of Section 5.4.2 of the IMO DG Code.

g) *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.

h) *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 completing this due diligence, the Port San Antonio had not been used for cyanide transportation by Chengxin.

As a member of the IMO and to comply with the IMSBC Code, vessels are required to declare dangerous cargo before arriving/leaving the Port. The Dispatch Centre organizes ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring.

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 Material Safety Data Sheets (MSDS).

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

In general, port and vessel security are managed through the International Ship and Port Facility Security Code (ISPS Code). The ISPS Code is a comprehensive set of measures to enhance security of ships and port facilities.

The purpose of the ISPS Code is to provide a standardized, consistent framework for evaluating risk, enabling Governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures. The ISPS Code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case.

The intent is to have dangerous cargo placed directly onto a trailer and removed from the facility under escort of the Port Authority. However, when this cannot occur, the port has a dedicated storage areas for specialized products including dangerous goods, cyanide containers are segregated and stacked separately according the provisions of the Code and all sodium cyanide remains sealed within its container at all times preventing contact with water and other incompatible materials.The Port has 4 warehouses measuring 11,000 square meters of covered space, with metal roofs, proper fencing and gates, and lighting for up to 6,000 TEUs.

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

The Port of San Antonio is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

Responsibility for marine pollution rests with the Department for Territorial Waters and Merchant Marine (DGTMMM), a branch of the Chilean Navy. Responsibility is delegated to 16 Maritime governing regions and to the 57 Captains of the Port located at the main ports. The Chilean National Contingency Plan embodies five Regional Contingency Plans covering the entire length of the Chilean coastline. Each region has a Coordination Centre, San Antonio Port is one such centre.

The responsibility for Hazardous and Noxious Substance (HNS) response would fall to the DGTMMM and would follow the same procedures as oil spill response. A national contingency plan for HNS incidents is currently being drafted by the authorities. Some private port facilities already have approved contingency plans for HNS on a local and regional scale. Available oil spill response equipment would also be used for HNS 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 Port of San Antonio Port within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to San Antonio Port's management of solid cyanide products and additional management measures by the consigner are not considered necessary.

This assessment should not be a final acceptance of the Port of San Antonio Port for all future work; rather it is recommended that Chengxin continues to review and monitor San Antonio Port's performance periodically 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.

6.0 REFERENCES

San Antonio Terminal Internacional. Available at: https://www.ssamarine.com/locations/san-antonio-terminal-internacional/; accessed on March 30, 2020.

Chile: Maritime Ports-Port Investment and Opportunities. Available at: https://www.amchamchile.cl/sites/default/files/maritime_ports_io.pdf; accessed on March 30, 2020.

Puerto San Antonio. Available at: http://www.worldportsource.com/ports/CHL_Puerto_San_Antonio_124.php; accessed on March 30, 2020.

San Antonio. Available at: http://www.sofreight.com/ports/cl/clsan; accessed on March 30, 2020.

Sociedad Matriz SAAM S.A. Annual Report 2018. https://www.saam.com/wp-content/uploads/2019/05/MEMORIA_ANUAL_2018_ENG_nav.pdf

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1.

Annual San Antonio Port Due Diligence Review Records, August 2, 2019.

Image: https://www.ssamarine.com/locations/san-antonio-terminal-internacional/.

Signature Page

Golder Associates Consulting Ltd.

Sijia Liu
EHS Engineer

Mike Woods
Transport Technical Specialist

SL, MW

golder.com

REPORT

Due Diligence for Port of Punta Arenas

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Punta Arenas, Chile. This assessment was conducted by Environmental Engineer Sijia Liu and reviewed by 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. 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 with regard to the Port of Punta Arenas's management of solid sodium cyanide product.

This assessment should not be a final acceptance of the Port of Punta Arenas for future work; rather it is recommended that Chengxin continues to review and monitor the Port of Punta Arenas performance periodically and implement an adaptive management process.

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF PUNTA ARENAS, CHILE 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 10

5.0 CLOSING 10

6.0 REFERENCES 11

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Punta Arenas, Chile, 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 of the Port of Punta Arenas, Chile, during March 2020. 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 for Port of Punta Arenas, Chile. The Port of Punta Arenas is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

The scope of this due diligence includes the management, interim storage and emergency response in relation to cyanide transported through the Port of Punta Arenas.

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 Punta Arenas
- 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 PUNTA ARENAS, CHILE

The Port of Punta Arenas is located in Southern Chile, in the XII Region on the border of the Magellan Strait. The Port of Punta Arenas is located at South 53 10’ 06” latitude and West 70 54’ 27” longitude. It is operated by Empresa Portuaria Austral which is a Chilean Government Enterprise.

In Chile, port governance is influenced by a wide number of stakeholders – more than 30 organisations deal with the regulation of the port system. The main entities likely to generate or influence port policies include five

ministries, these being: The Ministry of Transport and Telecommunication, The Ministry of Public Works, The Ministry of Defence, The Ministry of Finance and The Ministry of National Assets.

The Port of Punta Arenas has four main dock berths in the port area, with a shore length of 1,122 mm and a maximum water depth of 13.5 m. Loading and unloading equipment has a variety of shore cranes, loaders and tugboats, as well as the diameter of 200 to 250 mm pipeline for loading and unloading use. There is also a ship buoy, the maximum can berth 80,000 tons of oil tankers. Loading and unloading efficiency is 2,000 tons of coal per hour, 100 tons of gasoline per hour. The water depth of the large ship anchor is 27 m.

Overview of port operations:

- Port protocols exist for docking of vessels (e.g. use of Pilots, use of tugboats, management of different weather conditions, tides, currents and safety and general port operations). This sees to the safe docking and turnaround of the vessels in and out of the port.
- Entry into port is controlled by the port's Pilot who understands the port protocols and any unique issues regarding the approach and docking of a vessel at the port. The Ship's Captain works in conjunction with the Pilot as he understands his vessel and can implement and assist with the Pilot's instructions.
- The approach of the vessel to the ports will take into any account any channels, special navigation points and as mentioned above the currents, tides and weather.
- Once a vessel is secure alongside the wharf the shipping activities changeover to port activities. The vessels manifest of what containers are required to be unloaded from the vessel, including the manifest for containers for loading are handed over. This manifest will identify hazardous cargos and their UN number and classification and segregation requirements.

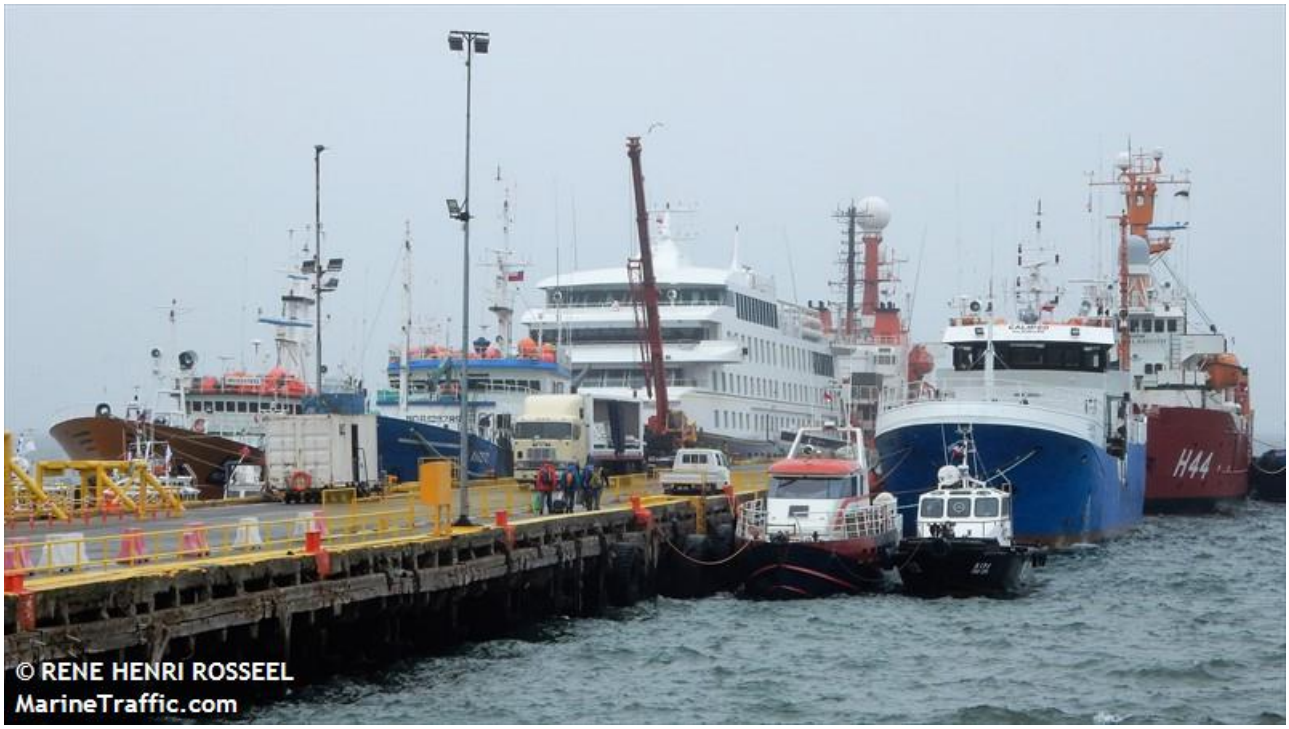
Third party stevedores manage the onshore (wharf) operations at the dedicated container terminal. This is the terminal currently used by other ICMI accredited transporters to facilitate the unloading of their vessels.

Stevedoring operations include:

- Handling of the containers whether full or empty on and off the vessels; container storage areas for general cargo, port security, control systems for companies and their vehicles collecting and or delivering containers.
- Software programs that control container placement and movement; these software packages identify each individual container placement area in designated stacks. The input information for the placement of containers comes from the vessel's manifest.

Containers of dangerous goods discharged by vessels at the terminal are currently placed directly onto onward forms of ICMI accredited transportation and removed from the port area.

ISPS Code Certificate has been obtained for the Port of Punta Arenas by fulfilling the provisions of the ISPS Code Contract. The Country Code for Port of Punta Arenas is CLPAR.



Overview photo of the Punta Arenas Port

(Source: https://www.marinetraffic.com/en/ais/details/ports/2484/Chile_port:PUNTA%20ARENAS)

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 theses 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

International sales and exports of cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 transports 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 Port of Punta Arenas 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.

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, (2009) 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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 diamond pictogram showing 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 and quantity.

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 certificates which meet the requirements of Section 5.4.2 of the IMO DG Code.

g) *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.

h) *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 completing this due diligence, the Port Punta Arenas had not been used for cyanide transportation by Chengxin.

Dangerous goods delivered to the port are required to be appropriately manifested, packaged, labelled and placarded. Documentation that accompanies the cyanide throughout transportation by sea and delivery at ports includes emergency response information along with the dangerous goods manifest, packing certificates and Multimodal Dangerous Goods Form.

The Dispatch Centre organizes ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring.

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 Material Safety Data Sheets (MSDS).

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

In general, port and vessel security are managed through the International Ship and Port Facility Security Code (ISPS Code). The ISPS Code is a comprehensive set of measures to enhance security of ships and port facilities.

The purpose of the ISPS Code is to provide a standardized, consistent framework for evaluating risk, enabling Governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures. The ISPS Code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to

determine what security measures are appropriate, an assessment of the risks must be made in each particular case.

The Port of Punta Arenas aims to have dangerous cargo placed directly onto a trailer and removed from the facility under escort of the Port Authority. However, when this cannot occur, the port has a dedicated storage area for specialized products including dangerous goods, cyanide containers are segregated and stacked separately according the provisions of the Code and all sodium cyanide remains sealed within its container at all times preventing contact with water and other incompatible materials.

The port has full CCTV coverage, is fully lit at night and the whole of the port area has controlled access.

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

The Port of Punta Arenas is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

Responsibility for marine pollution rests with the Department for Territorial Waters and Merchant Marine (DGTMMM), a branch of the Chilean Navy. Responsibility is delegated to 16 Maritime governing regions and to the 57 Captains of the Port located at the main ports. The Chilean National Contingency Plan embodies five Regional Contingency Plans covering the entire length of the Chilean coastline. Each region has a Coordination Centre, Punta Arenas is one such centre.

The responsibility for Hazardous and Noxious Substance (HNS) response would fall to the DGTMMM and would follow the same procedures as oil spill response. A national contingency plan for HNS incidents is currently being drafted by the authorities. Some private port facilities already have approved contingency plans for HNS on a local and regional scale. Available oil spill response equipment would also be used for HNS 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 Punta Arenas Port within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Punta Arenas 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 Port of Punta Arenas Port for all future work; rather it is recommended that Chengxin continues to review and monitor Punta Arenas Port's performance periodically 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.

6.0 REFERENCES

EPAUSTRAL. Available at: http://www.epaustral.cl/; accessed on March 27, 2020.

Punta Arenas. Available at: http://www.sofreight.com/ports/cl/clpar; accessed on March 27, 2020.

Punta Arenas. Available at: http://port.sol.com.cn/result.asp?id=jcjai; accessed on March 27, 2020.

Port of Punta Arenas. Available at: http://www.worldportsource.com/ports/portCall/CHL_Port_of_Punta_Arenas_1746.php; accessed on March 27, 2020.

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1.

Annual Punta Arenas Port Due Diligence Review Records, August 2, 2019.

Image: https://www.marinetraffic.com/en/ais/details/ports/2484/Chile_port:PUNTA%20ARENAS.

Signature Page

Golder Associates Consulting Ltd.

Sijia Liu
EHS Engineer

Mike Woods
Transport Technical Specialist

SL, MW

golder.com

REPORT

Due Diligence for Nouakchott 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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 the Port of Nouakchott, Mauritania. This assessment was conducted by EHS Consultant Chloe Wang 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. 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 with regards to the Port of Nouakchott's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF NOUAKCHOTT, MAURITANIA 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 10

5.0 CLOSING 10

6.0 REFERENCES 11

1.0 INTRODUCTION

This letter provides the results of a due diligence assessment of the Port of Nouakchott, Mauritania, 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 of the Port of Nouakchott, Mauritania, during March 2020. This assessment was conducted by EHS Consultant Chloe Wang 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 the Port of Nouakchott, Mauritania. The Port of Nouakchott is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

The scope of this due diligence includes the management, interim storage and emergency response in relation to cyanide transported through the Port of Nouakchott.

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 Nouakchott
- 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 NOUAKCHOTT, MAURITANIA

The Port of Nouakchott is located at North 18° 2' 7" latitude and West 16° 1' 27" longitude. The Port of Nouakchott is the main port in Mauritania accounting for approximately 96 % of all annual port traffic. It is located near the West African Atlantic coast and was developed as the capital of Mauritania after it gained independence in 1960. In the past Mauritania lay on one of the most lucrative trade routes in West Africa.

The Port of Nouakchott port handles approximately 90 % of all annual imported goods, approximately 1.5 million tonnes, these goods include wheat, cement, clinker, flour, sugar, semolina, milk and general equipment. Exports include plaster from Samia, Mauritania's main producer, animal skins and fish.

The Port of Nouakchott consists of two quays, one for small vessels (Wharf Quay) with draft less than 5 m and a second quay for larger vessels with a maximum draft of 10.3 m, this quay stretches 585 m and is split into four berths, three of which are used for cargo handling and the fourth for servicing vessels. The main cargo quay is located 4 km south of the Quai Wharf and 15 km south-west of the city of Nouakchott.

Nouakchott uses an integrated AS400 computer system developed in co-operation with the Office d'Exploitation des Ports Marocains (ODEP). This offers management transparency and enhances the quality of service offered to international customers.

The Autonomous Port of Nouakchott (PANPA) manages the port. Overview of port operations is as below:

- Port protocols exist for docking of vessels (e.g. use of Pilots, use of tug boats, management of different weather conditions, tides, currents and safety and general port operations). This sees to the safe docking and turnaround of the vessels in and out of the port.
- Entry into port is controlled by the port’s Pilot who understands the port protocols and any unique issues regarding the approach and docking of a vessel at the port. The Ship’s Captain works in conjunction with the Pilot as he understands his vessel and can implement and assist with the Pilot’s instructions.
- The approach of the vessel to the ports will take into any account any channels, special navigation points and as mentioned above the currents, tides and weather.
- Once a vessel is secure alongside the wharf the shipping activities changeover to port activities. The vessels manifest of what containers are required to be unloaded from the vessel, including the manifest for containers for loading are handed over. This manifest will identify hazardous cargos and their UN number and classification and segregation requirements.

The stevedoring service providers manage the onshore (wharf) operations at the dedicated container terminal. Stevedoring operations include:

- Handling of the containers whether full or empty on and off the vessels; container storage areas for general cargo, port security, control systems for companies and their vehicles collecting and or delivering containers.
- Software programs that control container placement and movement; these software packages identify each individual container placement area in designated stacks. The input information for the placement of containers comes from the vessel’s manifest.

Overview photo of the Port of Nouakchott

(Source: https://www.marinetraffic.com/en/ais/details/ports/1120/Mauritania_port:NOUAKCHOTT)

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 theses 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

International sales and exports of 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 transports 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 Port of Nouakchott 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.

The port of Nouakchott is advantageously located at the crossroads of the routes connecting Africa, Europe and America, and is one of the leading public commercial ports in the south Sahara for ships sailing from Europe.

By the time of this due diligence, Port of Nouakchott has not been used by Chengxin for the sea transportation of cyanide yet, which is also outside the scope of this due diligence. Nouakchott Port is used for the transfer from ship to road transportation. Road transportation of cyanide to the customer is outside of the scope of this due diligence.

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, (2009) 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.

Labels attached to the containers are illustrated below:

Labels on the cyanide containers

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 diamond, 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"?*
Chengixn prepares container packing certificates which meet 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"?*
Not Applicable – Vessel transportation is not within the scope of this due diligence.

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.

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

At the time of completing this due diligence, the Port of Nouakchott had not been used by Chengxin for handling of cyanide.

The Dispatch Centre organises ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring.

Port stevedores receive the vessels manifest on arrival which includes details on the containers for unloading. This information is then captured in the stevedore's management systems which assists with the location where each container from the vessel is to be placed after unloading, for Nouakchott this is generally onto onward forms of transportation. Where temporary storage is required transport from the unloading berth to the interim storage facility is controlled by documentary checks which use the container's tracking details and acknowledge its contents.

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 Material Safety Data Sheets (MSDS).

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

Chengxin do not intend to store their product at the Port. Should delay occur the containers are transferred to a holding site and a security presence is provided. Warning signage is erected prohibiting non-authorised personnel in the area where the contains are stored. The area in which containers are located, if warranted, is well segregated and ventilated to prevent the build- up of hydrogen cyanide gas.

The Port of Nouakchott is accredited under the ISPS Code and has a continual security presence. Security is provided at the entrance and exit to the port and also includes armed security patrols. Cyanide products remains within the sealed containers at all times.

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

Mauritania has been a member State of the IMO Council since 1961, it complies with the requirements of the IMDG Code.

The Port of Nouakchott is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

The Ministry of Transport (MOT), Direction of Merchant Navy is the competent authority and administers the National Contingency Plan (NCP) for dealing with pollution by oil and other noxious substances in marine and freshwater environments.

The MOT, with the support of private contractors, manages the response to and monitoring of a Hazardous and Noxious Substances (HNS) incident and some equipment is readily available at the port.

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 Port of Nouakchott within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Port of Nouakchott 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 Nouakchott Port for all future work; rather it is recommended that Chengxin continues to review and monitor Nouakchott's Port's performance periodically 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.

6.0 REFERENCES

Bollore Ports (2016). Bollore Transport and Logistics – Port of Nouakchott. Available at: https://www.bollore-ports.com/en/worldwide-network/africa/port-of-nouakchott-mauritania.html; accessed on March 27th, 2020.

Find a Port – the online port information specialists. General Information for Port of Nouakchott. Available at: https://www.findaport.com/port-of-nouakchott; accessed on March 27th, 2020.

Golder Associates. International Cyanide Management Code. Orica Australia Pty Ltd, Global Marine Supply Chain Summary Audit Report – Amendment, ICMC Due Diligence Assessment for the Port of Nouakchott, dated July 31st, 2017. Project No.1665113-020-L-Rev0

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx; accessed on March 27th, 2020.

International Maritime Organisation [IMO]. Member States. Available at: http://www.imo.org/en/About/Membership/Pages/MemberStates.aspx; accessed on March 27th 2020

International Tanker Owners Pollution Federation [ITOPF] (2012). Mauritania Country Profile. Available at: http://www.itopf.org/knowledge-resources/countries-territories-regions/countries/mauritania/; accessed March 27th, 2020

Image: https://www.marinetraffic.com/en/ais/details/ports/1120/Mauritania_port:NOUAKCHOTT

Signature Page

Golder Associates Consulting Ltd.

Chloe Wang
EHS Consultant

Mike Woods
Transport Technical Specialist

CW, MW

golder.com

REPORT

Due Diligence for Mombasa 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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 the Port of Mombasa, Kenya. This assessment was conducted by EHS Consultant Chloe Wang 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 with regards to the Port of Mombasa's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF MOMBASA, KENYAN 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 11

5.0 CLOSING 11

6.0 REFERENCES 11

1.0 INTRODUCTION

This letter provides the results of a due diligence of the Port of Mombasa, Kenya, 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 of the Port of Mombasa during March 2020. This assessment was conducted by EHS Consultant Chloe Wang 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 the Port of Mombasa, Kenya. The Port of Mombasa is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

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

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 Mombasa
- 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 THE PORT OF MOMBASA, KENYA

The history of the Port of Mombasa dates back many centuries from the existence of the Old Port. The port served dhows from India, Arabian Gulf and Far East. It is located near Fort Jesus at Mombasa Old Town. In 1890, Kenya and Uganda became a British Protectorate under the Imperial British East Africa (IBEA). The colonial government saw a need to create infrastructure inland to open up the area for effective administration,

hence the construction of the Kenya - Uganda Railway (1895-1902). Coupled with increased activities at the port, there was need for a more spacious and convenient place to meet the demand and for construction of a rail network. Therefore, the Port of Mombasa was relocated to the Kilindini Harbor, west of Mombasa Island. The development of the present Port of Mombasa commenced in 1896 when the first Jetty, used for discharging materials for the construction of the railway line was built at Kilindini.

The Port of Mombasa (South 4° 3' 4" latitude and East 39° 38' 6"longitude) provides a gateway to east and central Africa, and it is one of the busiest ports along the east African coastline. The port provides direct connectivity to over 80 ports worldwide and is well connected by road to a vast hinterland comprising Uganda, Rwanda, Burundi, Eastern Democratic Republic of Congo, Northern Kenya, Southern Sudan, Somalia and Ethiopia. A railway line also runs from the port into Uganda and Kenya.

The Port of Mombasa has two container terminals namely the Mombasa Container Terminal and the newly built Kipevu Container Terminal with an annual total capacity of 1.65 million Twenty-foot Equivalent Units (TEUs) currently. Container operations at the Port of Mombasa entail discharging and loading of vessels, stacking and unstacking of containers in the yard and delivery/receipt of import and export containers.

The Port of Mombasa is managed by the Kenya Port Authority (KPA). Established in January 1978. The KPA is authorised to manage and operate the Port of Mombasa and all scheduled seaports along Kenya's coastline. In addition, the Authority manages inland waterways as well as inland container depots at Embakasi, Eldoret and Kisumu.

A Harbour Master oversees the operation of the overall port operations. This includes:

- Port protocols exist for docking of vessels, e.g. use of Pilots; use of tug boats; different weather conditions, tides, currents; safety; and general port operations. This sees to the safe docking and turnaround of the vessels in and out of the port.
- Entry into port is controlled by the port's Pilot who understands the port protocols and any unique issues regarding the approach and docking of a vessel at the port. The Ship's Captain works in conjunction with the Pilot as he understands his vessel and can implement and assist with the Pilot's instructions.
- The approach of the vessel to the port will take into any account any channels, special navigation points and as mentioned above the currents, tides and weather.
- Once the vessel is secure alongside the wharf the shipping activities changeover to port activities. The vessels manifest of what containers are required to be unloaded from the vessel, including the manifest for containers for loading are handed over. This manifest will identify hazardous cargos and their UN number and classification and segregation requirements.

Stevedoring operations include:

- Handling of the containers whether full or empty on and off the vessels; container storage areas for general cargo, port security, control systems for companies and their vehicles collecting and or delivering containers.
- Software programs that control container placement and movement; these software packages identify each individual container placement area in designated stacks. The input information for the placement of containers comes from the vessel's manifest.

Containers of dangerous goods discharged by vessels at the container terminal are moved to a dedicated dangerous goods storage area within the port confines for storage until customs clearance has been completed and transport is arranged. Containers of Cyanide are segregated from other classes of dangerous goods. This area has minimal traffic flow and is large enough to allow space for appropriate segregation of different classes of dangerous goods.

Overview photo of the Poprt of Mombasa

(Source: https://www.marinetraffic.com/en/ais/details/ports/1628/Kenya_port:MOMBASA)

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 theses 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

International sales and exports of cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 transports Chengxin's 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 Port of Mombasa 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. The Port of Mombasa is the principal port of Kenya and serves landlocked countries such as Malawi, Zambia, Democratic Republic of Congo, Burundi, Rwanda and Uganda. The port is strategically placed to serve as a freight linkage to and from East and Central Africa countries.

By the time of this due diligence, Port of Mombasa has not been used by Chengxin for the sea transportation of cyanide yet, which is also outside the scope of this due diligence. The Port of Mombasa is used for the transfer from ship to road transportation. Road transportation of cyanide to the customer is outside of the scope of this due diligence.

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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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 diamond, pictograms 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 and quantity.

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"?
Chengixn prepares container packing certificates which meet 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"?
Not Applicable – Vessel transportation is not within the scope of this due diligence.

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.

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

The Port of Mombasa has not been previously used by Chengxin.

The Port of Mombassa's Dispatch Centre organises ship movements, tracks pilotage operations, and supervises terminal operations via real-time CCTV monitoring.

As a member of the IMO and to comply with the IMDG Code and the Kenya Ports Authority Act vessels are required to declare dangerous cargo before arriving at or leaving the port.

Chain of custody documentation is used by shipping companies to prevent the loss of cargo during shipment. This documentation includes the vessel manifest – 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).

The Container Operations Department at the Port of Mombasa operates 24/7 and utilises a Terminal Operations System (TOS) to track both containers and their documentation.

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

The KPA has increased the level of security checks and supervision in all sectors of its port operations to comply with the security rules of the IMO.

The Port of Mombasa has introduced a number of measures to make the port a safer and more secure place. They include:

- New electronic surveillance equipment including CCTV
- Coastguard surveillance of waters
- New search and rescue centre, set up jointly with the IMO
- More plain-clothes and uniformed security officers on patrol in port areas
- Strict controls on port entry with all port users and visitors required to display passes at all times
- Restricted entry to container terminal and other key sections
- Continuously manned watch towers in car handling area and container terminal
- New rapid response team to deal with urgent security matters in or near the port area
- New centralised verification areas at the container terminal
- New cargo scanning system to allow containers to be checked without stripping.

Upon arrival, inbound containers are discharged from vessels and taken by truck or tractor to a designated CFS. Each CFS is a self-contained facility with government agencies on site, including Customs, police, the Standards Authority and a sanitary inspection department. Each container awaiting clearance for on- carriage resides securely within a given CFS until cleared.

Cyanide is placed in a segregated area whilst awaiting relevant clearances. This area is clearly signed providing appropriate warning to all port personnel. Collection of the cargo by the approved carrier is direct from this area. Vehicles collecting cargo from the port environs are subject to port checks to ensure that approvals for collection are in place and that documentation and container details match prior to egress from the port. Additionally, signage is displayed prohibiting smoking and the consumption of foodstuffs and liquids in the areas where hazardous goods are being stored.

The Port of Mombasa is accredited under the International Ship and Port Security (ISPS) Code and is classed as a secure area. The port has a full-time security presence which includes armed patrols. Access to and from the container terminal is well controlled and areas used for cyanide storage are may be subject to an additional security presence. The port security egress checkpoint checks a driver's documentation to ensure approval has been granted for the removal of the container, that the container number physically matches with the documentation and that the seal is intact on the shipping container.

The port has a minimum standard of personal protective equipment required which includes the wearing of relevant safety footwear, clearly visible clothing and protective headwear in specific areas. This personal protective equipment requirement is suitable for cyanide that remains contained within sealed containers at all times.

Sodium cyanide product remains sealed inside its container at all times. Containers are in a segregated area which is open to the air to prevent the build-up of hydrogen cyanide gas.

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

Kenya has been a Member State of the IMO Council since 1973, it complies with the requirements of the IMDG Code.

The Port of Mombasa is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

The Port of Mombasa maintains permanent onsite fire and emergency response personnel and equipment. The Port Fire Services (PFS) are well equipped and operate three fire engines with a water capacity of 10 000 L each and has a water reserve of 300 000 L. Working with external bodies, the PFS responds to rescues, hazardous materials incidents and possible emergency activities both within the port and across the greater region. They offer fire and rescue services to enhance community safety, quality of life and confidence in port operations by minimising the impact of hazards and emergency incidents on port users, the environment and the economy.

The PFS also offer 24/7 ambulance services and emergency response. Manned by firefighters, the ambulance is used as a first responder in serious medical emergencies.

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 the Port of Mombasa within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Port of Mombasa '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 the Port of Mombasa for all future work; rather it is recommended that Chengxin continues to review and monitor the Port of Mombasa's performance periodically 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.

6.0 REFERENCES

Kenya Port Authority [KPA]. About Us- Port of Mombasa. Available at: https://www.kpa.co.ke/Pages/Default.aspx ; accessed on March 30th, 2020.

Kenya Port Authority [KPA]. Our Business- Port Fire Services. Available at: https://www.kpa.co.ke/OurBusiness/Pages/Firefighting.aspx ; accessed on March 30th, 2020.

Kenya Port Authority [KPA]. Our Business- Port of Mombasa. Available at: https://www.kpa.co.ke/OurBusiness/Pages/default.aspx;accessed on March 30th, 2020.

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx; accessed on March 30th, 2020.

Golder Associates. International Cyanide Management Code. Orica Australia Pty Ltd, Global Marine Supply Chain Summary Audit Report – Amendment, ICMC Due Diligence Assessment for the Port of Mombasa, dated July 31st, 2017. Project No.1665113-021-L-Rev0

International Maritime Organisation. Member States. Available at: http://www.imo.org/en/About/Membership/Pages/MemberStates.aspx; accessed March 30th, 2020.

International Tanker Owners Pollution Federation [ITOPF] (2008). Kenya Country Profile. Available at: http://www.itopf.org/knowledge-resources/countries-territories-regions/countries/kenya/; accessed on March 30th, 2020.

Image: https://www.marinetraffic.com/en/ais/details/ports/1628/Kenya_port:MOMBASA; accessed on March 30th, 2020.

Signature Page

Golder Associates Consulting Ltd.

Chloe Wang
EHS Consultant

Mike Woods
Transport Technical Specialist

CW, MW

golder.com

REPORT

Due Diligence for Abidjan 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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Abidjan, Cote d'Ivoire. This assessment was conducted by EHS Consultant Chloe Wang 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 Abidjan's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF ABIDJAN, COTE D'IVOIRE 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 10

5.0 CLOSING 11

6.0 REFERENCES 11

1.0 INTRODUCTION

This letter provides the results of a due diligence assessment of the Port of Abidjan, Cote d'Ivoire, 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 Abidjan, Cote d'Ivoire, during March 2020. This assessment was conducted by EHS Consultant Chloe Wang and reviewed by 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 Abidjan, Cote d'Ivoire. The Port of Abidjan is to be included in its 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 the Port of Abidjan.

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 Abidjan
- 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 ABIDJAN, COTE D'IVOIRE

The Port of Abidjan was a small village in 1898 that became a town in 1903. From 1934 until 1960, it was capital of the French colony, with scant port facilities until 1950. In 1950, the city was opened to the sea with the construction of the Vridi Canal. It soon became French-speaking West Africa's major shipping and financial center. Although Yamoussoukro was named the country's capital after independence in 1960, the Port of

Abidjan continues to be the country's commercial and financial center. After independence in 1960, the Port of Abidjan was blessed by a long economic boom, becoming the "Paris of Africa" with casinos and world-class hotels. Today, the Port of Abidjan is a gateway to West Africa. The Cote d'Ivoire is attempting to bring back ocean-going traffic that began avoiding the port since the 1999 military coup and subsequent political conflicts.

Port of Abidjan is located at North 5° 19' latitude and West 4° 01' longitude. The port of Abidjan is the main port of the Cote d'Ivoire (Ivory Coast) in Africa. Lying on the Ebrie Lagoon, it is linked to the Gulf of Guinea and Atlantic Ocean by the Vridi Plage sandbar. Abidjan Port is operated by Port Automome D'Abidjan (PAA).

The port of Abidjan is West Africa's largest, most modern port. With a central location and a well-developed infrastructure, it is a major point for transhipments into West and Central Africa over the Cote d'Ivoire's network of rail and road systems. Since the opening of the Vridi Canal, the port of Abidjan has handled nearly all commercial trade for the Cote d'Ivoire.

The port of Abidjan has a total quay length of six kilometres and there are 34 berths dedicated for timber, cereals, fruits, petroleum products and containers. The port of Abidjan can accommodate vessels up to 260 meters long, depth at the harbor's mouth is 10.5 m, and the depth at quay is 12.5 m. The port provides approximately 140,000 m^2 of open storage, covered warehouses, and sheds, three berths specialized in container-handling, and one berth devoted to roll-on/roll-off cargoes.

The Port handled a total of 25,738,345 tonnes of goods in 2019, total container traffic through the port in 2019 was 730,827 TEUs.

The port of Abidjan is certified with ISO 9001 (quality), ISO 14001 (environment) and OHSAS 18001 (health and security).

Overview of port operations:

- Port protocols exist for docking of vessels (e.g. use of Pilots, use of tugboats, management of different weather conditions, tides, currents and safety and general port operations). This sees to the safe docking and turnaround of the vessels in and out of the port.
- Entry into port is controlled by the port's Pilot who understands the port protocols and any unique issues regarding the approach and docking of a vessel at the port. The Ship's Captain works in conjunction with the Pilot as he understands his vessel and can implement and assist with the Pilot's instructions.
- The approach of the vessel to the ports will take into any account any channels, special navigation points and as mentioned above the currents, tides and weather.
- Once a vessel is secure alongside the wharf the shipping activities changeover to port activities. The vessels manifest of what containers are required to be unloaded from the vessel, including the manifest for containers for loading are handed over. This manifest will identify hazardous cargos and their UN number and classification and segregation requirements.

The stevedoring company, Bollore Africa Logistics, manage the onshore (wharf) operations at the dedicated container terminal. This is the terminal currently used by other ICMI accredited transporters to facilitate the unloading of their vessels.

Stevedoring operations include:

- Handling of the containers whether full or empty on and off the vessels; container storage areas for general cargo, port security, control systems for companies and their vehicles collecting and or delivering containers.
- Software programs that control container placement and movement; these software packages identify each individual container placement area in designated stacks. The input information for the placement of containers comes from the vessel's manifest.

Sodium cyanide containers are loaded directly onto trailers via gantry cranes, owned and maintained by Bollore Africa Logistics Transport Division, for direct delivery out of the port under controlled convoys to the end use destination in Cote d'Ivoire.

Overview photo of the Abidjan Port

(Source: https://www.ufsoo.com/port/abidjan/)

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 theses 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 Abidjan 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.

The port of Abidjan is West Africa's largest, most modern port. With a central location and a well-developed infrastructure, it is a major point for transhipments into West and Central Africa over the Cote d'Ivoire's network of rail and road systems.

By the time of this due diligence, Port of Abidjan has not been used by Chengxin for the sea transportation of cyanide yet, which is also outside the scope of this due diligence. Abidjan Port is used for the transfer from ship to road transportation. Road transportation of cyanide to the customer is outside of the scope of this due diligence.

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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

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

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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, 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 and quantity.

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"?*
Chengixn prepares container packing certificates which meet 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"?*
Not Applicable – Vessel transportation is not within the scope of this due diligence.

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.

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

At the time of this conducting this due diligence, Port of Abidjan had not been used by Chengxin as part of its marine supply chain.

The Harbour Master organises ship movements, tracks pilotage operations, and supervises terminal operations via the Port Control Tower and real-time CCTV monitoring. Container terminal software allows for the controlled tracking and placement of containers when removed from the vessel.

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).

The port of Abidjan requires documentation such as Request for Removal forms, original Bill of Lading, cargo manifests and the original handler's voucher in order to allow the removal from vessel of, and subsequently transhipping, dangerous goods containers.

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

In general, port and vessel security are managed through the International Ship and Port Facility Security Code (ISPS Code), awarded to the port of Abidjan in 2004. The ISPS Code is a comprehensive set of measures aimed to enhance security of ships and port facilities.

The port of Abidjan is also certified under OHSAS 18001 (health and security). There are regular security patrols, restricted points of access, video surveillance and the capability to call upon certain specialised State Defence and Security Forces.

When containers of dangerous goods cannot be placed directly onto onwards transportation, they are sent to a secure holding facility under escort of the PAA. All handling of dangerous goods, on and off of vessels, must have prior authorisation by the Harbour Master who sets the timeframes that such handling may take place.

All solid sodium cyanide remains at all times within its sealed containers. Containers are in a segregated area which is open to the air to prevent the build-up of hydrogen cyanide gas. The area in which the containers are located is suitable to effectively contain any spillage that may occur.

There are general dangerous goods warning signs throughout the port.

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

Cote d'Ivoire has been a member State of the IMO Council since 1960, it complies with the requirements of the IMDG Code.

The port of Abidjan is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

The Ivorian Anti-Pollution Centre (CIAPOL) is the responsible authority for marine pollution in the Ivory Coast.

CIAPOL, with the support of private contractors, manages the response to and monitoring of a Hazardous and Noxious Substances (HNS) incident and some equipment is readily available.

The Stevedoring service provider, Bollore Africa Logistics, has developed an emergency procedure guide specific to sodium cyanide. They also possess emergency response capabilities including a mobile bund for containing spillage from a shipping container. In the event of an emergency, the port of Abidjan has a Port response unit (U.I.P.), composed of officers from the fire service or the navy fire department, who are on- hand and ready to respond 24 hours a day.

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 Abidjan Port within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Abidjan 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 Abidjan Port for all future work; rather it is recommended that Chengxin continues to review and monitor Abidjan's Port's performance periodically 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.

6.0 REFERENCES

Bollore Ports. Port of Abidjan, Cote d'Ivoire. Abidjan Container Terminal. Available at: http://www.bollore-ports.com/en/worldwide-network/africa/port-of-abidjan-cote-divoire.html; accessed March 30th, 2020.

Introduction of Port of Abidjan: https://www.ufsoo.com/port/abidjan/; accessed March 30th, 2020.

Port Abidjan. Available at http://www.portabidjan.ci/en; accessed March 30th, 2020.

World Port Source. Port of Abidjan. Available at: http://www.worldportsource.com/ports/review/CIV_Port_of_Abidjan_1422.php; accessed March 30th, 2020.

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx; accessed March 30th, 2020.

International Maritime Organisation [IMO]. International Maritime Dangerous Goods Code [IMDG]. Volume 1, Incorporating Amendment 33-06. London, United Kingdom

International Maritime Organisation [IMO]. Member States. Available at: http://www.imo.org/en/About/Membership/Pages/MemberStates.aspx; accessed March 30th, 2020.

International Tanker Owners Pollution Federation [ITOPF] (2015). Cote d'Ivoire Country Profile. Available at: http://www.itopf.org/knowledge-resources/countries-territories-regions/countries/cote-divoire/; accessed March 30th, 2020.

The Port of Abidjan. Harbour Master's Office – Port Formalities, Dangerous Goods. Available at: http://portabidjan.com/en/content/harbour-masters-office; accessed March 30th, 2020.

Image: https://www.ufsoo.com/port/abidjan/； accessed March 30th, 2020.

Signature Page

Golder Associates Consulting Ltd.

Chloe Wang
EHS Consultant

Mike Woods
Transport Technical Specialist

CW, MW

golder.com

REPORT

Due Diligence for Aliaga 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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Aliaga, Turkey. This assessment was conducted by EHS Consultant Chloe Wang and reviewed by 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 regarding the Port of Aliaga's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF PORT OF ALIAGA, TURKEY 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 7

4.0 CONCLUSION 10

5.0 CLOSING 10

6.0 REFERENCES 10

1.0 INTRODUCTION

This letter provides the results of a due diligence assessment of the Port of Aliaga, 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 Aliaga, Turkey, during March 2020. This assessment was conducted by EHS Consultant Chloe Wang and reviewed by 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 Aliaga, Turkey. The Port of Aliaga is to be included in tits 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 Port of Aliaga.

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 Aliaga
- 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 ALIAGA, TURKEY

The Port of Aliaga is located at North 38° 49' 3"latitude and East 26° 56' 57" longitude, which lies on the southern shores of the Bay of Aliaga off the Gulf of Candarli about 24 kilometers northwest of Izmir, Turkey. The authority for the Port of Aliaga is Aliaga Liman Baskanligi (ALB). The Port mainly consists of oil product

terminals and refineries. It can accommodate vessels to 250 thousand deadweight tonnage (DWT) with maximum length of 338 meters and maximum draft of 16 meters.

The Petkim Terminal – Aliaga is operated by Petkim, Petro Kimya Holdings A.S. Pilotage is required for all vessels entering the harbor. The Port of Aliaga's Petkim Terminal contains six berths, three berths for products and gas ships, one berth for naphtha, one berth for caustic soda, and one berth for general cargo.

Berth 1 at the Port of Aliaga Petkim Terminal is a Tanker Quay 163 meters long with alongside depth of 7 meters. Berth 2 is also a Tanker Quay of 175 meters in length with alongside depth of 10 meters. Berth 2 loads/unloads chemicals like ammonia, fuel oil, benzene, ethylene glycols, ethylene oxide, wash oil, and choric hydrocarbons.

Handling capacity of Port of Aliaga is 1,300,000 TEUs per year. Total area of the Port is 420,000 m² consisting of 20,000 m² unbonded area and 400,000 m² customs warehouse.

The Petkim Terminal at the Port of Aliaga Berth 3 specializes in cargoes of caustic soda. It is 60 meters long with alongside depth of 6 meters. At 90 meters long with alongside depth of 14 meters, Berth 4 (the Naphtha Quay) is currently out of service. The Salt Quay at the Petkim Terminal in the Port of Aliaga is 190 meters long with alongside depth of 6 meters, and it receives salt that is used at the nearby Chlorine Alkali Plant. Berth 5 is a Tanker Quay of 285 meters in length with alongside depth of 13 meters. Berth 5 handles naphtha, ammonia, benzene, caustic soda, and fuel oil.

The Port of Aliaga's Petkim Terminal Berth 6 handles general cargo, primarily raw petrochemicals. It is 338 meters long with alongside depths from 7 to 10 meters. Finally, the Petrol Ofisi Quay has two berths of 175 and 163 meters that handle petroleum products, materials, and equipment.

Overview photo of the Port of Aliaga

(Source: https://www.marinetraffic.com/en/ais/details/ports/725/Turkey_port:ALIAGA)

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 theses 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 Port of Aliaga 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.

At the time of conducting this due diligence, the Port of Aliaga has not been used by Chengxin as part of its marina supply chain. The Port of Aliaga is used for the transfer from ship to road transportation. Road transportation of cyanide to the customer is outside of the scope of this due diligence.

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, (2009) 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.

Labels attached to the cyanide containers are illustrated below:

Labels on the cyanide containers

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

It was not possible during this due diligence to physically inspect the Port of Dar es Salaam. The due diligence review was completed based on information obtained from previous due diligence reviews, ICMI audit reports, discussions with consignors and publicly available online information.

Are shipments of cyanide transported by sea transported in compliance with the Dangerous Goods Code of the International Maritime Organisation (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, 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 certificates which meet 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"?*
Not Applicable – Vessel transportation is not within the scope of this due diligence.

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.

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

By the time of this due diligence, the Port of Aliaga has not been used by Chengxin for the sea transportation of cyanide yet. And this portion of the sea transportation is not within the scope of the Due Diligence.

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).

The Port of Aliaga requires documentation such as Request for Removal forms, original Bill of Lading, cargo manifests and the original handler's voucher in order to allow the removal from vessel of, and subsequently tranship, dangerous goods containers.

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

In general, Port and vessel security are managed through the International Ship and Port Facility Security Code (ISPS Code). The ISPS Code is a comprehensive set of measures to enhance security of ships and port facilities.

The purpose of the ISPS Code is to provide a standardised, consistent framework for evaluating risk, enabling Governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures. The ISPS Code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case.

The ISPS Code is implemented through chapter XI-2 Special measures to enhance maritime security in the International Convention for the Safety of Life at Sea (SOLAS). Since the ISPS Code is part of SOLAS, compliance is mandatory for all Contracting Governments to SOLAS. Turkey is both a member of the IMO (1958) and a signatory of SOLAS (1980).

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

Turkey has been a member State of the IMO Council since 1958, it complies with the requirements of the IMO DG Code.

Pollution response in Turkey is governed under Act 5312 Law Concerning the Principles of Emergency Response and Compensation for Damages for Pollution of the Marine Environment by Oil and Other Harmful Substances. The Under secretariat for Maritime Affairs has ultimate responsibility for dealing with oil pollution at sea and the Ministry of Environment and Urbanisation undertakes or causes to be undertaken the necessary

response measures. In the event of an incident, a Damage Commission of these authorities is usually convened and chaired by the Provincial Head of the Ministry of Environment and Urbanisation.

At local level, a governor or mayor may direct the Damage Commission. Local responsibility is designated to managers of individual ports or, in the case of spills at sea, to the Turkish Navy. Oil on shore would normally be dealt with by the municipalities or installation concerned.

Turkey has regional and national emergency response plans based on a tiered response structure.

The Port of Aliaga is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90). States which 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.

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 the Port of Aliaga within the constraints of access and limited influence, this due diligence did not find significant of concerns with regard to the Port of Aliaga'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 the Port of Aliaga for all future work; rather it is recommended that Chengxin continues to review and monitor the Port of Aliaga's performance periodically 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.

6.0 REFERENCES

History of the Port. Available at: http://www.worldportsource.com/ports/review/TUR_Port_of_Aliaga_3630.php; accessed on March 30th, 2020.

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx; accessed on March 30th, 2020.

International Maritime Organisation. Member States. Available at: http://www.imo.org/en/About/Membership/Pages/MemberStates.aspx; accessed March 30th, 2020.

International Tanker Owners Pollution Federation [ITOPF] (2018). Turkey Country Profile. Available at: http://www.itopf.org/knowledge-resources/countries-territories-regions/countries/turkey/; accessed on March 30th, 2020.

SOCAR Aliağa Port. Available at: http://www.turklim.org/en/turklim-members/; accessed on May 29, 2020.

Image: https://www.marinetraffic.com/en/ais/details/ports/725/Turkey_port:ALIAGA

Signature Page

Golder Associates Consulting Ltd.

Chloe Wang
EHS Consultant

Mike Woods
Transport Technical Specialist

CW, MW

golder.com

REPORT

Due Diligence for CMA CGM

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 CMA CGM Group (CMA CGM). This assessment was conducted by ICMI Lead Auditor Hongtao Hu 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. Due to the access restrictions, the due diligence was conducted as a desktop process using information obtained from online resource, experiences, previous consignor 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 regards to CMA CGM's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF CMA CGM 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 6

4.0 CONCLUSION 8

5.0 CLOSING 9

6.0 REFERENCES 9

1.0 INTRODUCTION

This letter provides the results of a due diligence of CMA CGM, 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 of CMA CGM, during March 2020. This was conducted by ICMI Lead Auditor Hongtao Hu 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 for CMA CGM. CMA CGM is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

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

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 CMA CGM
- 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 CMA CGM

CMA CGM was founded in 1978. With a presence in 160 countries through 755 agencies, 750 warehouses, 110,000 employees and a wide fleet of 502 vessels, CMA CGM serves 420 of the world’s 521 commercial ports and operates 285 shipping lines.

The CMA CGM Group is a global logistics enterprise centred on various forms of marine transport including global logistics and bulk energy transportation, cruises, terminal and harbour transport, shipping- related services and real estate. CMA CGM has global ocean, land, and air transportation networks.

CMA CGM has aligned itself with other shipping companies (GA Alliance and the G6 Alliance) to respond to the diversifying needs of customers. The GA Alliance comprises NYK, Hapag-Lloyd, and Orient Overseas Container Line to cover the trade between Asia and the West Coast of North America, whereas the G6 Alliance includes the GA members in addition to Mitsui O.S.K. Lines, APL, and Hyundai Merchant Marine to cover the trade between Asia and Europe in addition to the trade between Asia and the East Coast of North America.

CMA CGM provides its customers with terminal and stevedoring services for containerships, pure car carriers, and cruise ships at terminals in Japan, Asia, North America, Europe, and Australia.

CMA CGM has obtained 18 OHSAS 18001, ISO 14001 and ISO 9011 certifications for all of the 23 covered terminals until 2018, i.e. approximately 39% of the terminals subject to the CMA CGM QHSSE policy which has established a voluntary certification process.

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 theses 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 export of sodium cyanide takes into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 product through larger ports with modern facilities and management systems. The shipping companies provide the correct manifest documentation to the destination port which, in turn, provides the shipping company 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 a carrier service providing international shipping of containers. The container handling (on and off vessels) is predominately undertaken by stevedoring companies at each port.

Basically, an export or international route will include the following:

- Production, packaging and despatch
- Road transportation to port
- International shipping to destination port

- Road transportation to customer.

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

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

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

g) 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?

CMA CGM transports sodium cyanide by sea to various destination ports. All packaging and transportation appear to be in accordance with the IMO DG Code.

CMA CGM's operations personnel provide the vessel's Master with emergency information together with the Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded at the port. This documentation is meant to ensure that the adequate information is available in order to identify the correct stowage and separation of dangerous goods.

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

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

CMA CGM's operations personnel provide the vessel's Master with emergency information together with the Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded at the port.

i) Does the ship comply with the stowage and separation requirements of Part 7 of the DG Code?

Documentation provided includes emergency information, Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded onto the ship at the port. This information then determines the placement and segregation of the container on the vessel.

Based on previous due diligence investigations and accounts from other consigners, it appears that CMA CGM complies with Part 7 of the IMO DG Code.

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

CMA CGM's vessels have continuous means of tracking and communication during their voyages.

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

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

All packaging and transportation of sodium cyanide is required to be in accordance with the IMO DG Code.

Chengxin's packaging is labelled in English with global harmonised system - GHS pictograms and UN number identifying the product. In addition, Chengxin's product is packaged into purpose designed and packed as below with two types:

- Solid product into plastic bags and then into metal barrels which are locked and sealed (50 kg).
- Solid product into plastic bags and then into wooden crates which nailed and strapped to form an intermediate bulk container (IBC) (1 tonne or 1.1 tonnes). These are then package and locked in a shipping container.

Chengxin's Standard for Packing of solid cyanide specifies the requirements for packing cyanide for export, including the packaging materials and method for inspecting the packaging. The facility sources its drums and IBCs from a third party that provides compliance certificates with each supply of packaging. The Hebei Entry-Exit Inspection and Quarantine Bureau inspected the cyanide facility's packaging systems for each supply consignment during the audit period (2015-2019) and approved the packaging systems for international transport of the cyanide.

CMA CGM's operations personnel provide the vessel's Master with emergency information, a Dangerous Goods manifest (including stowage plan) and Packaging Certificates for container loaded onto the ship at the port.

CMA CGM's has adopted the VGM (Verified Gross Mass) international regulation which electronically incorporates the VGM data of the container. This data is transmitted to the relevant people at each stage of the shipping process, thereby ensuring the security of the shipping chain. To manage dangerous goods, CMA CGM has a dedicated computer application which is connected to the global booking IT system. This application which electronically incorporates the international regulation makes it possible to determine the way dangerous goods are declared then packaged and stowed in the container.

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

CMA CGM provides regular training to increase its employees' ability to respond to accidents. Training exercises involve scenarios with different vessel types and emergency situations with vessel crews, ship-management companies, government agencies, customers, and other interested parties.

CMA CGM appears to operate in compliance with the International Safety Management (ISM) Code which provides an international standard for the safe management and operation of ships, and for pollution prevention.

In accordance with the ISM Code, CMA CGM has a Security Safety policy and management system to ensure safe operation of the ships and protection of the environment in compliance with the relevant international and flag state legislation. This includes procedures for reporting accidents, or to prepare for and respond to emergency situations.

4.0 CONCLUSION

It was not possible during this due diligence to physically inspected the shipping company, 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 CMA CGM within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to CMA CGM'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 CMA CGM for all future work; rather it is recommended that Chengxin continues to review and monitor CMA CGM's performance periodically 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.

6.0 REFERENCES

Website of CMA CGM. Available at: https://www.cmacgm-group.com/en/group, accessed on March 18th, 2020.

CMA CGM CSR Report of 2018. Available at: https://www.cmacgm-group.com/api/sites/default/files/2019-06/CSR-report_2018_vCOM-UK.pdf, accessed on March 18th, 2020.

Annual CMA CGM Due Diligence Review Records, August 2, 2019.

Standard for Packing of Solid Cyanide, Number GB 19268-2003, issued by the Quality and Technology Supervision and Inspection Administration of the People's Republic of China, 2003

CXWJ-H10-01, Solid Cyanide Workshop Operations Manual, dated January 1st, 2016.

Golder Associates (2018). International Cyanide Management Code Cyanide Supply Chain Audit, Chengxin. Australia Pty Ltd, Global Ocean Supply Chain Amendment, Detailed Audit Report. Report number- 1668932-020-R-Rev1

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1

Golder Associates (2019). International Cyanide Management Code Transportation Verification Audit. Chengxin. Australia Pty Ltd, Transport Recertification, Detailed Audit Report. Report number- 19128557-002-R-Rev0

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx , accessed on March 18th, 2020.

International Maritime Organisation [IMO]. Pollution Preparedness and Response. Available at: http://www.imo.org/en/OurWork/Environment/PollutionResponse/Pages/Default.aspx , accessed on March 18th, 2020.

Signature Page

Golder Associates Consulting Ltd.

Hongtao Hu
ICMI Lead Auditor

Mike Woods
Transport Technical Specialist

HH, MW

golder.com

REPORT

Due Diligence for Korea Marine Transport Co., Ltd.

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Korea Marine Transport Co., Ltd. (KMTC). This assessment was conducted by ICMI Lead Auditor Hongtao Hu 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. Due to the access restrictions, the due diligence was conducted as a desktop process using information obtained from online resource, experiences, previous consignor 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 regards to the KMTC's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF KMTC 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 6

4.0 CONCLUSION 8

5.0 CLOSING 8

6.0 REFERENCES 9

1.0 INTRODUCTION

This letter provides the results of a due diligence of KMTC, 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 of KMTC, during March 2020 which was was conducted by ICMI Lead Auditor Hongtao Hu 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 for KMTC. KMTC is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

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

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 KMTC
- 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 KMTC

KMTC was founded in 1954, headquartered in Seoul, Korea. The main business of KMTC is marine transport with routes between the mainland of China, South Korea, Japan, South-East Asia and the Middle East.

KMTC has 68 offices in Korea, Japan, China, Singapore, Indonesia, Malaysia and Thailand and Middle East.

KMTC has an integrated marine computer service management system that was internationally recognised in 2006 for its punctuality rate.

KMTC has obtained compliance for the International Safety Management Code under the authority of the Government of Korea by Korean Registry of Shipping in 1998 and renewed it in May of 2018. Also, KMTC has obtained ISO 9001 Certificate, ISPS Code Certificate and Korea AEO Code Certificate.

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 theses 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 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.

KMTC is a carrier service providing international shipping of containers. The container handling (on and off vessels) is predominately undertaken by stevedoring companies at each port.

Basically, an export or international route will include the following:

- Production, packaging and despatch
- Road transportation to port
- International shipping to destination port
- Road transportation to customer.

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

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

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

g) 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?

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

KMTC operations personnel provide the vessel's Master with the copies of emergency information together with the Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded at the port. This documentation is meant to ensure that the adequate information is available in order to identify the correct stowage and separation of dangerous goods.

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

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

KMTC's operations personnel provide the vessel's Master with emergency information, the Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded onto the ship at the port.

i) Does the ship comply with the stowage and separation requirements of Part 7 of the DG Code?

Documentation provided includes emergency information, Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded onto the ship at the port. This information then determines the placement and segregation of the container on the vessel.

Based on previous due diligence investigations and accounts from other consigners, it appears that KMTC complies with Part 7 of the IMO DG Code.

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

KMTC's vessels have continuous means of tracking and communication during their voyages.

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

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

All packaging and transportation of sodium cyanide is required to be in accordance with the IMO DG Code.

Chengxin's packaging is labelled in English with global harmonised system GHS pictograms and UN number identifying the product. In addition, Chengxin's product is packaged into purpose designed and packed as below with two types:

- Solid product into plastic bags and then into metal barrels which are locked and sealed (50 kg).

- Solid product into plastic bags and then into wooden crates which nailed and strapped to form an intermediate bulk container (IBC) (1 tonne or 1.1 tonnes). These are then package and locked in a shipping container.

Chengxin's Standard for Packing of solid cyanide specifies the requirements for packing cyanide for export, including the packaging materials and method for inspecting the packaging. The facility sources its drums and IBCs from a third party that provides compliance certificates with each supply of packaging. The Hebei Entry-Exit Inspection and Quarantine Bureau inspected the cyanide facility's packaging systems for each supply consignment during the audit period (2015-2019) and approved the packaging systems for international transport of the cyanide

KMTC's operations personnel provide the vessel's Master with emergency information, the Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded onto the ship at the port.

KMTC also operates a safety system aimed at safe and efficient operations of its vessels that transport cargo (including owned or chartered vessels). The system has been developed to comply with international regulations.

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

KMTC's operations personnel provide the vessel's Master with emergency information, the Dangerous Goods manifest (including stowage plan), Packaging Certificates and the Multimodal Dangerous Goods Form for each container loaded onto the ship at the port.

KMTC appears to operate in compliance with the International Safety Management (ISM) Code which provides an international standard for the safe management and operation of ships, and for pollution prevention.

In accordance with the ISM Code, KMTC has a Security Safety policy and management system to ensure safe operation of the ships and protection of the environment in compliance with the relevant international and flag state legislation. This includes procedures for reporting accidents, or to prepare for and respond to emergency situations.

4.0 CONCLUSION

It was not possible during this due diligence to physically inspected the shipping company, 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 KMTC within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to KMTC'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 KMTC for all future work; rather it is recommended that Chengxin continues to review and monitor KMTC's performance periodically 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.

6.0 REFERENCES

E-KMTC. Available at: http://www.ekmtc.com/, accessed on March 17th, 2020.

Website of KMTC. Available at: http://www.kmtc.co.kr/company/overview, accessed on March 17th, 2020.

Certificates of KMTC. Available at: http://www.kmtc.co.kr/company/certificate, accessed on March 17th, 2020.

Annual KMTC Diligence Review Records, August 2, 2019.

Standard for Packing of Solid Cyanide, Number GB 19268-2003, issued by the Quality and Technology Supervision and Inspection Administration of the People's Republic of China, 2003

CXWJ-H10-01, Solid Cyanide Workshop Operations Manual, dated January 1st, 2016.

Golder Associates (2018). International Cyanide Management Code Cyanide Supply Chain Audit, Chengxin. Australia Pty Ltd, Global Ocean Supply Chain Amendment, Detailed Audit Report. Report number- 1668932-020-R-Rev1

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1

Golder Associates (2019). International Cyanide Management Code Transportation Verification Audit, Chengxin. Australia Pty Ltd, Transport Recertification, Detailed Audit Report. Report number- 19128557-002-R-Rev0

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx, accessed on March 17th, 2020..

International Maritime Organisation [IMO]. Pollution Preparedness and Response. Available at: http://www.imo.org/en/OurWork/Environment/PollutionResponse/Pages/Default.aspx , accessed on March 17th, 2020.

International Maritime Organisation [IMO]. Member States. Available at: http://www.imo.org/en/About/Membership/Pages/MemberStates.aspx, accessed on March 17th, 2020.

Signature Page

Golder Associates Consulting Ltd.

Hongtao Hu
ICMI Lead Auditor

Mike Woods
Transport Technical Specialist

HH, MW

golder.com

REPORT

Due Diligence for Hapag-Lloyd

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Hapag-Lloyd. This assessment was conducted by ICMI Lead Auditor Hongtao Hu 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. Due to the access restrictions, the due diligence was conducted as a desktop process using information obtained from online resource, experiences, previous consignor 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 regards to Hapag-Lloyd's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF HAPAG-LLOYD 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 6

4.0 CONCLUSION 9

5.0 CLOSING 9

6.0 REFERENCES 9

1.0 INTRODUCTION

This letter provides the results of a due diligence of Hapag-Lloyd, 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 of Hapag-Lloyd, during March 2020 which was conducted by ICMI Lead Auditor Hongtao Hu 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 for Hapag-Lloyd. Hapag-Lloyd is to be included in its Global Marine Supply Chain.

1.2 Scope and method

The scope of this Due Diligence includes the management, interim storage and emergency response in relation to cyanide transported through Hapag-Lloyd.

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 Hapag-Lloyd
- 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 HAPAG-LLOYD

Hapag-Lloyd was founded in 1847. Hapag-Lloyd is a global liner shipping company with 13,000 employees in 392 offices in 129 countries.

Hapag-Lloyd offers a fleet of 231 ships with a total capacity of 1.7 Million TEU, as well as a container stock of approximately 2.6 million TEU. It predominately operates along Transatlantic, Middle East, Latin America and Intra-America routes.

ISO 9001 and 14001 certifications were renewed in 2018 as well as OHSAS 18001 certification.

Hapag-Lloyd has expertise in the area of dangerous goods and has developed specialist software ('Watchdog') that continuously and systematically scans all the bookings placed globally, using intelligently linked criteria, to identify dangerous goods which have been declared incorrectly or which have not been declared at all.

Hapag-Lloyd is a founding member of the Cargo Incident Notification System Network (CINSNET). The network of ten major liner shipping companies accounts for around two-thirds of all global container traffic and allows its members to share information on incidents relating to dangerous goods.

Hapag-Lloyd has more than 80 internationally recognised Dangerous Goods experts worldwide. The employees who deal with dangerous goods, such as captains and cargo officers, receive regular training by Hapag-Lloyd dangerous good officer in line with International Maritime Organisation Dangerous Goods (IMO DG) Code, the German Ordinance on the Transport of Dangerous Goods by Sea (GGVSee) and 49 CFR.

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 theses 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 export of sodium cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 product through larger ports with modern facilities and management systems. The shipping companies provide the correct manifest documentation to the destination port which, in turn, provides the shipping company 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.

Hapag-Lloyd is a carrier service providing international shipping of containers. The container handling (on and off vessels) is predominately undertaken by stevedoring companies at each port.

Basically, an export or international route will include the following:

- Production, packaging and despatch
- Road transportation to port
- International shipping to destination port
- Road transportation to customer.

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

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

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

g) 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?

Hapag-Lloyd transports sodium cyanide by sea to various destination ports. All packaging and transportation appear to be in accordance with the IMO DG Code.

Hapag-Lloyd's operations personnel provide the vessel's Master with emergency information together with the Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded at the port. This documentation is meant to ensure that the adequate information is available in order to identify the correct stowage and separation of dangerous goods.

Hapag-Lloyd has multiple cross checks to verify that products arriving at the laydown areas match those listed on the booking forms and containers loaded onto the vessels match those stipulated on the loading (or stowage) plan.

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

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

Hapag-Lloyd's operations personnel provide the vessel's Master with emergency information together with the Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded at the port.

i) Does the ship comply with the stowage and separation requirements of Part 7 of the DG Code?

Documentation provided includes emergency information, Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded onto the ship at the port. This information then determines the placement and segregation of the container on the vessel.

Based on previous due diligence investigations and accounts from other consigners, it appears that Hapag-Lloyd complies with Part 7 of the IMO DG Code.

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

Hapag-Lloyd's vessels have continuous means of tracking and communication during their voyages.

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

Hapag-Lloyd controls the stowage of hazardous cargo worldwide through their Hapag-Lloyd Link computer system headquartered in Antwerp. This hazardous cargo system is initiated when hazardous cargo is booked into the container booking Hapag- Lloyd Link computer system.

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.

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

All packaging and transportation of sodium cyanide is required to be in accordance with the IMO DG Code.

Chengxin's packaging is labelled in English with global harmonised system - GHS pictograms and UN number identifying the product. In addition, Chengxin's product is packaged into purpose designed and packed as below with two types:

- Solid product into plastic bags and then into metal barrels which are locked and sealed (50 kg).
- Solid product into plastic bags and then into wooden crates which nailed and strapped to form an intermediate bulk container (IBC) (1 tonne or 1.1 tonnes). These are then package and locked in a shipping container.

Chengxin's Standard for Packing of solid cyanide specifies the requirements for packing cyanide for export, including the packaging materials and method for inspecting the packaging. The facility sources its drums and IBCs from a third party that provides compliance certificates with each supply of packaging. The Hebei Entry-Exit Inspection and Quarantine Bureau inspected the cyanide facility's packaging systems for each supply consignment during the audit period (2015-2019) and approved the packaging systems for international transport of the cyanide.

Hapag-Lloyd's operations personnel provide the vessel's Master with emergency information, a Dangerous Goods manifests (including stowage plan) and Packaging Certificates for each container loaded onto the ship at the port. Hapag-Lloyd's Dangerous Goods experts ascertain compliance with statutory requirements.

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

Hapag-Lloyd's operations personnel provide the vessel's Master with emergency Information, a Dangerous Goods manifest (including stowage plan), Packaging Certificates and the Multimodal Dangerous Goods Form for each container loaded onto the ship at the port.

Hapag-Lloyd appears to operate in compliance with the International Safety Management (ISM) Code which provides an international standard for the safe management and operation of ships, and for pollution prevention.

In accordance with the ISM Code, Hapag-Lloyd has a Security Safety policy and management system to ensure safe operation of the ships and protection of the environment in compliance with the relevant international and flag state legislation. This includes procedures for reporting accidents, or to prepare for and respond to emergency situations.

Hapag-Lloyd controls the stowage of hazardous cargo worldwide through their Hapag-Lloyd Link computer system headquartered in Antwerp. This hazardous cargo system is initiated when hazardous cargo is booked into the container booking Hapag- Lloyd Link computer system.

Specialist chemists are available to Hapag-Lloyd to provide advice in the event of an emergency and Hapag-Lloyd is also able to dispatch one of their eight worldwide emergency rescue teams who are experts in handling dangerous cargos.

4.0 CONCLUSION

It was not possible during this due diligence to physically inspected the shipping company, 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 Hapag-Lloyd within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Hapag-Lloyd'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 Hapag-Lloyd for all future work; rather it is recommended that Chengxin continues to review and monitor Hapag-Lloyd's performance periodically 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.

6.0 REFERENCES

Website of Hapag-Lloyd. Available at: https://www.hapag-lloyd.cn/en/home.html, accessed on March 19th, 2020.

History of Hapag-Lloyd. Available at: https://www.hapag-lloyd.cn/en/about-us.html#anchor_24ae92, accessed on March 19th, 2020.

Sustainability Report 2018 of Hapag-Lloyd. Available at: https://www.hapag-lloyd.cn/en/about-us/sustainability/sustainability-report.html, accessed on March 19th, 2020.

Dangerous Goods Management of Hapag-Lloyd. Available at: https://www.hapag-lloyd.cn/en/products/cargo/dg/safety-first.html, accessed on March 19th, 2020.

Annual Hapag Lloyd Due Diligence Review Records, August 2, 2019.

Standard for Packing of Solid Cyanide, Number GB 19268-2003, issued by the Quality and Technology Supervision and Inspection Administration of the People's Republic of China, 2003

CXWJ-H10-01, Solid Cyanide Workshop Operations Manual, dated January 1st, 2016.

Golder Associates (2018). International Cyanide Management Code Cyanide Supply Chain Audit, Chengxin. Australia Pty Ltd, Global Ocean Supply Chain Amendment, Detailed Audit Report. Report number- 1668932-020-R-Rev1

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1

Golder Associates (2019). International Cyanide Management Code Transportation Verification Audit. Chengxin. Australia Pty Ltd, Transport Recertification, Detailed Audit Report. Report number- 19128557-002-R-Rev0

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx , accessed on March 10th, 2020.

International Maritime Organisation [IMO]. Pollution Preparedness and Response. Available at: http://www.imo.org/en/OurWork/Environment/PollutionResponse/Pages/Default.aspx , accessed on March 10th, 2020.

Signature Page

Golder Associates Consulting Ltd.

Hongtao Hu
ICMI Lead Auditor

Mike Woods
Transport Technical Specialist

HH, MW

golder.com

REPORT

Due Diligence for Maersk Shipping

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 A. P. Moller - Maersk (Maersk). This assessment was conducted by ICMI Lead Auditor Hongtao Hu 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. Due to the access restrictions, the due diligence was conducted as a desktop process using information obtained from online resource, experiences, previous consignor 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 regards to the Maersk's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF MAERSK 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 6

4.0 CONCLUSION 9

5.0 CLOSING 9

6.0 REFERENCES 9

1.0 INTRODUCTION

This letter provides the results of a due diligence of Maersk, 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 of Maersk, during March 2020 which was conducted by ICMI Lead Auditor Hongtao Hu 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 for Maersk. Maersk is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

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

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 MAERSK

A.P. Moller - Maersk is an integrated container logistics company with a dedicated team of over 76,000 people, operating in 130 countries. The first Maersk company was established in the United States on 7 July 1919 by ship-owner A.P. Moller.

Maersk, headquartered in Copenhagen, Denmark, operates a fleet of containers vessels with worldwide shipping coverage. The fleet consists of approximately 590 container vessels with the capacity to handle more than three million twenty-foot containers. Maersk operates a container booking and tracking system called the Global Customer Service System (GCSS). The system is also the management tool for handling the dangerous goods cargo for the proper control of the stowage of hazardous cargo.

Maersk requires companies to provide evidence that their product packaging has been approved by government regulators and tested in accordance with International Maritime Organisation (IMO) Dangerous Goods (DG) Code. Maersk maintains the right to refuse cargo if the packaging, container and/or documentation are not acceptable to IMO DG Code requirements.

Maersk's vessels are registered by the Lloyd's Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. Maersk also has current certificates for its vessels under the International Ship and Port Facility Security (ISPS) Code developed by the IMO.

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 theses 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 product through larger ports with modern facilities and management systems. The shipping companies provide the correct manifest documentation to the destination port which, in turn, provides the shipping company 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.

Maersk is a carrier service providing international shipping of containers on a fleet of their container vessels. The container handling (on and off vessels) is predominately undertaken by stevedoring companies at each port.

Basically, an export or international route will include the following:

- Production, packaging and despatch
- Road transportation to port
- International shipping to destination port
- Road transportation to customer.

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

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

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

g) 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?

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

Documentation provided to the vessel Master includes the Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container and the Maersk's GCSS (which records the UN classification (UN 1689), Dangerous Goods Class (6) and that the product is a marine pollutant) ensure that adequate information is available in order to identify the correct stowage and separation of dangerous goods. This information then determines the placement and segregation of the container on the vessel and handling through trans-shipment ports, if applicable.

Maersk has multiple cross checks to verify that products arriving at the laydown areas match those listed on the booking forms and containers loaded onto the vessels match those stipulated on the loading (or stowage) plan.

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

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

Maersk's operations personnel provide the vessel's Master with emergency information together with the Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded at the port.

i) Does the ship comply with the stowage and separation requirements of Part 7 of the DG Code?

Documentation provided includes emergency information, Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded onto the ship at the port. This information then determines the placement and segregation of the container on the vessel.

Based on previous due diligence investigations and accounts from other consigners, it appears that Maersk complies with Part 7 of the IMO DG Code.

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

Maersk's vessels have continuous means of tracking and communication during their voyages.

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

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.

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

All packaging and transportation of sodium cyanide is required to be in accordance with the IMO DG Code.

Chengxin's packaging is labelled in English with global harmonised system GHS pictograms and UN number identifying the product. In addition, Chengxin's product is packaged into purpose designed and packed as below with two types:

- Solid product into plastic bags and then into metal barrels which are locked and sealed (50 kg).
- Solid product into plastic bags and then into wooden crates which nailed and strapped to form an intermediate bulk container (IBC) (1 tonne or 1.1 tonnes). These are then package and locked in a shipping container.

Chengxin's Standard for Packing of solid cyanide specifies the requirements for packing cyanide for export, including the packaging materials and method for inspecting the packaging. The facility sources its drums and IBCs from a third party that provides compliance certificates with each supply of packaging. The Hebei Entry-Exit Inspection and Quarantine Bureau inspected the cyanide facility's packaging systems for each supply consignment during the audit period (2015-2019) and approved the packaging systems for international transport of the cyanide.

Maersk's operations personnel provide the vessel's Master with emergency information, a Dangerous Goods manifests (including stowage plan) and Packaging Certificates for each container loaded onto the ship at the port. Maersk's GCSS (which records the UN classification (UN 1689), Dangerous Goods Class (6) and that the product is a marine pollutant) ensure that adequate information is available in order to identify the correct stowage and separation of dangerous goods. This information then determines the placement and segregation of the container on the vessel and handling through trans-shipment ports, if applicable.

Maersk also operates its own safety management system to achieve safe, efficient operations of all vessels that transport cargo (including owned or chartered vessels).

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

Maersk's operations personnel provide the vessel's Master with emergency Information, a Dangerous Goods manifest (including stowage plan), Packaging Certificates and the Multimodal Dangerous Goods Form for each container loaded onto the ship at the port.

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

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

4.0 CONCLUSION

It was not possible during this due diligence to physically inspected the shipping company, 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 Maersk within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Maersk'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 Maersk for all future work; rather it is recommended that Chengxin continues to review and monitor Maersk's performance periodically 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.

6.0 REFERENCES

Website of Maersk. Available at: https://www.maersk.com.cn, accessed on March 23th, 2020.

Website of Maersk Sustainability Report. Available at: https://www.maersk.com.cn/about/sustainability/reports, accessed on March 23th, 2020.

Annual Maersk Due Diligence Review Records, August 2, 2019.

Standard for Packing of Solid Cyanide, Number GB 19268-2003, issued by the Quality and Technology Supervision and Inspection Administration of the People's Republic of China, 2003

CXWJ-H10-01, Solid Cyanide Workshop Operations Manual, dated January 1st, 2016.

Golder Associates (2018). International Cyanide Management Code Cyanide Supply Chain Audit, Chengxin. Australia Pty Ltd, Global Ocean Supply Chain Amendment, Detailed Audit Report. Report number- 1668932-020-R-Rev1

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1

Golder Associates (2019). International Cyanide Management Code Transportation Verification Audit, Chengxin. Australia Pty Ltd, Transport Recertification, Detailed Audit Report. Report number- 19128557-002-R-Rev0

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx, accessed on March 10th, 2020.

International Maritime Organisation [IMO]. Pollution Preparedness and Response. Available at: http://www.imo.org/en/OurWork/Environment/PollutionResponse/Pages/Default.aspx , accessed on March 10th, 2020.

Signature Page

Golder Associates Consulting Ltd.

Hongtao Hu
ICMI Lead Auditor

Mike Woods
Transport Technical Specialist

HH, MW

golder.com

REPORT

Due Diligence for Mediterranean Shipping Company

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Mediterranean Shipping Company (MSC). This assessment was conducted by ICMI Lead Auditor Hongtao Hu 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. Due to the access restrictions, the due diligence was conducted as a desktop process using information obtained from online resource, experiences, previous consignor 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 regards to MSC's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF MSC 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 5

4.0 CONCLUSION 9

5.0 CLOSING 9

6.0 REFERENCES 9

1.0 INTRODUCTION

This letter provides the results of a due diligence of MSC, 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 of MSC, during March 2020. This assessment was conducted by ICMI Lead Auditor Hongtao Hu 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 for MSC. MSC is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

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

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 MSC
- 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 MSC

MSC is a privately-owned organisation and was founded in 1970. It is headquartered in Geneva, Switzerland and has a fleet of 520 vessels and more than 70,000 staff in 155 countries. MSC services 500 ports on 200 trade routes, carrying some 21 million TEU (twenty-foot equivalent units) annually.

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. MSC has also obtained the following certificates:

- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environmental Management
- ISO 50001: 2011 Energy Management Systems
- ISO 28000: Security Management Systems for Supply Chain
- OHSAS 18001: Occupational Health & Safety
- DNV GL Excellence 5 Stars Certification (2018)

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 theses 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 takes 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 product through larger ports with modern facilities and management systems. The shipping companies provide the correct manifest documentation to the destination port which, in turn, provides the shipping company 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.

MSC is a carrier service providing international shipping of containers. The container handling (on and off vessels) is predominately undertaken by stevedoring companies at each port.

Basically, an export or international route will include the following:

- Production, packaging and despatch
- Road transportation to port

- International shipping to destination port
- Road transportation to customer.

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

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

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

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

g) 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?

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

MSC has dangerous goods cargo management centres that control the stowage of hazardous cargo worldwide through their MSC Link computer system. This hazardous cargo system is aligned with IMO DG Code requirements. MSC's Intelligent Planning Exchange system (IPX) stowage management system plans and stows dangerous cargo automatically to eliminate the potential for human error.

MSC has cross checks to verify that products arriving at the laydown areas match those provided on the delivery documentation and that containers being loaded onto the vessels match those stipulated on the loading (or stowage) plan.

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

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

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

i) Does the ship comply with the stowage and separation requirements of Part 7 of the DG Code?

Documentation provided includes emergency information, Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded onto the ship at the port. This information then determines the placement and segregation of the container on the vessel.

Based on previous due diligence investigations and accounts from other consigners, it appears that MSC complies with Part 7 of the IMO DG Code.

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

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

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

MSC has dangerous goods cargo management centres that control the stowage of hazardous cargo worldwide through their MSC Link computer system. This hazardous cargo system is aligned with IMO DG Code requirements. MSC's IPX stowage management system plans and stows dangerous cargo automatically to eliminate the potential for human error. MSC vessels are registered by the Lloyd's Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories.

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

All packaging and transportation of sodium cyanide is required to be in accordance with the IMO DG Code.

Chengxin's packaging is labelled in English with global harmonised system GHS pictograms and UN number identifying the product. In addition, Chengxin's product is packaged into purpose designed and packed as below with two types:

- Solid product into plastic bags and then into metal barrels which are locked and sealed (50 kg).
- Solid product into plastic bags and then into wooden crates which nailed and strapped to form an intermediate bulk container (IBC) (1 tonne or 1.1 tonnes). These are then package and locked in a shipping container.

Chengxin's Standard for Packing of solid cyanide specifies the requirements for packing cyanide for export, including the packaging materials and method for inspecting the packaging. The facility sources its drums and IBCs from a third party that provides compliance certificates with each supply of packaging. The Hebei Entry-Exit Inspection and Quarantine Bureau inspected the cyanide facility's packaging systems for each supply consignment during the audit period (2015-2019) and approved the packaging systems for international transport of the cyanide.

MSC's operations personnel provide the vessel's Master with emergency information, a Dangerous Goods manifest (including stowage plan) and Packaging Certificates for container loaded onto the ship at the port.

MSC has dangerous goods cargo management centres that control the stowage of hazardous cargo worldwide through their MSC Link computer system. This hazardous cargo system is aligned with IMO DG Code requirements. MSC's IPX stowage management system plans and stows dangerous cargo automatically to eliminate the potential for human error.

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

MSC's operations personnel provide the vessel's Master with emergency information, Dangerous Goods manifest (including stowage plan), Packaging Certificates and the Multimodal Dangerous Goods Form for each hazardous cargo transport units loaded onto the ship at the port.

MSC has dangerous goods cargo management centres that control the stowage of hazardous cargo worldwide through their MSC Link computer system. This hazardous cargo system is aligned with IMO DG Code

requirements. MSC's IPX stowage management system plans and stows dangerous cargo automatically to eliminate the potential for human error.

4.0 CONCLUSION

It was not possible during this due diligence to physically inspected the shipping company, 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 MSC within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to MSC'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 MSC for all future work; rather it is recommended that Chengxin continues to review and monitor MSC's performance periodically 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.

6.0 REFERENCES

MSC About Us. Available at: https://www.msc.com/aus/about-us, accessed March 24th, 2020.

MSC Sustainability Report. Available at: https://www.msc.com/aus/sustainability, accessed March 24th, 2020.

Annual MSC Due Diligence Review Records, August 2, 2019.

Standard for Packing of Solid Cyanide, Number GB 19268-2003, issued by the Quality and Technology Supervision and Inspection Administration of the People's Republic of China, 2003

CXWJ-H10-01, Solid Cyanide Workshop Operations Manual, dated January 1st, 2016.

Golder Associates (2018). International Cyanide Management Code Cyanide Supply Chain Audit, Chengxin. Australia Pty Ltd, Global Ocean Supply Chain Amendment, Detailed Audit Report. Report number- 1668932-020-R-Rev1

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1

Golder Associates (2019). International Cyanide Management Code Transportation Verification Audit, Chengxin. Australia Pty Ltd, Transport Recertification, Detailed Audit Report. Report number- 19128557-002-R-Rev0

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx, accessed on March 10th, 2020.

International Maritime Organisation [IMO]. Pollution Preparedness and Response. Available at: http://www.imo.org/en/OurWork/Environment/PollutionResponse/Pages/Default.aspx , accessed on March 10th, 2020.

Signature Page

Golder Associates Consulting Ltd.

Hongtao Hu
ICMI Lead Auditor

Mike Woods
Transport Technical Specialist

HH, MW

golder.com

REPORT

Due Diligence for Swire Shipping

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Swire Shipping Group (Swire Shipping). This assessment was conducted by ICMI Lead Auditor Hongtao Hu 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. Due to the access restrictions, the due diligence was conducted as a desktop process using information obtained from online resource, experiences, previous consignor 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 regards to the Swire Shipping's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF SWIRE SHIPPING 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 6

4.0 CONCLUSION 9

5.0 CLOSING 9

6.0 REFERENCES 9

1.0 INTRODUCTION

This letter provides the results of a due diligence of Swire Shipping, 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 of Swire Shipping, during March 2020. This assessment was conducted by ICMI Lead Auditor Hongtao Hu 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 for Swire Shipping. Swire Shipping is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

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

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 Swire Shipping
- 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 SWIRE SHIPPING

Swire Shipping is the brand name for all liner shipping services operated by The China Navigation Company Pte Ltd. Swire has provided regional, multipurpose shipping services since 1883 when The China Navigation Company established liner services in Australasia. From their traditional trading area (the Asia – South Pacific

region), they have expanded to offer shipping links between over 100 ports in Asia, the Pacific Islands, Australia, New Zealand, North America, Europe the Middle East and the Indian Sub-Continent.

The China Navigation Company Pte Ltd is wholly owned by The China Navigation Company Ltd, a London registered company that oversees the marine operations of its parent company, John Swire and Sons.

Swire Shipping has a safety target of Zero Harm which is supported by a safety culture developed through training, learning and transparent reporting.

Swire Shipping has established a Responsible Cargo Carriage Policy to ensure cargo operations are performed in a safe and responsible manner. For Swire Shipping, cargo handling/stowage initiatives include:

- The design and implementation of cargo care policies and procedures for the safe handling and stowage of hazardous, reefer and special lift cargoes.
- Ongoing training and education of stakeholders to ensure compliance with the international Maritime Organisation (IMO) Dangerous Goods (DG) Code for hazardous cargo shipments at all times.
- Ensuring that cargo operations are safely and efficiently carried out by engaging stevedores and cargo lashing providers that meet our strict safety requirements and share our values and culture for cargo safety.
- Ensuring that all our lifting and securing equipment is certified and of the highest standard.
- Conducting risk assessments prior to lifting special cargo including heavy lifts, over-dimensional units, out-of-gauge pieces and boats; and ensuring that all persons involved in the job are aware of the hazards and take necessary measures to reduce exposure to these risks.
- Proactively identifying, mitigating and/or eliminating the main operating risks in relation to cargo handling, lifting and stowage that may lead to accidents and injuries.

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 theses 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 takes into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 product through larger ports with modern facilities and management systems. The shipping companies provide the correct manifest documentation to the

destination port which, in turn, provides the shipping company 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.

Swire Shipping is a carrier service providing international shipping of containers. The container handling (on and off vessels) is predominately undertaken by stevedoring companies at each port.

Basically, an export or international route will include the following:

- Production, packaging and despatch
- Road transportation to port
- International shipping to destination port
- Road transportation to customer.

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

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

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

g) 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?

Swire Shipping transports sodium cyanide by sea to various destination ports. All packaging and transportation appear to be in accordance with the IMO DG Code.

Swire Shipping's operations personnel provide the vessel's Master with emergency information together with the Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded at the port. This documentation is meant to ensure that the adequate information is available in order to identify the correct stowage and separation of dangerous goods.

Swire has cross checks to verify that products arriving at the laydown areas match those provided on the delivery documentation and that containers being loaded onto the vessels match those stipulated on the loading (or stowage) plan.

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

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

Swire Shipping's operations personnel provide the vessel's Master with emergency information together with the Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded at the port.

i) Does the ship comply with the stowage and separation requirements of Part 7 of the DG Code?

Documentation provided includes emergency information, Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each container loaded onto the ship at the port. This information then determines the placement and segregation of the container on the vessel.

Based on previous due diligence investigations and accounts from other consigners, it appears that Swire Shipping complies with Part 7 of the IMO DG Code.

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

Swire Shipping vessels have continuous means of tracking and communication during their voyages.

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

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

All packaging and transportation of sodium cyanide is required to be in accordance with the IMO DG Code.

Chengxin's packaging is labelled in English with global harmonised system GHS pictograms and UN number identifying the product. In addition, Chengxin's product is packaged into purpose designed and packed as below with two types:

- Solid product into plastic bags and then into metal barrels which are locked and sealed (50 kg).
- Solid product into plastic bags and then into wooden crates which nailed and strapped to form an intermediate bulk container (IBC) (1 tonne or 1.1 tonnes). These are then package and locked in a shipping container.

Chengxin's Standard for Packing of solid cyanide specifies the requirements for packing cyanide for export, including the packaging materials and method for inspecting the packaging. The facility sources its drums and IBCs from a third party that provides compliance certificates with each supply of packaging. The Hebei Entry-Exit Inspection and Quarantine Bureau inspected the cyanide facility's packaging systems for each supply consignment during the audit period (2015-2019) and approved the packaging systems for international transport of the cyanide.

Swire Shipping's operations personnel provide the vessel's Master with emergency information, a Dangerous Goods manifest (including stowage plan) and Packaging Certificates for container loaded onto the ship at the port.

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

Swire Shipping's operations personnel provide the vessel's Master with emergency information, Dangerous Goods manifest (including stowage plan), Packaging Certificates and the Multimodal Dangerous Goods Form for each hazardous cargo transport units loaded onto the ship at the port.

Swire Shipping appears to operate in compliance with the International Safety Management (ISM) Code which provides an international standard for the safe management and operation of ships, and for pollution prevention.

In accordance with the ISM Code, Swire Shipping has a Security Safety policy and management system to ensure safe operation of the ships and protection of the environment in compliance with the relevant international and flag state legislation. This includes procedures for reporting accidents, or to prepare for and respond to emergency situations.

4.0 CONCLUSION

It was not possible during this due diligence to physically inspected the shipping company, 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 Swire Shipping within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Swire Shipping'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 Swire Shipping for all future work; rather it is recommended that Chengxin continues to review and monitor Swire Shipping's performance periodically 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.

6.0 REFERENCES

Website of Swire Shipping. Available at: https://www.swireshipping.com/, accessed on March 16th, 2020.

Supplier Code of Conduct. Available at: https://www.swirecnco.com/CNCoWeb/media/Departments/SD/CNCo-Supplier-Code-Of-Conduct-Feb2016.pdf, accessed on March 16th, 2020.

Safety Culture of Swire Shipping. Available at: https://www.swirecnco.com/safety, accessed on March 16th, 2020.

Responsible Cargo Carriage Policy. Available at: https://www.swirecnco.com/CNCoWeb/media/Departments/SD/Responsible-Cargo-Carriage-Policy-Rev-4_April-2019.pdf, accessed on March 16th, 2020.

Standard for Packing of Solid Cyanide, Number GB 19268-2003, issued by the Quality and Technology Supervision and Inspection Administration of the People's Republic of China, 2003

CXWJ-H10-01, Solid Cyanide Workshop Operations Manual, dated January 1st, 2016.

Golder Associates (2018). International Cyanide Management Code Cyanide Supply Chain Audit, Chengxin. Australia Pty Ltd, Global Ocean Supply Chain Amendment, Detailed Audit Report. Report number- 1668932-020-R-Rev1

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1

Golder Associates (2019). International Cyanide Management Code Transportation Verification Audit, Chengxin. Australia Pty Ltd, Transport Recertification, Detailed Audit Report. Report number- 19128557-002-R-Rev0

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at:

http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx , accessed on March 10th, 2020.

International Maritime Organisation [IMO]. Pollution Preparedness and Response. Available at: http://www.imo.org/en/OurWork/Environment/PollutionResponse/Pages/Default.aspx , accessed on March 10th, 2020.

Signature Page

Golder Associates Consulting Ltd.

Hongtao Hu
ICMI Lead Auditor

Mike Woods
Transport Technical Specialist

HH, MW

golder.com

REPORT

Due Diligence for Hamburg Süd Group

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.

Submitted by:

Golder

Suite 1201, 555 Building 555 Nanjing Road (W) Shanghai 200041
People's Republic of China

+86 21 6258 5522

208515006Task01

March 30, 2020

Distribution List

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 Hamburg Süd Group (Hamburg Süd). This assessment was conducted by ICMI Lead Auditor Hongtao Hu 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. Due to the access restrictions, the due diligence was conducted as a desktop process using information obtained from online resource, experiences, previous consignor 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 regards to the Hamburg Süd's management of solid sodium cyanide product.

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

Table of Contents

1.0 INTRODUCTION 5

1.1 Terms of Reference 5

1.2 Scope and method 5

2.0 OVERVIEW OF HAMBURG SÜD 5

3.0 ICMC TRANSPORT VERIFICATION PROTOCOL ASSESSMENT 6

4.0 CONCLUSION 8

5.0 CLOSING 9

6.0 REFERENCES 9

1.0 INTRODUCTION

This letter provides the results of a due diligence of Hamburg Süd, 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 of Hamburg Süd, during March 2020. This assessment was conducted by ICMI Lead Auditor Hongtao Hu 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 for Hamburg Süd. Hamburg Süd is to be included in its Global Ocean Supply Chain.

1.2 Scope and method

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

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 Hamburg Süd
- 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 HAMBURG SÜD

Hamburg Süd was founded as a joint-stock company by representatives of eleven Hamburg merchant houses in 1871 and is owned by A.P. Moller – Maersk since December 1, 2017. Hamburg Süd has 177 ships in service around the globe and a workforce of approximately 6,300 employees in over 250 offices worldwide. The shipments mainly included: dry cargo, reefer cargo, special cargo and dangerous goods.

Hamburg Süd inspects transportation requests for dangerous goods, to ascertain compliance with special safety regulations for transporting dangerous goods. The Company's regional dangerous goods experts plan and follow every transportation from acceptance of the order until the cargo reaches its destination. On board, trained employees are responsible for cargo is stowage and security according to the regulations.

Hamburg Süd has established an integrated management system addressing quality, environmental sustainability and the safety of people, ships and cargo. Hamburg Süd has been certified in accordance with the ISO 9001 quality standard since 1996. The International Safety Management (ISM) Code for safe ship operation was introduced in the same year. This was followed in 2000 with certification of environmental management system in accordance with ISO 14001. Hamburg Süd also publishes its Sustainability Report in accordance with the Global Reporting Initiative (GRI) G4 Standard Disclosures (Core).

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 theses 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

International sales and exports of cyanide take into consideration the ports and their extended infrastructure available to service the intended target area. Chengxin operates 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 transports Chengxin's 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.

Hamburg Süd is a carrier service providing international shipping of containers on a fleet of its container vessels. Containers holding cyanide are placed a marine carrier service and all actual handling of containers (on and off vessels) is predominately undertaken by stevedoring companies at each port.

Basically, an export or international route will include the following:

- Production, packaging and despatch
- Road transportation to port
- International shipping to destination port
- Road transportation to customer.

In some instances, sodium cyanide shipments are unloaded at terminals en-route. This is known as trans-shipping and involves a temporary set down within a port facility before loading onto another vessel for continuation of the delivery. It is at the discretion of Hamburg Süd to determine when and where this occurs. Hamburg Süd appears to conduct itself in accordance with the international Maritime Organisation (IMO) Dangerous Goods (DG) Code and in a professional manner, which extends to the selection of terminals used by Hamburg Süd for trans-shipping.

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

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

g) 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?

Hamburg Süd transports cyanide by sea to various destination ports. All packaging and transportation appear to be in accordance with the IMO DG Code.

Hamburg Süd's operations personnel provide the vessel's Master with Emergency Information, Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each hazardous cargo transport units to be loaded at the port. This documentation provides information to identify the correct stowage and separation of dangerous goods.

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

Hamburg Süd's operations personnel provide the vessel's Master with Emergency Information, Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each hazardous cargo transport units to be loaded at the port.

i) Does the ship comply with the stowage and separation requirements of Part 7 of the DG Code?

Documentation provided includes Emergency Information, Dangerous Goods manifest (including stowage plan) and Packaging Certificates for each hazardous cargo transport units loaded onto the ship at the port. This information then determines the placement and segregation of the container on the vessel.

Based on previous due diligence investigations and accounts from other consigners, it appears that Hamburg Süd complies with Part 7 of the IMO DG Code.

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

Hamburg Süd vessels have continuous means of tracking and communication during its voyages.

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).

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

All packaging and transportation of sodium cyanide is required to be in accordance with the IMO DG Code.

Chengxin's packaging is labelled in English using global harmonised system (GHS) pictograms and the UN number identifying the product. Chengxin's product is packaged into purpose designed packages:

- Solid product into plastic bags and then into metal barrels which are locked and sealed (50 kg).
- Solid product into plastic bags and then into wooden crates which nailed and strapped to form an intermediate bulk container (IBC) (1 tonne or 1.1 tonnes). These are then package and locked in a shipping container.

The producer's (Hebei) Standard for Packing of Solid Cyanide specifies the requirements for packing cyanide for export, including the packaging materials and method for inspecting the packaging. The facility sources its drums and IBCs from a third party that supply compliance certificates with each supply of the packaging. The Hebei Entry-Exit Inspection and Quarantine Bureau inspected the cyanide facility's packaging systems for each supply consignment during the audit period (2015-2019) and approved the packaging systems for international transport of the cyanide

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

Hamburg Süd also operates its own safety promotion system. Using this system, Hamburg Süd aims to achieve safe, efficient operations of all vessels that transport cargo (including owned or chartered vessels). The system has been developed to meet international regulations.

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

Hamburg Süd's operations personnel provide the vessel's Master with Emergency Information, Dangerous Goods manifest (including stowage plan), Packaging Certificates and the Multimodal Dangerous Goods Form for each hazardous cargo transport units loaded onto the ship at the port.

Hamburg Süd operates in compliance with the International Safety Management (ISM) Code which provides an international standard for the safe management and operation of ships, and for pollution prevention, which Hamburg and its vessels have duly complied with.

In accordance with the ISM Code, Hamburg Süd has developed, implements and maintains a Security Safety policy and management system to ensure safe operation of the ships and protection of the environment in compliance with the relevant international and flag state legislation. This includes procedures for reporting accidents, or to prepare for and respond to emergency situations.

4.0 CONCLUSION

It was not possible during this due diligence to physically inspected the shipping company, 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 Hamburg Süd within the constraints of access and limited influence, this due diligence did not find significant of concerns with regards to Hamburg Süd'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 Hamburg Süd for all future work; rather it is recommended that Chengxin continues to review and monitor Hamburg Süd's performance periodically 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.

6.0 REFERENCES

Website of Hamburg Sud. Available at: https://www.hamburgsud-line.com/liner/en/liner_services/index.html, accessed on March 10th, 2020.

Safety, Environmental and Quality Policy of Hamburg Süd. Available at: https://www.hamburgsud-line.com/liner/media/hamburg_sud_liner_shipping/company_3/company/about_us/management_systems/171127_HS_SecurityEnviromentQualityPolicy_ENGLISH.pdf, accessed on March 10th, 2020.

Certificate ISO 9001:2015 / ISO 14001:2015 of Hamburg Süd. Available at: https://www.hamburgsud-line.com/liner/media/sonstiges/starting_page_3/certificates_general/ISO_Certificate.pdf, accessed on March 10th, 2020.

AEO Certificate: https://www.hamburgsud-line.com/liner/media/sonstiges/starting_page_3/certificates_general/AEO_Zertifikat_C_3.pdf, accessed on March 10th, 2020.

Verification Statement DNV-GL: https://www.hamburgsud-line.com/liner/media/sonstiges/starting_page_3/certificates_general/Verification_Statement_Emission_Data_2017_CCWG.pdf, accessed on March 10th, 2020

Standard for Packing of Solid Cyanide, Number GB 19268-2003, issued by the Quality and Technology Supervision and Inspection Administration of the People's Republic of China, 2003

CXWJ-H10-01, Solid Cyanide Workshop Operations Manual, dated January 1st, 2016.

Golder Associates (2018). International Cyanide Management Code Cyanide Supply Chain Audit, Chengxin. Australia Pty Ltd, Global Ocean Supply Chain Amendment, Detailed Audit Report. Report number- 1668932-020-R-Rev1

Golder Associates (2019). International Cyanide Management Code Production Verification Audit, Chengxin. Australia Pty Ltd, Production Recertification, Detailed Audit Report. Report number- 1657269- 012-R-Rev1

Golder Associates (2019). International Cyanide Management Code Transportation Verification Audit. Chengxin. Australia Pty Ltd, Transport Recertification, Detailed Audit Report. Report number- 19128557-002-R-Rev0

International Maritime Organisation [IMO]. Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide. Available at: http://www.imo.org/en/OurWork/Safety/Cargoes/DangerousGoods/Pages/EmS-Guide.aspx , accessed on March 10th, 2020.

International Maritime Organisation [IMO]. Pollution Preparedness and Response. Available at: http://www.imo.org/en/OurWork/Environment/PollutionResponse/Pages/Default.aspx , accessed on March 10th, 2020.

Signature Page

Golder Associates Consulting Ltd.

Hongtao Hu
ICMI Lead Auditor

Mike Woods
Transport Technical Specialist

HH, MW

golder.com

golder.com