CUSA SAC
International Cyanide Management Code
Summary Certification Audit Report

CUSA SAC Certification Audit of Cyanide Supply Chain including transportation from the Korean cyanide production facility to the Port of Pusan – Korea, ocean transport, unloading at the Port of Callao – Perú, transport to the CUSA SAC warehouse and transport to the mine sites.

Submitted to:
The International Cyanide Management Institute
1400 I Street, NW – Suite 550
Washington, DC 20005
USA
# CUSA Supply Chain

## Summary

### Company Summary

Company Names & Contact Information

| Name and location of Supply Chain Consignor: | CUSA S.A.C.  
Main office: Av. de la Floresta 497 Of 303 - 304, San Borja  
Email: cusa@cusa-chem.com  
Phone: (511) 618 5600  
Warehouse: Calle 2 - (Sec.9 Altura KM 9.7 Av. Néstor Gambetta) - Ex Fundo Oquendo – Callao, Lima, Perú |
| --- | --- |
| Name and contact information for CUSA: | Kiyomi Zuiko  
Phone: (511) 618 5600 Internal: 2016  
kzuiko@cusa-chem.com |
| Name of Transporter included in this Supply Chain: | • SAM IK Logistics - Transport from cyanide manufacturing Ulsan plant Tong Suh Petrochemical to Pusan Port in Korea, to Korea Rail terminal and to Port of Busan - Transport company and rail movements have been certified since 2010 and were most recently certified in December 2013.  
• Chemfield International Co. Ltd. – Korean Broker / 3rd-Party Logistics Provider  
• Port of Pusan / Pusan Newport Co., Ltd. – Korea: Cyanide storage and shipment activities.  
• Hamburg Süd – Maritime transport of cyanide from Port of Busan to Port of Callao.  
• Port of Callao / DP World - Unloading of ship and loading of truck and interim storage at Port of Callao – Lima, Perú.  
• Tecnicargas - Truck transport from Port of Callao to CUSA warehouse. Transport company certified in the ICMC.  
• CUSA – Consignor. Warehouse unloading truck, storing cyanide, no opening of boxes or drums, loading truck. Warehouse certified in the ICMC.  
• Edewit – Truck transport from CUSA warehouse to mines. Transport company certified in the ICMC |
### Names and contact information for Transporters:

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Address</th>
<th>Contact Person</th>
<th>Phone Number</th>
<th>Fax Number</th>
<th>Email Address</th>
</tr>
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<tbody>
<tr>
<td>SAM IK Logistics Co, Ltd</td>
<td>303, Jangsaengpo-ro, Nam-gu, Ulsan, Korea</td>
<td>Jea Min, Son</td>
<td>82-52-268-1874</td>
<td>82-52-268-1844</td>
<td><a href="mailto:oscar87@hanmail.net">oscar87@hanmail.net</a></td>
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<tr>
<td>Chemfield International Co, Ltd.</td>
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<td></td>
<td></td>
<td></td>
<td><a href="mailto:ruhama@chemfield.co.kr">ruhama@chemfield.co.kr</a></td>
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<tr>
<td>Pusan Newport Co., Ltd. (Korean Port)</td>
<td>372, Sinhangnam-ro, Gangseo-gu, Busan, Korea</td>
<td>Jae Hyun, Lee</td>
<td>82-51-601-8131</td>
<td>82-51-601-8130</td>
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<tr>
<td>Hamburg Süd Korea Limited (CCNI)</td>
<td>E-room Center Building 7F, 22, Euisadang-daero,</td>
<td>Ki Bong, Lee</td>
<td>82-2-785-8302</td>
<td>82-51-601-8131</td>
<td><a href="mailto:Ki-Bong.Lee@ccni-line.com">Ki-Bong.Lee@ccni-line.com</a></td>
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<tr>
<td>Tecnicargas</td>
<td>Avenida Elmer Faucett 2000, Callao, Lima – Perú.</td>
<td>Miguel Maceda</td>
<td>511-613-6100</td>
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Supply Chain Overview

The CUSA SAC (CUSA) company, with headquarters located in Lima, Perú maintains a sodium cyanide supply chain that is compliant with the requirements of the International Cyanide Management Code (ICMC).

The Supply Chain includes transport of cyanide from the Tong Suh Petrochemical Company sodium cyanide production plant in Ulsan, South Korea to the Port of Pusan by SAM IK Logistics Company, ocean transport to the Port of Callao in Perú, and road transportation to the CUSA warehouse in Lima, Perú by Tecnicargas, and to gold mines in Perú by Edewit.

a. Transport of cyanide from ICMC-certified Tong Suh Petrochemicals (Tong Suh) production plant at Ulsan (first certified in 2008, most recently certified in March 2014), using the SAM IK Logistics (SAM IK) trucking company that has been ICMC certified since 2010 and was most recently re-certified in December 2013.
b. Shipment of cyanide from the Port of Pusan – Korea (operated by Pusan Newport Co., Ltd.).
c. Ocean transport of cyanide using Hamburg Süd (this operation was formerly named CCNI).
d. Receipt of cyanide at the Port of Callao, Lima by DP World Callao (operated by DP World).
e. Transportation from the Port of Callao to CUSA warehouse using ICMC-certified Tecnicargas trucking company (certified in November 2013).
f. Storage and distribution of sodium cyanide at the ICMC-certified CUSA warehouse (certified in May 2014).
g. Transportation from CUSA warehouse to mining clients using Edewit, an ICMC-certified trucking company (certified in April 2014).

CUSA maintains a certified cyanide warehouse and headquarter offices in Lima, Perú. The company has been in operation for 48 years and has been serving the mining community since 2002. Sodium cyanide is shipped from Korea in 1 ton wooden boxes and 50 kg drums in 20-foot sea containers that are mounted on truck trailers (chassis). The shipments in Korea are managed by CUSA’s agent Chemfield Int’l Co. Ltd. Chemfield was audited during this process and manages all aspects of the Korean land transport on CUSA’s behalf.

CUSA maintains procedures to select carriers and closely monitors all aspects of ICMC compliance of its supply chain. CUSA maintains a formally documented policy that only ICMC-certified transportation partners will be used for cyanide shipments. CUSA employees are in attendance during all deliveries to the warehouse and to mine sites. CUSA security guards confirm
that drivers are fit for duty. CUSA personnel confirmed that transport equipment is fit for service prior to each delivery and that shipments are tracked continuously. CUSA personnel perform all functions related to product unloading and emergency response in the event of an unplanned event.

In Korea, CUSA and its agent Chemfield jointly track shipments. Commissioned by CUSA, MSS performed on-site due diligence reviews of the Pusan Port operations (Pusan Newport Co., Ltd.) in Korea, Hamburg Süd ocean transport operations, and of the Port of Callao (DP World) operations, to ensure that shipments are made safely and in accordance with accepted hazardous material shipment regulations in Korea and in Perú.

The Tecnicargas truck transport company transports the cyanide from the port of Callao to the CUSA warehouse. Transportation from the warehouse to mining clients is done by Edewit, a truck transportation company. Tecnicargas and Edewit maintain tractors and trailers. Route risk assessments are performed by Tecnicargas and Edewit. Each transporter escorts the shipments. Unloading and loading activities are performed by CUSA employees at the warehouse and by the mine personnel at the mine. Escorts provide immediate emergency response support, as necessary. CUSA maintains all necessary emergency response equipment in case there is an on-site emergency at the warehouse. In the event that there is a transport emergency, it would be managed by the transport company.

**Audit Implementation and Conclusions**

The audit was conducted through a review of procedures and records, and interviews with the CUSA Operations Manager, Senior Management, EHS Coordinator, Security Guards, Tecnicargas Escort, Edewit EHS Coordinator, DP World Operations Manager, EHS Manager and Commercial Advisor, Deputy General Manager, Chemfield international Co., Ltd., and Port of Busan and Hamburg Süd (CCNI) personnel. The auditor used the ICMI Cyanide Transportation Protocol to evaluate International Cyanide Management Code (ICMC) compliance. The CUSA warehouse, CUSA offices, Port of Busan, the Port of Callao, and the office of Hamburg Süd were visited during this audit and the related due diligence activities.

The audit was based on a sampling of information and therefore deficiencies may exist which have not been identified. The due diligence reviews and the on-site portions of the audit were conducted between October 10 and December 22, 2015. The audit was performed by an independent third-party auditor who was pre-approved by the ICMI as a Lead Auditor for all types of International Cyanide Management Code (ICMC) audits and as a technical expert for ICMC audits of cyanide transportation, production plants and mining operations. All supply chain components noted above were included in this ICMC Certification Audit. Each organization noted in this report was found to be in FULL COMPLIANCE with ICMC requirements.
CUSA Supply Chain Certification Audit - Auditor’s finding and attestation

Cyanide management practices for the CUSA Supply Chain were evaluated for ICMC compliance using the *ICMI Cyanide Transportation Verification Protocol*. CUSA internal Standards, Policies, Practices, and Procedures regarding the management of the cyanide and overall Supply Chain management were reviewed.

The results of the certification audit indicate that CUSA and all portions of its Supply Chain are in **FULL COMPLIANCE** with International Cyanide Management Code requirements.

No cyanide spills or exposure incidents have occurred in this supply chain.
Auditor’s Finding

All CUSA Sodium Cyanide Supply Chain management practices, CUSA warehouse operations, and truck delivery operations using certified trucking companies (Tecnicargas and Edewit) were found to be in FULL COMPLIANCE with the requirements of the International Cyanide Management Code according to the ICMI Cyanide Production and Transportation Verification Protocols. All personnel were prepared for the audit. The audit team found that the overall level of preparedness and understanding of ICMC requirements was good.

The CUSA Sodium Cyanide Supply Chain is in full compliance with the ICMI International Cyanide Management Code.

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<tr>
<th>Audit Company:</th>
<th>MSS Code Certification Service</th>
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<th>Lead / Technical Auditor:</th>
<th>Bruno Pizzorni</th>
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<td>E-mail:</td>
<td><a href="mailto:CodeAudits@mss-team.com">CodeAudits@mss-team.com</a></td>
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<tr>
<td></td>
<td>Pusan Port (Korea): October 10, 2015</td>
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<td>Hamburg Süd Korea Limited (CCNI): October 10, 2015</td>
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<td></td>
<td>CUSA, Tecnicargas, and Edewit operations in Lima, Perú: October 28-29 and December 22, 2015</td>
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<td>Port of Callao (Perú): December 22, 2015</td>
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I attest that I meet the criteria for knowledge, experience and conflict of interest for Code Certification 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 the Audit Reports accurately describe the findings of the certification audit. I further attest that the certification audit was conducted in a professional manner in accordance with the International Cyanide Management Code Verification Protocol for Cyanide Transportation Operations and using standard and accepted practices for health, safety and environmental audits.

CUSA Sodium Cyanide Supply Chain

Name of Operation

Signature of Lead Auditor

March 1, 2016

Date

CUSA Supply Chain

Name of Supply Chain

Signature of Lead Auditor

March 1, 2016

www.mss-team.com

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Summary Audit Report

1. TRANSPORT: Transport cyanide in a manner that minimizes the potential for accidents and releases.

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

☑ in full compliance with

☐ in substantial compliance with Transport Practice 1.1

☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

CUSA as the cyanide consigner, requires that each transporter implement route selection procedures for routes that minimizes the potential for accidents and releases and the potential impacts of accidents and releases. The responsibilities of each transportation company involved in this supply chain are described in the CUSA Supply Chain Description document. CUSA, as the Consignor, has overall accountability for the supply chain route planning, but individual trucking companies are responsible for the road portion of the route planning.

The CUSA Supply Chain Description document was reviewed and CUSA, Tecnicargas, and Edewit personnel were interviewed. Leadership understanding of Consignor ICMC responsibilities was excellent. All CUSA personnel demonstrated a high level of commitment to ensuring that cyanide shipments are made in compliance with ICMC requirements.

Route analyses documents were reviewed from the Edewit company. Route evaluations were available for mine destinations from the CUSA warehouse. These route analyses considered all ICMC criteria during the determination of the routes. CUSA collaborates closely with its transporter, Edewit, to ensure that all new routes are formally evaluated for risk against ICMC risk criteria before delivery to a mine can commence. Tecnicargas route evaluations for shipments from the port to the warehouse were also sampled during the audit and were found to be compliant with ICMC requirements. SAM Logistics route planning activities were audited by an ICMC auditor in 2013 and were found to be compliant.

Interviews were conducted to confirm that before CUSA initially qualifies a new customer for sodium cyanide, that they follow a standard practice to determine that the cyanide can be safely
delivered to the customer mine site. CUSA does not control the routing of the trucking companies; however, they do utilize only ICMC-certified trucking companies that have been found to be compliant with all ICMC requirements. The risk evaluations associated with this supply chain focus primarily on the selection of routes to the mine sites to ensure that safety and security standards are acceptable. Trucking companies are selected based on being certified in the ICMC, their ability to deliver cyanide safely and on their qualifications for transporting dangerous goods according to local regulations requirements.

CUSA plans the Korean transportation activities in close collaboration with a local transportation broker. The broker, Chemfield International, was included in the due diligence and audit activities. Confirmation was made that Korean road shipments are performed only by ICMC-certified trucking companies and that ocean transport is achieved using Hamburg Süd, an ocean carrier that has undergone multiple ICMC due diligence evaluations since 2007.

The CUSA policies and procedures require that each transportation company must have a process to evaluate the risks of selected cyanide transport routes and take the measures necessary to manage these risks. Risk mitigation measures have been taken in the development and implementation of an improved tracking process, the revision of the Emergency Response Procedures, and the coordination of additional emergency response resources to accompany shipments to mine sites. Additionally, all trucking companies involved in this supply chain were audited and found to be compliant with this requirement during their ICMC certification audits.

CUSA solicits feedback regarding the routes and other supply chain topics from its transportation partners at least every three years as part of its partner re-evaluation process. Recurring route evaluations are performed by the trucking companies and audited during their re-certification audits. CUSA does not have any role in or responsibility for soliciting feedback from the drivers of the transportation companies.

CUSA documents the measures taken to address risks identified with the selected routes. CUSA maintains records of transportation routes and associated risks and mitigation measures deployed.

During CUSA’s warehouse ICMC certification audit confirmation was made that CUSA has engaged its local community and emergency response centers. During the SAM ICMC certification audit, the auditor reported that SAM advised local agencies effectively.

CUSA uses escorts and ensures that its own personnel accompany all shipments in Perú. This is done to ensure the safe and secure transportation of the materials. Security from the port to the warehouse was considered to be an elevated risk by CUSA, which is why the escort is used on this segment. The escort use to the mine sites is done primarily due to the safety concerns of the mines roads. The use of an escort is generally required by mines in the region.
The primary risks with the ocean transportation supply chain relate to the possibility of losing track of a shipment due to a trans-shipment or other factors, or the risk of having a container opened en-route by a person who has not been trained in cyanide safety. All intermodal containers are sealed by the shipper in order to mitigate the risk of having unauthorized personnel access the product during transit.

CUSA also advises local external responders, medical facilities and communities of their roles and/or mutual aid during an emergency response. This was confirmed during the original CUSA certification audit in 2014 and was confirmed again during this audit.

Only ICMC-certified transportation companies are used to transport cyanide and none of them sub-contract the cyanide handling or transport activities.

**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

The operation is in substantial compliance with Transport Practice 1.2

not in compliance with

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

CUSA only uses trained, qualified and licensed (where required) operators to transport its products. CUSA performs due diligence evaluations to ensure that its ocean carriers and ports operate according to recognized EHS standards and are experienced in the handling of hazardous goods. Due diligence evaluations were available for the ocean carrier and ports in the scope of this certification.

All trucking companies involved in this supply chain were audited and found to be compliant with this requirement during their ICMC certification audits, personnel operating cyanide handling and transport equipment been trained to perform their jobs in a manner that minimizes the potential for cyanide releases and exposures.
CUSA uses formal policies, procedures, and contracts with safety, health, environmental, and security terms and conditions to ensure that cyanide is appropriately handled and transported by its transportation partners. CUSA supply chain only uses ICMC-certified transportation companies to transport cyanide and none of them sub-contract the cyanide handling or transport activities.

**Transport Practice 1.3:** Ensure that transport equipment is suitable for the cyanide shipment.

- [X] in full compliance with
- [ ] in substantial compliance with
- [ ] not in compliance with

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

CUSA only uses supply chain partners with equipment designed and maintained to operate within the loads being handled.

Inter-modal containers used for international shipments are owned and controlled by the ocean carriers that carry the containers to international destinations. Cyanide is shipped by an ICMC-certified supplier (Tong Suh) that uses only authorized packaging for its solid sodium cyanide shipments. Loads on container ships are inspected and controlled according to the International Convention on Load Lines (ICLL), an International Maritime Organization (IMO) Convention that is applicable to all container vessels engaged in international trade.

CUSA transportation partners employ procedures to verify that their equipment can adequately bear the required loads. CUSA performs due diligence evaluations to ensure that its ocean carrier and ports operate according to recognized EHS standards and are experienced in the handling of hazardous goods.

According to interviews with CUSA personnel, the shipments of bulk and semi-bulk packages are of standard weights. Tong Suh, the ICMC-certified producer is responsible for the blocking and bracing of shipments leaving Korea. The cargo is sealed when it is packed into the sea containers. The sea containers are not opened until they arrive at the CUSA warehouse. Upon arrival at the CUSA warehouse, CUSA personnel unpack the sea container and put the material into the warehouse. Personnel use formal procedures and checklists to ensure that the trailers are not overloaded and that the load is distributed evenly.
Shipping paperwork and CUSA policies and procedures were reviewed and trucking personnel were interviewed to confirm that appropriate practices are used. Shipping records showed that cargo amounts and weights were within the normal weight capacity of the equipment in use. This requirement was also audited during each of the trucking company ICMC certification audits.

Shipping papers indicate the number of packages shipped and the weight of the cargo. This information is used by transportation partners to ensure that overloading does not occur.

**Transport Practice 1.4:** Develop and implement a safety program for transport of cyanide.

- ✔️ in full compliance with
- ✅ in substantial compliance with
- ❌ not in compliance with

**Transport Practice 1.4**

Summarize the basis for this Finding/Deficiencies Identified:

CUSA ensures that cyanide is transported in a manner that maintains the integrity of its packaging. Transportation of cyanide by sea is done in compliance with the International Maritime Organization Dangerous Goods Code. Cyanide shipments are packaged in accordance with Part 4 of the International Maritime Organization Dangerous Goods (IMO DG) Code and according to the packaging instructions and packaging provisions indicated on the DG List.

All trucking companies involved in this supply chain have written procedures that describe a safe method for the transportation and handling of sodium cyanide. The procedures include administrative, operational and safety measures for the proper transportation of sodium cyanide. The trucking companies were found to be compliant with this requirement during their ICMC certification audits. Transport of cyanide from CUSA warehouse to the mine sites is monitored by GPS providing continuous tracking of each of the vehicles at all times.

CUSA has implemented a procedure in its warehouse to ensure that the cyanide is unloaded and loaded in a manner that maintains the integrity of the producer’s packaging. CUSA controls the amount and appearance of the package during unloading/loading of sodium cyanide to the trucks and checks for correct blocking and bracing of vehicles and cargo. The cargo is locked by the driver. CUSA conducts routine inspections to ensure the integrity of the cyanide storage.

Inter-modal containers used for international shipments are controlled by the ocean carriers that transport them. Port of Busan containers carrying cyanide (as reported in the due diligence report for the Port of Busan) are marked with easily identifiable placards and signage. This signage
identifies the shipment as containing cyanide and warns of the presence of a toxic chemical as required by local regulations and international standards.

The Callao Port operator procedure calls for confirmation that the UN, DOT and NFPA diamond number placards are present on the three visible sides of cyanide containers before they can be transferred to trucks and dispatched to the CUSA warehouse. This is required by Peruvian law when transporting hazardous materials.

Per procedure, when cyanide packages and containers arrive at and are dispatched from the CUSA warehouse, personnel confirm that signage is in place that identifies the shipment as containing cyanide. The auditor reviewed a sampling of completed arrival and dispatch checklists and found them to be complete.

CUSA is not directly responsible for pre-trip inspections, maintenance of vehicles or for operator drivers’ hours. It does, however, require that transporters be in compliance with ICMC requirements, including the need for pre-trip inspections and a formal preventive maintenance program. Pre-trip checklists from the CUSA warehouse and transport trucking companies were reviewed and found to be complete. Pre-trip checklists showed that escort and transport vehicles are in optimal condition, that load capacity is reviewed, that weights to be transported conform to the vehicular configuration, and that characteristics of the transport unit (lights, brakes, chassis, container among others) are without cracks or flaws.

Transportation companies Edewit and Tecnicargas have implemented a maintenance plan. The maintenance records were reviewed and the practice was confirmed during interview with the H&S Supervisors.

Drivers must rest at least 8 hours before a trip and must not drive more than 12 hours a day and the driving time is only during the day. It is noteworthy that Peruvian regulations set the same schedule for the transportation of hazardous materials.

Tong Suh, the ICMC-certified cyanide producer is responsible for blocking and bracing of the shipments leaving Korea. The cargo is sealed when it is packed into the sea containers. The sea containers are not opened until they arrive at the CUSA warehouse. Upon arrival at the CUSA warehouse, CUSA personnel unpack the sea containers and put the material into the warehouse. Personnel use formal procedures and checklists to ensure that trailers are loaded evenly and that the trailer is not overloaded.

According to interviews with CUSA personnel, trucking companies use standard practices to ensure proper loading, blocking and bracing of vehicles and containers. CUSA policies and
procedures were reviewed and trucking personnel were also interviewed and confirmed that appropriate practices are used.

All trucking companies involved in this supply chain have established a method for the safe transportation of cyanide. The method describes the administrative, operational and safety measures to be used. The method was found to be compliant during their ICMC certification audits. An interview with the H&S Supervisor from Edewit truck transport company determined that the convoy supervisor is responsible for suspending a trip if anything with the load, driver or the environment does not meet safety requirements and to go ahead when conditions are safe and all requirements have been met.

The CUSA policies and procedures require that each transportation company have a drug abuse prevention program. CUSA each driver takes an alcohol test before leaving the warehouse with a cyanide shipment. CUSA performs periodic drug tests. Records were reviewed and found to be complete.

All trucking companies involved in this supply chain have a drug abuse prevention program. Documents from transportation companies Edewit and Tecnicargas were reviewed and found to be compliant with this requirement during their ICMC certification audits.

According to the ICMC certifications reports, all transporters of this supply chain maintain records with details of route incidents, sensitive areas found and any other relevant information. Sam IK stated that the records retained include inspection, preventive maintenance, transportation log sheets, and dispatch order sheets. Records were reviewed and found to be complete.

Only ICMC-certified transportation companies are used to transport cyanide in the CUSA supply chain and none of them sub-contract cyanide handling or transport activities.
**Transport Practice 1.5:** Follow international standards for transportation of cyanide by sea and air.

☑️ in full compliance with

The operation is

☑️ in substantial compliance with **Transport Practice 1.5**

☐ not in compliance with

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

CUSA transports shipments of cyanide by sea in compliance with the Dangerous Goods Code of the International Maritime Organization. CUSA plans the Korean transportation activities in close collaboration with a local transportation broker. The broker, Chemfield International, was included in the due diligence and audit activities. Confirmation was made that Korean shipments are performed only using Hamburg Süd, an ocean carrier that has undergone multiple ICMC due diligence evaluations since 2007 and have demonstrated safety programs and safe performance.

As recommended by the ICMI Auditor Guidance for the Use of the Cyanide Transportation Verification Protocol, specific information regarding this practice is addressed below:

a) The shipment packaging specifications were reviewed during the due diligence portion of the Port of Busan and the Port of Callao ICMC audits and were found to be conformant to the packaging requirements of the IMDG Code.

b) Packaging was reviewed during the due diligence portion of the Port of Busan audit (the operation responsible for loading intermodal and ISO tank shipping containers). Packages and shipping containers were appropriately marked and were found to be compliant with Chapter 5.2 of the IMDG Code requirements.

c) Shipping documents were reviewed for a sample of cyanide shipments from 2014 for the ocean carrier used in this supply chain. All information required by the IMDG Code is required as standard practice on CUSA shipping paperwork.

d) CUSA confirmed through its due diligence assessment that the ocean carrier involved in this supply chain have cyanide emergency response information available on board each vessel, as required by Section 5.4.3.2 of the IMDG Code.

e) CUSA confirmed through its due diligence assessment that the ocean carrier involved in this supply chain complies with stowage and separation requirements of Part 7 of the IMDG Code. This includes the requirement that sodium cyanide be stored separately from acids, strong oxidizers, and explosives.

CUSA does not ship cyanide by air.
**Transport Practice 1.6:** Track cyanide shipments to prevent losses during transport.

- in full compliance with
- in substantial compliance with
- not in compliance with

*Transport Practice 1.6*:

The operation is

Summarize the basis for this Finding/Deficiencies Identified:

All trucking companies involved in this supply chain have the means to communicate with the transport company, the mining operation, the cyanide producer or distributor and/or emergency responders. They were found to be compliant with this requirement during their ICMC certification audits.

Drivers of the Korean transporter, Sam IK, have pagers and mobile phones. During transportation, they can communicate with the Port of Busan and the Seoul Head Office as necessary. They have communication channels with the safety team of Tong Suh Petrochemical Co., Ltd., Industrial safety and health agency, police, hospitals in Ulsan and Busan and the firefighting agency.

Peruvian trucking company’s vehicles and escorts have GPS, radio and cellular pathway that allows communication during transportation and connection to their Head Offices, mining clients, CUSA warehouse and to emergency responder’s agencies.

The certification audits reports show that the communication equipment of all the trucking companies involved in this supply chain are periodically tested and were found to be in compliance with ICMC. SAM IK tests the function of pagers for every trip, mobile phones are controlled by individual drivers. The Peruvian trucking companies’ telephone lines and mobile equipment, including cellular phones, radio and GPS were operating at the time of the transport certification audits. Tecnicargas and Edewit check the operation of the cell phone and radio prior to the completion of trips.

As detailed in the certification audit report, SAM IK conducted a route evaluation of two main routes and one alternative route for sodium cyanide transportation in May 2013. During the route evaluation, they did not find any communication blackout areas along the main or alternative routes.

Tecnicargas does not have any blackout areas as it operates within the Callao district. Edewit has identified areas without cell coverage and radio. When entering these areas drivers communicate with the central office or the mine to announce its entry into the uncovered area, and again as they...
leave this area. In areas without signal coverage, the GPS system saves the information transmitted, delivering it once the truck has passed through the blackout area.

CUSA has systems and procedures to track the progress of cyanide shipments. CUSA’s GPS tracking capabilities for road transportation and planned online tracking capabilities through ocean carrier information portals were confirmed through a computer demonstration, interview with the H&S Coordinator and review of examples of GPS truck shipment reports. The Korean tracking procedure of cyanide shipments was found to be in compliance with the ICMC during the last certification audit. For truck and trailer transportation progress is checked by mobile communication between the driver, the cyanide manufacturer and the port.

Shipping paperwork was found to be conformant to Code requirements, including chain of custody requirements.

Bills of lading and shipping papers indicating the number of packages and amount of material are used to track inventory and movement of cyanide. Information was found to be compliant.

CUSA uses formal standards, policies, guidelines, formal contracts with safety, health, environmental, and security terms and conditions to ensure that cyanide is appropriately handled and transported by its partners.

2. INTERIM STORAGE: Design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent releases and exposures.

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

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

Transport Practice 2.1

Summarize the basis for this Finding/Deficiencies Identified:

Interim storage activities in this supply chain, as defined by ICMI, are limited to those that take place at certified SAM Logistics terminal and at the ocean ports. Intermodal containers are transported to SAM Logistics from the Tong Suh production plant and are then transported further to the Port of Busan. All three interim storage locations were found to be compliant with ICMC requirements. Warning signs are posted alerting workers that cyanide is present; that
smoking, open flames, eating and drinking are not allowed and what personal protective equipment must be worn.

According to the certification audit report, sea shipping containers are stored in a segregated part of the SAM Logistics storage facility. There is no handling of the intermodal and ISO tank containers other than movement by industrial-sized forklift. Sea containers are not opened at the SAM Logistics facility.

CUSA evaluated the suitability and security of interim storage at ports through its due diligence evaluation process. The due diligence assessment results are included later in this report under the Port due diligence section. Security of the SAM Logistics facility was confirmed during its ICMC certification audit.

CUSA ensures that ICMC security requirements are fulfilled through due diligence reviews of ports.

Cyanide is separated from incompatible materials such as acids, oxidizers and explosives to prevent mixing. Cyanide is stored to minimize the potential for contact with water. Records were reviewed and found to be acceptable.

No intermodal containers are opened or stored indoors where cyanide gas can build up. The storage practices at the CUSA warehouse were evaluated as part of its ICMC certification using the ICMI Production Protocol.

Sodium Cyanide packages within the intermodal shipping containers are comprised of a bag-in-box construction that offers additional protection against water intrusion. The requirement for spill containment equipment other than at the CUSA warehouse was not deemed to be necessary. The facility was audited as part of its certification audit using the Production Protocol.

3. EMERGENCY RESPONSE: Protect communities and the environment through the development of emergency response strategies and capabilities
**Transport Practice 3.1:**  
Prepare detailed emergency response plans for potential cyanide releases.

☑ in full compliance with
in substantial compliance with  
not in compliance with  
Transport Practice 3.1

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

CUSAs as the cyanide consigner, requires that each transporter implement an Emergency Response Plan (ERP) against potential accidents and releases. The responsibilities of each transportation company involved in this supply chain are described in the CUSA Supply Chain Description document. CUSA, as the Consignor, has overall accountability for the supply chain, but individual trucking companies are responsible for the emergency response in its transport segment.

The CUSA Supply Chain Description document was reviewed and CUSA, Tecnicargas, and Edewit personnel were interviewed. Leadership’s understanding of Consignor ICMC responsibilities was excellent. All CUSA personnel demonstrated a high level of commitment to ensuring that cyanide shipments are made in compliance with ICMC requirements.

SAM IK ERP had an ICMC audit in 2013 and was found to be compliant. The due diligence reviews of Port of Busan and Port of Callao performed within the scope of this ICMC supply chain audit show that ERPs were available for review and were found to be in compliance with the ICMC requirements. CCNI / Hamburg Süd ocean carrier responded to a due diligence questionnaire and confirmed that its practices and policies are in alignment with ICMI requirements.

The ERPs for CUSA’s supply chain transporters are appropriate for the selected transportation routes and include information specific to responding to emergencies within the supply chain. The ERPs identified possible emergency situations such as sodium cyanide release to road, land, surface water, or robbery during transportation. The ERP for the CUSA storage facility was also reviewed.

All CUSA’s supply chain transporters consider the physical and chemical form of the cyanide. The only form of cyanide to be shipped using this supply chain is solid sodium cyanide. Emergency response procedures address actions to be taken in response to a solid sodium cyanide spill.
The ERPs reviewed consider the method of transport, ocean or trucking to port, warehouse and mine sites. The Emergency Response Plans are adequate for the selected transport routes, based on a review of the hazards and risk assessments after the completion of the route sheet.

The ERPs specifically consider all aspects of responses that may be needed for emergency situations in the corresponding transport segment of the CUSA supply chain. They consider the condition of the roads, ports and storage, they also consider the design of the transport vehicle for each case. All plans were found to be appropriate for the mode of transportation involved.

All ERPs reviewed included descriptions of appropriate response actions for potential emergency situations. The ERPs can be applied in the event of sodium cyanide release to road, land, surface water, or robbery during transportation and storage.

CUSA as the cyanide consigner, requires that each transporter implement its ERP for potential accidents and releases. The responsibilities of each transportation company in this supply chain is described in the Supply Chain Description document. All ERPs reviewed in the CUSA supply chain clearly outline the roles and responsibilities of internal and external responders, as well as the customer, medical facilities, fire fighters and local government.

Transport Practice 3.2: Designate appropriate response personnel and commit necessary resources for emergency response.

☑ in full compliance with
not in compliance with

Transport Practice 3.2

Summarize the basis for this Finding/Deficiencies Identified:

All CUSA supply chain transporters provide emergency response training to their personnel. This was confirmed during the on-site due diligence audits performed at the Port of Busan, the Port of Callao, during the document review at Lima - Perú of the trucking companies Edewit and Tecnicargas and the CUSA warehouse. All trucking companies involved in this audit, including SAM IK in the Korean portion of the supply chain are certified in the ICMC and were found to be in compliance with the Code requirements. Hamburg Süd confirmed their understanding of emergency response requirements in their due diligence questionnaire responses.

CUSA Supply Chain Description document describes the emergency response duties and responsibilities of each company involved in the supply chain. The roles and responsibilities of
the Emergency Response Team are defined in the ERPs. The ERPs addresses actions to be taken in response to a number of different emergencies including spill, fire, and medical incidents.

Although it is highly unlikely that CUSA would be called in to respond to an emergency by an ocean carrier at sea, it is conceivable that CUSA may need to coordinate response to an emergency at the Port of Callao or during land transportation. The Korean portion of this supply chain is managed by the Tong Suh cyanide production plant trader, who is in close coordination with CUSA regarding the safety of the shipment.

The on-site Due Diligence audits confirmed that appropriate emergency response equipment was available at both ports. The auditor also found that CUSA maintains appropriate emergency equipment at the warehouse. Documents show that the Peruvian trucking companies also maintain appropriate types of equipment.

CUSA ensures, through the terms of their contracts and periodic reviews, that the emergency response equipment maintained by its partners in the supply chain is available at all times.

The transporter for the Korean segment, SAM IK’s emergency response equipment includes personnel protective equipment and treatment equipment for transportation and interim storage. Railroad transportation is implemented by Korea Rail Operation Company (Korea Rail), SAM IK has a contract agreement with Korea Rail for sodium cyanide transportation, where the responsibility of Korea Rail to comply with the railroad transportation safety act was defined.

The emergency response equipment documented as part of the Due Diligence review of the Ports of Busan and Callao. Cyanide antidote is maintained and medical personnel have been trained in its use. Both ports have a medical post that is open 24 hours a day, 7 days per week.

The CUSA warehouse has the necessary emergency response and health and safety equipment, including personal protective equipment. From the documents review of the trucking companies Edewit and Tecnicargas, the list of equipment was found to be acceptable.

SAM IK provides emergency training to all its drivers and employees on a quarterly basis. They use the emergency response plan as training material. The training results are recorded and maintained for 3 years.

Port of Busan and Port of Callao personnel, including operators of cranes, forklifts and drivers, receive initial and periodic refresher training in emergency response procedures including the Emergency Response Plan. This was confirmed during the on-site Due Diligences at the ports, which are part of the scope of this audit. Training of ocean carrier personnel is outside of CUSA’s responsibilities.
CUSA’s warehouse provides initial safety training inductions, safety briefings and scheduled formal training in emergency response. Emergency response training was reviewed during the warehouse visit.

Edewit and Tecnicargas the Peruvian trucking companies showed that drivers and supervisors are trained annually in emergency response to cyanide spills or intoxication, among other safety training.

CUSA ensures through contractual terms and periodic review that the emergency response equipment maintained by its emergency response provider is available at all times.

SAM IK maintains personnel protective equipment and treatment equipment as defined in a list in the emergency plan. The Ulsan Center, Busan Station and Busan New Port Rail Center office’s member safety representative inspects the emergency response equipment in drivers’ trucks and interim storage areas once per month and results are recorded.

CUSA warehouse conducts routinely inspections of first aid kits and emergency equipment, according to its procedures; inspection records were reviewed and found to be acceptable.

At Edewit and Tecnicargas, both the driver and the convoy supervisor have the responsibility of verifying the readiness of the response kit for spills and poisoning (antidote kit), and personal protective equipment before the start of the trip.

CUSA transportation partners do not sub-contract the cyanide handling or transport. CUSA uses formal policies, procedures, and contracts with safety, health, environmental, and security terms and conditions to ensure that cyanide is appropriately handled and transported by its transportation partners.
Transport Practice 3.3: Develop procedures for internal and external emergency notification and reporting.

☑ in full compliance with

The operation is in substantial compliance with

Transport Practice 3.3 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

CUSA supply chain partners have developed procedures and maintain current contact information for notifying CUSA, regulatory agencies, outside response providers, medical facilities and potentially affected communities of an emergency. Confirmation of this information was made through interview and a review of documentation.

SAM IK has identified in his Cyanide Transportation Operational Manual the outside emergency responders as Tong Suh Petrochemical Co. the customer, the shipping companies, Korea Railroad, government agencies and hospitals in Ulsan and Busan.

The ERPs for Port of Busan and for Port of Callao address actions to be taken in response to a number of different emergencies including spill, fire, and medical incidents. Contact information Emergency contact information is included for the Emergency Response Team members, local hospitals, and the local fire department and is kept up-to-date and revised as necessary. During both ports on-site Due Diligences, this information was found to be acceptable.

CUSA warehouse ERP includes procedures and contact information for notifying regulatory agencies, outside response providers, medical facilities and potentially affected communities of an emergency.

CUSA supply chain partners have developed procedures and maintain current contact information for notifying regulatory agencies, outside response providers, medical facilities and potentially affected communities of an emergency.

SAM IK maintains current contact information current in its Cyanide Transportation Operational Manual. The ERPs for the Busan and Callao ports require contact information be kept up-to-date and revised as necessary. The CUSA warehouse ERP requires that internal and external emergency notification and reporting procedures are kept current. Edewit and Tecnicargas trucking companies update contact information on an annual basis as stated in their ERPs.
**Transport Practice 3.4:** Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.

☑️ in full compliance with

The operation is in substantial compliance with Transport Practice 3.4

not in compliance with

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

Specific details regarding the remediation, neutralization, decontamination, and disposal of cleanup debris are contained within CUSA supply chain partners’ emergency response procedures. Extensive descriptions of the necessary actions, depending specific scenarios, are clearly outlined in the documents.

SAM IK’s ERP is appropriate for overall emergency situations and defines the procedure for recovery of released sodium cyanide, decontamination of soil and water, control & disposal of wastes. The Busan and Port of Callaos have procedures for HAZMAT recovery and remediation. The Hamburg Süd ocean carrier personnel receive Dangerous Goods training periodically.

The CUSA warehouse ERP details the measures to be taken in case of dry spills and the use of neutralization solution. The ERP for Edewit and Tecnicargas trucking companies describe how to recover cyanide, neutralize the solid decontamination of soils or other contaminated media, and how to manage these wastes.

All CUSA supply chain partners’ procedures specifically prohibit the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide for treating a surface water cyanide spill.
Transport Practice 3.5: Periodically evaluate response procedures and capabilities and revise them as needed.

☑️ in full compliance with

The operation is ☑️ in substantial compliance with Transportation Practice 3.5
not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

CUSA supply chain partners periodically review their emergency response plans and evaluate the plan’s adequacy. Records were available for review that show CUSA and its transportation partners had emergency response drills in 2014 and 2015.

CUSA supply chain partners periodically conduct mock emergency drills and evaluate their performance. Records were available for review that show CUSA partners have held emergency response drills.

Sam IK performs mock drills twice per year. They check the overall process and adequacy of the emergency response plan and record the results. At the Ports of Busan and Callao emergency drills are conducted regularly with all people who would be expected to respond to the emergency. The ocean carrier Hamburg Süd conducts emergency drills regularly with all necessary personnel. The CUSA warehouse and the Peruvian trucking companies perform emergency drills twice a year as is stated in their ERPs. Records were available to confirm that drills occur regularly.

All CUSA transportation partner ERPs state the emergency response plans should be checked periodically, contact information should be revised and reflect changes in the transportation routes. ERPs were available for review. It was confirmed that they are revised at defined frequencies. The ERPs are under formal document control.
Ports Due Diligence and Ocean Carrier Investigation Results

CUSA ships its solid sodium cyanide on CCNI/Hamburg Süd, a main line ocean carrier that meets recognized Environmental, Health, and Safety (EHS) standards and that are experienced in the handling of dangerous goods. The ocean routes are chosen by the ocean carrier.

Due Diligence assessments were conducted for the ocean carrier and ports and were included in the scope of the CUSA Supply Chain.

**Port of Busan - Korea**
The Port of Busan (Pusan Newport Company) is located at the east-southern end of the Korean peninsula. Is located on the major trade routes between Europe, Americas and Asia and is a gateway hub port of Northeast Asia. In Busan, PNC is located at west end of the city and is a newly built port with state of art new equipment supporting infrastructures such as connecting railways, highways. Solid sodium cyanide is received at the Port of Busan (Pusan Newport Company) in sea containers, stored for a short time (mostly shipped on the same date) before it is loaded on the container carrier by PNC crews. The Port is considered to be a large sized full-service container port.

The Port of Busan Due Diligence Audit results were very positive and the Audit Team confirmed that the Port of Busan (Pusan Newport Company) is suitable for the receipt and dispatch of solid sodium cyanide transported in sea containers. The port is authorized to receive Dangerous Goods. Equipment, security, and safety practices were found to be very well aligned with ICMI Code requirements. Personnel were very aware of safe handling and operational practices such as the need to segregate incompatible materials and the need to carefully manage chain of custody paperwork and truck dispatch. The port maintains a management system certificates to ISO 14001, OSHAS18001, ISO28000 and AEO (Authorized Economic Operator).

The Port of Busan (Pusan Newport Company) personnel were very well prepared for the review and were very helpful in facilitating the audit. The road infrastructure to and from the port was found to be acceptable.

Port personnel have experience with handling sodium cyanide and this cargo is currently handled at the port. Dangerous chemical including sodium cyanide handling process has been established and being implemented in an effective manner. Port handles sodium cyanide along with other various types of chemicals. Personnel have been trained on general chemical safety.

The sea containers are not opened and no specialized personal protective equipment is necessary at this location. The Port is fenced and manned at all times. The solid sodium cyanide is packed
in multiple layers of packaging within sealed sea containers. The auditor found The Port of Busan (Pusan Newport Company) sodium cyanide interim storage policy and storage area to be compliant.

**Port of Callao – Perú**
The Port of Callao is located just 12 kilometers from downtown Lima and is Perú’s primary commercial port. The Port of Callao is Perú's biggest and most important port. As part of the Lima metropolitan area, the Port of Callao is a key part of the country's commercial network and a major distribution center for imports and exports. The Port of Callao handles about 20% of all ocean-borne cargo in Perú.

DP World Callao operates the *Muelle Sur* (South Pier) Terminal in the Port of Callao to handle containers. The private terminal began operating in 2010 with state-of-the-art technology and advanced security systems. The Port of Callao's South Pier serves local customers in the import and export of products as well as transfer operations for the world's leading cruise lines.

This audit was performed by an independent 3rd-party auditor who is pre-approved by the ICMI as a Lead Auditor for all types of Code audits and as a Technical Expert for Code audits of cyanide transportation and production operations in December 2015 and included the on-site assessment of the DP World Callao - South Pier port operation.

The Port of Callao is fully fenced and has strict access controls. CUSA contracted MSS to evaluate the Port of Callao in 2015. The MSS ICMC auditor audited the port and confirmed that DP World Callao - South Pier Port Operation is suitable for the receipt and dispatch of solid sodium cyanide transported in sea containers port operations including storage and handling operations were in conformance with ICMC requirements.

The port is authorized to receive Dangerous Goods. Equipment, security, and safety practices were found to be well aligned with ICMI Code requirements. Personnel were aware of safe handling and operational practices such as the need to segregate incompatible materials and the need to carefully manage chain of custody paperwork and truck dispatch. The port is certified in ISO 28000:2007, ISO 14001:2004 and ISO 9001:2008.

DP World Callao personnel was prepared for the review and facilitated the audit. The road infrastructure to and from the port was found to be acceptable.

Port personnel have experience with handling sodium cyanide and this cargo is currently handled at the port. The dangerous chemical, including sodium cyanide, handling process has been established and is being implemented in an effective manner. The Port handles sodium cyanide along with other various chemicals. Personnel have been trained in general chemical safety.
The sea containers are not opened and no specialized personal protective equipment is necessary at this location. The Port is fenced and manned at all times. The solid sodium cyanide is packed in multiple layers of packaging within sealed sea containers. DP World Callao operates according to the International Maritime Dangerous Goods Code guidelines.

1. TRANSPORT: **Transport cyanide in a manner that minimizes the potential for accidents and releases.**

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

The management of ports and ocean transport is: ☑ consistent with Transport Practice 1.1

Substantially consistent

Not consistent

**Summary of the basis for this finding:**

Ocean routes are chosen by the ocean carrier and are regulated by a number of international organizations.

The Korean port and ocean carrier of this supply chain are managed by the Tong Suh cyanide production plant trader, who is in close coordination with CUSA regarding the safety of the shipment.

CCNI / Hamburg Süd was found to be compliant with ICMC requirements through multiple ICMC Due Diligence assessments. The ports have been found to be acceptable and are chosen based on proximity to end customer, experience handling hazardous materials safely, security of the port, emergency response capabilities, and road infrastructure to the port.
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.

The management of ports and ocean transport is: ☑ consistent with Transport Practice 1.2

☑ substantially consistent
☐ not consistent

Summary of the basis for this finding:

Ocean Carrier
According to the responses to a questionnaire modeled after the ICMC Transportation Protocol, CCNI / Hamburg Süd the ocean carrier, reported in 2015 that they comply with International Maritime Organization (IMO) requirements and are in compliance with International Maritime Dangerous Goods (IMDG) and U.S. 49 Code of Federal Regulations (CFR) requirements concerning the transportation of hazardous materials, including the training of employees.

Intermodal moves once the shipment reaches the port are controlled by the ocean carrier. Ocean carriers self-reported to CUSA that they train their personnel on hazardous materials handling. Information from the carriers also indicated that they have systems in place to ensure that intermodal moves are performed by appropriately licensed and qualified personnel.

Transport Practice 1.3: Ensure that transport equipment is suitable for the cyanide shipment.

The management of ports and ocean transport is: ☑ consistent with Transport Practice 1.3

☑ substantially consistent
☐ not consistent

Summary of the basis for this finding:

Ocean Carrier
CUSA has contractual agreements through its broker that require that shipping companies comply with the regulations regarding the safe and appropriate shipping of dangerous goods.

CUSA ensures authorized packages are used for solid sodium cyanide. Package specifications were reviewed during this audit and were found to be compliant. Intermodal and ISO tank shipping container loading procedures and inspection checklists were reviewed during the audit. Port of
Busan personnel ensure that all equipment is safe for transport prior to shipment of the cargo. Employees showed very good awareness of requirements for ocean shipments.

Transport Practice 1.4: Develop and implement a safety program for transport of cyanide.

The management of ports and ocean transport is: ☑ consistent with Transport Practice 1.4

Summary of the basis for this finding:

Ocean Carrier
The ocean carrier self-reported to the Korean auditor that they train their personnel on hazardous materials handling. In their response to the ICMC Due Diligence protocol, ocean carriers reported that they have robust safety programs which are mandated by international laws. Formal safety, environmental, emergency response, and auditing programs apply to all employees aboard ocean vessels.

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

The management of ports and ocean transport is: ☑ consistent with Transport Practice 1.5

Summary of the basis for this finding:

CUSA ships its sodium cyanide on CNNI/Hamburg Süd, a main line ocean carrier that has demonstrated safety programs and safe performance. The carrier was asked for information regarding fulfillment of ICMC requirements using a customized ICMC transportation protocol. Responses and information provided by the carriers was deemed to be appropriate by the ICMC Lead Auditor.

The ocean routes are chosen by the ocean carriers. Records were available during the audit to demonstrate that all ports within the supply chain had undergone an on-site evaluation and had been found to be compliant with ICMC Due Diligence requirements.
As recommended by the ICMI Auditor Guidance for the Use of the Cyanide Transportation Verification Protocol, specific information regarding this practice is addressed below:

a) The CUSA packaging specifications were reviewed as part of the ICMC audit and were found to be conformant to the packaging requirements of the IMDG Code.

b) Packaging was reviewed during the audit of the CUSA operation responsible for loading intermodal and ISO tank shipping containers. Packages and shipping containers were appropriately marked and were found to be compliant with Chapter 5.2 of the IMDG Code requirements.

c) Packaging was reviewed during the audit of the port operators responsible for loading and unloading intermodal shipping containers. Packages and shipping containers were appropriately marked and were found to be compliant with Chapter 5.2 of the IMDG Code requirements.

d) Loaded intermodal shipping containers were evaluated and were found to be marked and placarded in accordance with the IMDG Code.

e) Shipping documents were reviewed for a sample of cyanide shipments from 2015 for the ocean carrier used in this supply chain. All information required by the IMDG Code is required as standard practice on CUSA shipping paperwork.

f) The container packing certificates from 2015 shipments were reviewed during the audit as part of the overall evaluation of shipping papers. All information was found to be conformant to IMDG Code requirements.

g) CUSA confirmed through its Due Diligence assessment that each of the ocean carriers involved in this supply chain use detailed stowage plans for the placement and safe transportation of all hazardous materials, including sodium cyanide shipments.

h) CUSA confirmed through its Due Diligence assessment that ocean carriers involved in this supply chain have cyanide emergency response information available on board each vessel, as required by Section 5.4.3.2 of the IMDG Code.

i) CUSA confirmed through its Due Diligence assessment that the ocean carrier involved in this supply chain complies with stowage and separation requirements of Part 7 of the IMDG Code. This includes the requirement that sodium cyanide be stored separately from acids, strong oxidizers, and explosives.
Transport Practice 1.6: Track cyanide shipments to prevent losses during transport.

The management of ports and ocean transport is: ☑ consistent with Transport Practice 1.6

Substantially consistent

not consistent

Summary of the basis for this finding:

Ocean Carrier
The ocean carrier has a computer system that is used for the tracking and management of all freight containers within their system. The management systems provide, among other items, the date, time, location, and carrier involved in the last interchange, transport action, or gate move. CUSA’s freight forwarder has access to this information via the internet web sites. CUSA can request this information at any time. This was confirmed through a sampling approach during the audit.

The sodium cyanide shipments for this segment are containerized loads of bag-in-box packages and metallic drums. All shipping containers are sealed. Shipping papers were reviewed. Auditors confirmed that seal numbers are recorded on the bills of lading. This enables personnel along any portion of the segment to confirm that the containers have not been opened.

2. INTERIM STORAGE: Design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent releases and exposures.

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

The management of ports and ocean transport is: ☑ consistent with Transport Practice 2.1

Substantially consistent

not consistent

Summary of the basis for this finding:

Ocean Carrier
The ocean carrier reported that during transport, the storage of cyanide both on land and on vessels is in accordance with the applicable stowage and segregation requirements in the IMDG. The terminal must segregate containers similar to the segregation onboard vessels.
Safety checklists and seals are used by Port personnel when the shipping containers are loaded. The seal enables verification that the container was not opened during transit.

Each port within the scope of this certification audit has been evaluated for its ability to handle hazardous materials safely. The ports are confirmed to be secure with appropriate roadway infrastructure into the port. Completed port audit checklists and reports were reviewed during the audit. Records were found to be complete and acceptable.

3. EMERGENCY RESPONSE: Protect communities and the environment through the development of emergency response strategies and capabilities

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

The management of ports and ocean transport is: ☑ consistent with Transport Practice 3.1
Substantially consistent
Not consistent

Summary of the basis for this finding:

Ocean Carrier

The ocean carrier reported that they have emergency response plans in place which include the prompt notification of all involved parties. The shipping papers show the emergency contact information which is then transferred to the hazardous cargo declaration.

The due diligence questionnaire responses from the ocean carrier confirmed their understanding of emergency response requirements. Emergency response planning and the performance of frequent emergency drills are required by international law. The ocean carriers provided information demonstrating that is certified by third-party auditing organizations for environmental, health, and/or safety programs. Ocean carrier responses confirmed that emergency response planning is an integral part of these programs.
Transport Practice 3.2: Designate appropriate response personnel and commit necessary resources for emergency response.

The management of ports and ocean transport is: ✓ consistent with Transport Practice 3.2
✓ substantially consistent
not consistent

Summary of the basis for this finding:

Ocean Carrier

The ocean carrier responded that they contract with professional emergency response contractors for landside emergencies. Onboard vessels, the emergency response would be conducted by trained crew members with shore side support and guidance.

CUSA offers immediate technical assistance for any cyanide spill, and offers emergency resources for spills that might occur near a CUSA site.

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

The management of ports and ocean transport is: ✓ consistent with Transport Practice 3.3
✓ substantially consistent
not consistent

Summary of the basis for this finding:

Ocean Carrier

Ocean carrier reported that they have emergency response plans in place which include the prompt notification of all involved parties. CUSA provides shipping papers showing the emergency contact information which is then transferred to the hazardous cargo declaration.

The due diligence questionnaire responses from the ocean carrier confirmed their understanding of emergency response requirements. Emergency response planning and the performance of frequent emergency drills are required by international laws. The ocean carrier responded that they are certified by third-party auditing organizations for environmental, health, and/or safety
programs. Ocean carrier responses confirmed that emergency response planning is an integral part of these programs.

**Transport Practice 3.4:** Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.

The management of ports and ocean transport is: ✓ consistent with Transport Practice 3.4
substantially consistent
not consistent

**Summary of the basis for this finding:**

**Ocean Carrier**

The ocean carrier responses confirmed that they would communicate with CUSA in the event of a spill. CUSA bans the use of cyanide destruction chemicals for cyanide spills into water.

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

The management of ports and ocean transport is: ✓ consistent with Transport Practice 3.5
substantially consistent
not consistent

**Summary of the basis for this finding:**

**Ocean Carrier**

The due diligence questionnaire responses from the ocean carrier confirmed their understanding of emergency response requirements. Emergency response planning and the performance of frequent emergency drills are required by international laws. The ocean carrier provided information demonstrating that they are certified by third-party auditing organizations for environmental, health, and/or safety programs. Ocean carrier responses confirmed that emergency response planning is an integral part of these programs.