ICMI Cyanide Code Consigner Supply Chain
Summary Audit Report

Cyanco Consignor Certification Audit – Global Ocean Supply Chain

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

2017 Audit Cycle

Cyanco Ocean Supply Chain Summary

Consignor Name & Contact Information

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Cyanco Global Ocean Supply Chain Description of Consignor Operations & Scope of Certification

Cyanco maintains offices in Reno, Nevada - USA, Pearland, Texas – USA, Montreal, Quebec – Canada and Hermosillo, Sonora - Mexico, a solid sodium cyanide production facility outside of Houston, Texas - USA, a liquid sodium cyanide production facility near Winnemucca, Nevada - USA, and terminal operations in Cheyenne, Wyoming - USA, Cadillac, Quebec – Canada and Hermosillo, Sonora – Mexico.

Cyanco started producing solid sodium cyanide in the industrial park of the Chocolate Bayou Plant of Ascend Performance Materials at Alvin/Texas in September 2012. The plant was acknowledged by the ICMI as being International Cyanide Management Code (ICMC) certified in November 2013 and was re-certified in 2017. The plant ships product in rail sparger cars, ISO containers, and one metric ton bag/boxes packed into rail box cars and 20-foot intermodal containers.

Product manufactured at this location is shipped domestically by truck, rail, and barge, and internationally via rail and ocean carrier. Ocean shipments shipped through the Port of Houston are within the scope of this Global Supply Chain. The product packed into 20-foot intermodal sea containers or ISOs is transported to the Port of Houston by ICMC-compliant truck transporters.

At the time of the audit, Quality Carriers, Inc, an ICMC certified transporter, and Action Resources were transporting solid sodium cyanide to the Port of Houston. According to the ICMI web-site, Quality Carriers was most recently re-certified in 2017. Action Resources (AR) underwent a full ICMC certification audit and was most recently ICMI certified in 2015.

Cyanco HQ operations was audited as part of this Global Ocean Supply Chain audit. Cyanco was found to be fully compliant with ICMC requirements.

Cyanco has developed formal manuals, procedures, and practices that ensure that all ICMI International Cyanide Management Code requirements are fulfilled. Due Diligence reviews are performed at all Ports and for all ocean carriers that are used to transport sodium cyanide to gold mines.

Due Diligence assessments were conducted for the ocean carriers and ports included in the scope of the Global Ocean Supply Chain. This Global Ocean Supply Chain includes the following ocean carriers:

1. Hamburg Sued
2. Maersk
3. Hapag Lloyd
4. Mediterranean Shipping Co. (MSC)
5. CMA CGGM
6. Compañía Sud Americana de Vapores (CSAV)
7. Zim Lines
8. Seaboard
9. Intermarine
10. Grimaldi Lines

Ports used in this supply chain are listed below:

1. Port of Tema, Ghana
2. Port of Houston, USA
3. Port of Caucedo, Dominican Republic
4. Port of Nouakchott, Mauritania
5. Port of Cortes, Honduras

Audit Information – Cyanco Global Ocean Supply Chain

The ICMC audit of Cyanco as a Consignor/Transporter for its Ocean Supply Chain 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.

The ICMC certification audit of Cyanco as a Transporter / Consignor was conducted on September 18-19, 2017. The due diligence assessments of the ocean carriers and the ports were performed through December 2017, at which time all operations, ocean carriers, and ports within the scope of the Cyanco Global Supply Chain were found to be in Full Compliance with ICMI Code requirements.

Cyanco's procedures, policies and planned transportation management practices for its Ocean Supply Chain were evaluated against the ICMI International Cyanide Management Code requirements, as documented in the ICMI *Cyanide Transportation ICMC Verification Protocol*. The audit was conducted through discussions and interviews with multiple individuals in cross-functional roles at Cyanco.

The results of this ICMC certification audit and the related due diligence reviews indicate that Cyanco and its ocean transport management practices are in FULL COMPLIANCE with ICMI ICMC transportation requirements.

Cyanco Ocean Supply Chain - Auditor's Finding

The Cyanco Ocean Supply Chain is:

☑ **in full compliance**
☐ in substantial compliance
☐ not in compliance

with the ICMC requirements of the International Cyanide Management Code.

The operations included in this audit have not experienced any cyanide incidents, releases, or exposures since the supply chain was put into use in 2013. The operations were found to have been in compliance with the ICMI Cyanide Code since the previous ICMI Cyanide Code certification audit.

Audit Company:	MSS Code Certification Service www.mss-team.com
Lead / Technical Auditor:	Bruno Pizzorni
Date(s) of Audit	On-Site Audits: September 18-19, 2017

I attest that I meet the criteria for knowledge, experience and conflict of interest for Code Certification Audit Team Leader, established by the International Cyanid e Management Institute and that all members of the audit team meet the applicable criteria established by the International Cyanide Management Institute for Code Certification Auditors.

I attest that the Audit Report accurately describes 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 Certification Protocol for Cyanide ICMC Transportation Operations and using standard and accepted practices for health, safety and environmental audits.

Cyanco Global Ocean Supply Chain _____ 12/15/2017
Name of Supply Chain Signature of Lead Auditor Dates

Description of Consignor's role in ensuring compliance of its carriers

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 operation is
- ☑ in full compliance with
- ☐ in substantial compliance with
- ☐ not in compliance with

Transport Practice 1.1

Summarize the basis for this Finding:

Cyanco has implemented a process for selecting transport routes that minimize the potential for accidents and releases. The Cyanco International Cyanide Management Code Compliance Manual (ICMC Manual) defines that all ICMC criteria must be considered during the planning of shipping routes. Examples were available for ocean routes showing that Cyanco Leadership evaluated transportation partners, route selection processes, and emergency response capabilities to confirm suitability of the transportation partners and the routes chosen. The ICMC Manual states that appropriate risk considerations are to be made for each type of mode used.

Interviews were conducted to confirm that before Cyanco initially qualifies a new customer for sodium cyanide, they follow a standard practice to determine that the cyanide can be safely delivered to the customer mine site. Cyanco does not control the routing of shipments via ocean; however they do choose the shipping ports, receiving ports, and ocean carriers. The risk evaluations associated with this supply chain focus primarily on the selection of the international ports to ensure that safety and security standards are acceptable. Infrastructure around the ports is also evaluated for alignment with ICMI Code criteria. Ocean carriers are selected based on their abilities to deliver cyanide safely into the necessary ports and on their qualifications for transporting dangerous goods according to International Maritime Dangerous Goods (IMDG) requirements.

Cyanco has implemented a process to periodically re-evaluate routes used for cyanide deliveries. Cyanco has periodically meetings with the partners (carriers) to ensure all are aligned with the safety issues in the transport of cyanide. Feedback regarding routes chosen is gathered during the partner re-evaluation process. According to interviews with Cyanco personnel, feedback regarding the routes is gathered during this partner re-evaluation process.

The Cyanco ICMC Manual states appropriate risk considerations are made for each type of mode used. Risk mitigation measures taken by Cyanco prior to using this Global Ocean Supply Chain included: the development and implementation of an improved international shipment tracking process, the revision of the Cyanco Global Emergency Response Procedures, and the coordination of additional global emergency response resources in destination countries.

Cyanco seeks input from communities, other stakeholders and applicable governmental agencies in the selection of routes and the development of risk management measures. Records were available to demonstrate that Cyanco personnel have met with transportation partners and local stakeholders to seek input from communities, non-governmental organizations, and governmental authorities in the U.S., Canada, South America, and Ghana to seek input into the planning for their global supply chains.

Cyanco uses formal policies, procedures, and contractual terms and conditions with transportation partners to ensure that cyanide is appropriately handled and transported globally.

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 operation is	☑ in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Transport Practice 1.2

Summarize the basis for this Finding:

Cyanco uses only trained, qualified and licensed operators and companies to transport its products. Cyanco ensures that its transportation partners in its Global Ocean Supply Chain are compliant with ICMC requirements and are assessed by auditors during either certification audits (trucking transporters and interim storage) or due diligence audits (ports and ocean carriers).

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

The operation is	☑ in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Transport Practice 1.3

Summarize the basis for this Finding:

Cyanco uses only supply chain partners with equipment designed and maintained to operate within the loads it is handling. The ICMC Manual states that Cyanco reviews all transportation partners to ensure that ICMC transportation requirements are fulfilled.

At the time of the audit, Cyanco was using Quality Carriers, Inc. and Action Resources to transport solid sodium cyanide in trailers, intermodal containers, and ISO tanks from the production plant outside of Houston Texas. The loading activities and shipment records were reviewed during the audit to confirm that standard weights within the capacity of the intermodal containers, tractors, trailers, ISO tanks, and chassis were being shipped. Quality Carriers and Action Resources are certified ICMC Signatory companies. Both transportation companies were found to be in full compliance with ICMC requirements during their certification and re-certification audits.

Inter-modal containers used for ocean shipments are owned and controlled by the ocean carriers that bring the containers to international destinations. ISO tanks are leased and maintained by Cyanco. ISO weight capacities and the fulfillment of ISO tank inspection requirements were reviewed during the audit and were found to be compliant. Cyanco uses only authorized packaging for its sodium cyanide shipments.

According to interviews with Cyanco personnel, standard weights are loaded and standard blocking and bracing configurations are used for van trailers and intermodal containers. Shipping paperwork was reviewed during the audit and showed 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.

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 for all container vessels engaged in international trade. The ICLL defines the maximum allowed draught of the vessel, and how this is to be marked on the side of the vessel. Container ships regularly go through an International Load Line Certification process that verifies that the vessel strength and stability have been approved for the specific loading capacities. The sides of the ships are marked to show the height of the freeboard (the height from the water line to the main deck) that must be maintained. The use of this load line ensures that the vessel has a reserve buoyancy and bow height in compliance with the requirements of the ICLL. The use and monitoring of this ship characteristic ensures that the container ship is not overloaded.

The original on-site Due Diligence evaluations of ports also confirmed the acceptability of lifting equipment used to move intermodal containers and ISO tanks.

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

The operation is
☑ in full compliance with
☐ in substantial compliance with Transport Practice 1.4
☐ not in compliance with

Summarize the basis for this Finding:

Cyanco 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. Cyanide packages is marked as required by Section 5.2.1 of the IMO DG Code and according to the labeling requirements indicated on the DG List.

Cyanco uses UN 1689 placards to identify the shipments as sodium cyanide, as required by local regulations and international standards. Section 3.1 of the ICMC Manual addresses this requirement.

Cyanco has implemented a safety program for cyanide transport that includes all ICMC required considerations. The Cyanco ICMC Manual states that Cyanco confirms that its transportation partners must stay in compliance with all ICMC requirements.

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

The operation is
☑ in full compliance with
☐ in substantial compliance with Transport Practice 1.5
☐ not in compliance with

Summarize the basis for this Finding:

Cyanco transports shipments of cyanide by sea in compliance with the Dangerous Goods Code of the International Maritime Organization. Cyanco ships its sodium cyanide on main line ocean carriers that have demonstrated safety programs and safe performance. The ocean carriers have sign standard contractual agreements that require that the carrier adhere to applicable regulations

and have recognized environmental, health, and safety programs. Cyanco does not ship cyanide by air. In addition to instituting contractual requirements, Cyanco has ensured that each ocean carrier used in this Ocean Supply Chain has undergone a Due Diligence evaluation to confirm that ICMC requirements are fulfilled.

The auditor concluded that Cyanco has effective processes for ensuring that U.S. and international ports have demonstrated appropriate safety, security, and road infrastructure prior to being approved for sodium cyanide shipments.

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 Cyanco 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 Cyanco 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 Cyanco 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.
d) Loaded intermodal and ISO tank 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 2013 for each ocean carrier used in this supply chain. All information required by the IMDG Code is required as standard practice on Cyanco shipping paperwork.
f) The container packing certificates from shipments made during the re-certification period 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) Cyanco 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) Cyanco confirmed through its Due Diligence assessment that each of the 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) Cyanco confirmed through its Due Diligence assessment that each of the Ocean Carriers 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 operation is	☑ in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Transport Practice 1.6

Summarize the basis for this Finding:

Cyanco has implemented systems and procedures to track the progress of cyanide shipments. Interviews with the Director of Logistics & Transportation and the Logistics Coordinator were held during the audit. The Logistics Coordinator has designated responsibilities for tracking shipments on a daily basis. Cyanco GPS tracking capabilities and online tracking capabilities through ocean carrier information portals were confirmed through computer demonstration and interview. Cyanco uses bills of lading and shipping papers indicating the number of packages and amount of material to confirm that the chain of custody for the cyanide is recorded and that ICMC requirements are fulfilled. This practice was also confirmed through interviews with personnel throughout the Supply Chain.

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 operation is	☑ in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Transport Practice 2.1

Summarize the basis for this Finding:

Interim storage activities in this supply chain, as defined by ICMI, are limited to those that take place at the ocean ports. Port operations ensure that the storage locations and security access to the ports is in alignment with ICMI requirements.

Cyanco evaluated the suitability of interim storage at ports through its Due Diligence evaluation process. The ports were each evaluated on-site initially to confirm fulfillment of ICMI

requirements and then remotely to confirm continued suitability. The Due Diligence assessment results are included later in this report under the Port Due Diligence section.

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 operation is	☑ in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Transport Practice 3.1

Summarize the basis for this Finding:

Cyanco has developed and implemented a Global Transportation Emergency Response Plan (GTERP) that is appropriate for its Global Ocean Supply Chain. The GTERP includes details regarding the response procedures to be used in each region of the world, each mode of transportation, and type of incident. The GTERP was last updated in 2017. The notification numbers are updated every 6 months and the rest of the plan is reviewed annually and updated as necessary.

Emergency response plans were reviewed during this audit. The GTERP considers 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 GTERP includes descriptions of response actions, as appropriate for the anticipated emergency situations. Cyanco also contracts with professional emergency response and remediation firms in the countries into which it ships to ensure that local emergency response is appropriate for the country involved. The Cyanco GTERP is universally applicable to all types of emergencies. All of the plans and emergency response information clearly outline the roles and responsibilities of internal and external responders.

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

The operation is
- ☑ in full compliance with
- ☐ in substantial compliance with Transport Practice 3.2
- ☐ not in compliance with

Summarize the basis for this Finding:

Cyanco has provides emergency response training to Cyanco personnel ensures that its transportation partners also provide emergency response training to their personnel. This confirmation is done through on-site auditing and Due Diligence review.

The roles and responsibilities of relevant internal and external personnel are clearly described in the Cyanco emergency response plans. Although it is highly unlikely that Cyanco would be called in to respond to an emergency by an ocean carrier at sea, it is conceivable that Cyanco may need to respond to an emergency at a port. Current emergency response procedures state that Technical Advisory Team (TAT) Rapid Response Kits are maintained by emergency response contractors. Information is available regarding the contents of these emergency kits. The types of equipment maintained were found to be appropriate by the auditor.

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

The operation is
- ☑ in full compliance with
- ☐ in substantial compliance with Transport Practice 3.3
- ☐ not in compliance with

Summarize the basis for this Finding:

Cyanco has developed procedures and maintains current contact information for notifying regulatory agencies, outside response providers, medical facilities and potentially affected communities of an emergency. The GTERP was reviewed during the audit and was found to contain all necessary contact information.

The Cyanco ICMC Manual requires that internal and external emergency notification and reporting procedures are kept current. Contact numbers and reporting information is reviewed at least annually, or as needed.

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

The operation is
- ☑ in full compliance with
- ☐ in substantial compliance with Transport Practice 3.4
- ☐ not in compliance with

Summarize the basis for this Finding:

Specific details regarding the remediation, neutralization, decontamination, and disposal of clean-up debris are contained within the Cyanco emergency response procedures. Extensive descriptions of necessary action steps depending on the incident scenario are clearly outlined in the documents.

Cyanco personnel showed a high level of awareness that the use of treatment chemicals is prohibited if cyanide spills into surface waters. Cyanco emergency response procedures specifically prohibit the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide for treating a cyanide spill into surface water. Section 3.4 of the ICMC Manual specifically bans the use of treatment chemicals for spills into surface water.

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

The operation is
- ☑ in full compliance with
- ☐ in substantial compliance with Transport Practice 3.5
- ☐ not in compliance with

Summarize the basis for this Finding:

Cyanco periodically reviews its emergency response plans and evaluates the plan's adequacy. The ICMC Manual requires that table top simulations be run annually and that emergency response drills are run every 3-5 years. Records were available to demonstrate that Cyanco has held emergency response drills with its transportation partners and client mines in 2015, 2016 and 2017.

Cyanco reviews and revises its emergency response plans as necessary after responding to an actual emergency and after emergency response drills. Formal action-tracking systems are used to ensure timely and complete close-out of actions following emergency response drills and actual emergencies.

Ocean Carrier Due Diligence Investigation Results

Cyanco ships its solid sodium cyanide on main line ocean carriers that meet 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 carriers. According to Cyanco's ICMC Manual, ocean carriers used for cyanide shipments undergo a Due Diligence review of their ability to fulfill ICMI Code requirements.

Due Diligence assessments were conducted for the ocean carriers and ports included in the scope of the Global Ocean Supply Chain. This Global Ocean Supply Chain includes the following ocean carriers:

1. Hamburg Sued
2. Maersk
3. Hapag Lloyd
4. Mediterranean Shipping Co. (MSC)
5. CMA CGGM
6. Compañía Sud Americana de Vapores (CSAV)
7. Zim Lines
8. Seaboard
9. Intermarine
10. Grimaldi Lines

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 Global 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 carriers and are regulated by a number of international organizations. When Cyanco plans a specific shipping route to an ICMI Signatory Mine, it

evaluates the route that will be taken from production to mine site. This route evaluation includes the selection of the most appropriate destination port and then the selection of an ocean carrier with hazardous material handling capabilities.

According to interviews, Cyanco gives strong preference to ocean carriers that have already found to be compliant with ICMC requirements through an ICMC Due Diligence assessment. Preference is also given to direct shipping lanes that do not involve a transfer of the cargo to a different ship. Ports that have been found to be acceptable 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. Only in cases where a closer port has unacceptable infrastructure or security is the shipment routed using a longer over-the-road segment.

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 Global Ocean Transport is:
- ☑ consistent with Transport Practice 1.2
- ☐ substantially consistent
- ☐ not consistent

Summary of the basis for this finding:

All Ocean Carriers
According to the responses to a questionnaire modeled after the ICMC Transportation Protocol, all ocean carriers reported 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 the 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 Cyanco that they train their personnel on hazardous materials handling. Information from the carriers also indicated that they have systems in place to ensure that inter-modal 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 ☑ consistent with Transport Practice 1.3

Global Ocean Transport is: ☐ substantially consistent
☐ not consistent

Summary of the basis for this finding:

All Ocean Carriers
Cyanco has contractual agreements with all of its ocean carriers that require that they comply with the regulations regarding the safe and appropriate shipping of dangerous goods. Part of the U.S. Department of Transportation Hazardous Materials Registration and Safety of Life at Sea regulatory processes addresses the use of safe and appropriate equipment.

Cyanco 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. Cyanco 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 Global Ocean Transport is: ☑ consistent with Transport Practice 1.4
☐ substantially consistent
☐ not consistent

Summary of the basis for this finding:

All Ocean Carriers

Ocean carriers self-reported to Cyanco 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 Global Ocean Transport is:
- ☑ consistent with Transport Practice 1.5
- ☐ substantially consistent
- ☐ not consistent

Summary of the basis for this finding:
Cyanco ships its sodium cyanide on main line ocean carriers that have demonstrated safety programs and safe performance. Each carrier was asked for information regarding fulfillment of ICMC requirements using a customized ICMC transportation protocol. Responses and information provided by all carriers was deemed to be appropriate by the ICMC Lead Auditor.

The ocean routes are chosen by the ocean carriers. The destination ports are evaluated via an on-site evaluation when the port is under consideration to receive cyanide by an ICMI Signatory Mine. Records were available during the audit to demonstrate that all ports within the supply chain had undergone such 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 Cyanco 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 Cyanco 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 Cyanco 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.
d) Loaded intermodal and ISO tank 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 2017 for each ocean carrier used in this supply chain. All information required by the IMDG Code is required as standard practice on Cyanco shipping paperwork.
f) The container packing certificates from 2017 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) Cyanco 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) Cyanco confirmed through its Due Diligence assessment that each of the 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) Cyanco confirmed through its Due Diligence assessment that each of the Ocean Carriers 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 Global Ocean Transport is:
☑ consistent with Transport Practice 1.6
☐ substantially consistent
☐ not consistent

Summary of the basis for this finding:

All Ocean Carriers
Ocean carriers reported that they have computer systems that are 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. Cyanco's freight forwarder has access to this information via the internet web sites. Cyanco 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 ISO tank shipping containers. 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 Global Ocean Transport is:
- ☑ consistent with Transport Practice 2.1
- ☐ substantially consistent
- ☐ not consistent

Summary of the basis for this finding:

All Ocean Carriers
Ocean carriers 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 and the Coast Guard 33 CFR regulations when in the United States. The terminal must segregate containers similar to the segregation onboard vessels.

Safety checklists and seals are used by Cyanco personnel when the shipping containers are loaded. The seal enables verification that the container was not opened during transit.

Each U.S. and international 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 or rail infrastructure into the port. Records were 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 Global Ocean Transport is:
- ☑ consistent with Transport Practice 3.1
- ☐ substantially consistent
- ☐ not consistent

Summary of the basis for this finding:

All Ocean Carriers

Ocean carriers reported that they and their affiliates have emergency response plans in place which include the prompt notification of all involved parties. Cyanco 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 carriers confirmed their understanding of emergency response requirements. Emergency response planning and the performance of frequent emergency drills are required by international laws. All of the ocean carriers 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.

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

The management of Global Ocean Transport is:
- ☑ consistent with Transport Practice 3.2
- ☐ substantially consistent
- ☐ not consistent

Summary of the basis for this finding:

All Ocean Carriers
Ocean carriers 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.

Cyanco offers immediate technical assistance for any cyanide spill, and offers emergency resources for spills that might occur near a Cyanco site. Cyanco contracts with a global emergency response service provider to ensure that appropriate notifications and emergency response is initiated if there is an incident.

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

The management of Global Ocean Transport is:
- ☑ consistent with Transport Practice 3.3
- ☐ substantially consistent
- ☐ not consistent

Summary of the basis for this finding:

All Ocean Carriers
Ocean carriers reported that they and their affiliates have emergency response plans in place which include the prompt notification of all involved parties. Cyanco 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 carriers confirmed their understanding of emergency response requirements. Emergency response planning and the performance of frequent emergency drills are required by international laws. All of the ocean carriers 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 Global Ocean Transport is:
- ☑ consistent with Transport Practice 3.4
- ☐ substantially consistent
- ☐ not consistent

Summary of the basis for this finding:

All Ocean Carriers
Ocean carrier responses confirmed that they would communicate with Cyanco cyanide experts in the event of a spill. Cyanco 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 Global Ocean Transport is:
- ☑ consistent with Transport Practice 3.5
- ☐ substantially consistent
- ☐ not consistent

Summary of the basis for this finding:

All Ocean Carriers

The due diligence questionnaire responses from the ocean carriers confirmed their understanding of emergency response requirements. Emergency response planning and the performance of frequent emergency drills are required by international laws. All of the ocean carriers 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.

Ocean Port Due Diligence Investigation Results

Ports used in this supply chain are listed below:

1. Port of Tema, Ghana
2. Port of Houston, USA
3. Port of Caucedo, Dominican Republic
4. Port of Nouakchott, Mauritania
5. Port of Cortes, Honduras

Solid sodium cyanide packed into intermodal or ISO tank shipping containers is shipped from the Port of Houston in Texas USA using the Ocean Carriers detailed in this supply chain audit report. The cyanide is received at the international ports and stored for a short time (normally no more than three days), and is picked up by transportation companies that have either contracted to Cyanco or to the mine site to which they are delivering. The road transportation in the destination country is outside the scope of this certification audit activity.

On-site evaluations were performed for each port within the scope of this audit as part of the original ICMC certification audit. The only port that was added to the certification as part of this re-certification cycle was the Port of Cortes in Honduras. A full ICMC on-site assessment was performed by an approved ICMI Lead Auditor for Transportation. The report was reviewed as part of this re-certification audit. Remote Due Diligence evaluations were conducted for the existing ports to confirm that they are still suitable for use in the supply chain. No negative issues, spills, or cyanide exposures were reported during the re-certification period from any of the ports.

When a port is first added to the supply chain, the port evaluation process involves an on-site review of environmental, health, safety, and security practices. Road infrastructure to and from the ports, as well as port experience with handling dangerous goods is also evaluated.

The auditor concluded that Cyanco's demonstrated and planned Due Diligence activities are appropriate for confirming that Ports have appropriate safety, security, and road infrastructure prior to being approved by Cyanco for dangerous goods shipments.

In addition to Cyanco’s efforts to ensure that ICMC requirements are fulfilled, there are many agencies charted with the task of confirming that shipping is conducted in a safe and secure manner. One such organization is the International Maritime Organization (IMO). The IMO was established in Geneva in 1948 and it currently headquartered in London, United Kingdom. The IMO is a specialized agency of the United Nations. The IMO's primary purpose is to develop and maintain a comprehensive regulatory framework for shipping. The IMO regulates practices associated with safety, environmental concerns, legal matters, technical co-operation, maritime

security and the efficiency of shipping. One initiative of the IMO is the International Convention for the Safety of Life at Sea (SOLAS), which was enacted in 1974. Ocean carriers are required to have periodic audits of their safety programs. The provisions of SOLAS include: fire protection, life saving equipment, radio communications, safety of navigation, transportation of dangerous goods, management of safe operations of ships, and maritime security.

With regard to port safety and security, new amendments to the SOLAS Convention were enacted in 2002. These amendments gave rise to the International Ship and Port Facility Security (ISPS) Code, which went into effect on 1 July 2004. The concept of the code is to provide layered and redundant defenses against smuggling, terrorism, piracy, stowaways, etc. The ISPS Code required most ships and port facilities engaged in international trade to establish and maintain strict security procedures as specified in ship and port specific Ship Security Plans and Port Facility Security Plans. Container ships and ports that service them are required to have multiple third-party audits of safety and security. Each ship and each port involved in international trade undergoes external security, safety, and management system audits at least annually. In the United States the Port Facility Security Plans are filed with, and monitored by the United States Coast Guard, the U.S. authority with jurisdiction over U.S. Ports.

Angamos Port - Chile

The Angamos Port is situated 1,440 km north of Santiago, Chile's capital city, on the Pacific Ocean coastline. The Port is in Mejillones, Chile, north of Antofagasta. The port is operated by Ultraport, which is part of the Ultramar Group. This company operates the container ship terminal that is used by Cyanco for sodium cyanide shipments. The Ultramar Group was founded in Valparaiso, Chile in 1981. Ultraport has been operating the Angamos Port since 2003.

The Port is serviced by MSC, CSAV, Hamburg Sued, and CCNI ocean carriers. The facility is completely fenced. Access to the port is only possible via a security gate. Security cameras are used throughout the facility and the port is manned 24 hours per day. The Angamos Port maintains current ISO 14001, OHSAS 18001, ISO 9001, and International Ship and Port Security (ISPS) certifications.

During the initial on-site assessment, interviews were held with port personnel, procedures were assessed, storage and handling practices were observed, and records were reviewed. The remote evaluation confirmed that the information shown here is current, that Cyanco has not had any negative experiences with the port. Cyanco has concluded that the port is still suitable for cyanide storage and shipments.

San Antonio Port – Chile

The port of San Antonio is located in the city and province of San Antonio, in the Valparaiso Region of Chile. It is located on the Pacific Ocean coastline. It is approximately 100 km west of Chile's capital: Santiago. The port is a multi-operater port. San Antonio International (STI) operates the South Molo Terminal which specializes in the handling of containerized cargo.

Puerto Panul SA operates the North Terminal dedicated to solid bulk cargoes. The Policarpo Terminal Toro is administered by the Portuaria Compania de San Antonio. TEM, Terminal Multioperado, is administered by Portuaria Compania de San Antonio. STI has been operating the South Terminal since January of 2000. The port is serviced by Alianca, APL, CSAV, Hamburg Sud, Libra, Maersk Line, Mediterranean Shipping Company (MSC), MOL and West Coast Industrial Express ocean carriers.

The facility is completely fenced. Access to the port is only possible via a security gate. Security cameras are used throughout the facility and the port is manned 24 hours per day. The San Antonio Port maintains current ISO 14001, ISO 9001, and International Ship and Port Security (ISPS) certifications.

During the initial on-site assessment, interviews were held with port personnel, procedures were assessed, storage and handling practices were observed, and records were reviewed. The remote evaluation confirmed that the information shown here is current, that Cyanco has not had any negative experiences with the port. Cyanco has concluded that the port is still suitable for cyanide storage and shipments.

Tema Port – Ghana

The Tema Port is the main Container Port servicing Ghana and some of the land locked countries (Burkina, Mali, Niger & Chad). The port has been in use since 1962. The port operator that was evaluated through Due Diligence is Meridian Port Service (MPS). Interviews were held with MPS personnel, procedures were assessed, storage and handling practices were observed, and records were reviewed.

The Tema Port is located in Tema, which is in the southeastern part of Ghana and is about 30 kilometers east of Accra. The Tema Port has a security fence around the entire Port. Security measures include electronic access gates for staff, 24-hour manned security staff and the use of surveillance cameras. During the initial on-site assessment, Mine personnel held interviews with port personnel, procedures were assessed, storage and handling practices were observed, and records were reviewed. The remote evaluation confirmed that the information shown here is current, that Cyanco has not had any negative experiences with the port. Cyanco has concluded that the port is still suitable for cyanide storage and shipments.

Port of Callao – Peru

The Port of Callao is located just 12 kilometers from downtown Lima and is Peru's primary commercial port. The Port of Callao is fully fenced and has strict access controls. Cyanco contracted a third-party ICMC auditor who is external to MSS to evaluate the Port of Callao in 2014. The auditor audited the port and concluded that port operations including storage and handling operations were in conformance with ICMC requirements.

During the initial on-site assessment, interviews were held with port personnel, procedures were assessed, storage and handling practices were observed, and records were reviewed. The remote evaluation confirmed that the information shown here is current, that Cyanco has not had any negative experiences with the port. Cyanco has concluded that the port is still suitable for cyanide storage and shipments.

Port of Caucedo – Dominican Republic

The Port of Caucedo is located on the southern half of the Dominican Republic. It is located approximately 30 minutes / 25 km from Santo Domingo, the capital of the Dominican Republic. It is also located about 5 km from the International airport in a Free Trade Zone.

The port was built in 2003. It has three deep water berths, 17 m deep, with a length of 922 m.

DP World Limited, which operates the port and logistics center, is incorporated in Dubai. It operates 70 terminals on 6 continents. DP World has more than 36,000 employees, and, according to its website, is the 4th largest Marine Terminal Operator.

The port is has multiple accreditations, including ISO 28000-2007, C-TPAT, US Homeland Security, US Coast Guard, ISPS, CSI.

The Port of Caucedo is fully fenced and has strict access controls. Cyanco contracted a third-party ICMC auditor who is external to MSS to evaluate the Port of Caucedo in 2016. The auditor audited the port and concluded that port operations including storage and handling operations were in conformance with ICMC requirements.

During the initial on-site assessment, interviews were held with port personnel, procedures were assessed, storage and handling practices were observed, and records were reviewed. The remote evaluation confirmed that the information shown here is current, that Cyanco has not had any negative experiences with the port. Cyanco has concluded that the port is still suitable for cyanide storage and shipments.

Port of Nouakchott - Mauritania

Mauritania, officially the Islamic Republic of Mauritania, is a country in the Maghreb region of western North Africa. It is the eleventh largest country in Africa and is bordered by the Atlantic Ocean to the west, Morocco and the remnants of Western Sahara in the north, Algeria in the northeast, Mali in the east and southeast, and Senegal in the southwest.

Solid sodium cyanide is received at the Port of Nouakchott in sea containers, and they are immediately loaded onto trucks to go to mine sites. The Port is situated some distance from the city of Nouakchott with one access road leading the Port entrance. A distance from the Port, one road leads to the city of Noaukchott, while the main road leads past the city, and eventually onto the main road leading north.

The Port, "Port de l'Amitié" (PANPA) is run by the Port Autonome De Nouakchott and is a Governmental Department.

The Port of Nouakchott is fully enclosed in walls and fencing and has strict access controls. Cyanco contracted a third-party ICMC auditor who is external to MSS to evaluate the Port of Nouakchott in 2016. The auditor audited the port and concluded that port operations including storage and handling operations were in alignment with ICMC requirements. The Port is authorized for the receipt of dangerous goods. Equipment, training programs, handling practices, and emergency response preparedness were all deemed suitable and acceptable for the handling of solid cyanide in sea containers.

During the initial on-site assessment, interviews were held with port personnel, procedures were assessed, storage and handling practices were observed, and records were reviewed. The remote evaluation confirmed that the information shown here is current, that Cyanco has not had any negative experiences with the port. Cyanco has concluded that the port is still suitable for cyanide storage and shipments.

Port of Cortes, Honduras

Puerto Cortes is in the north and along the Atlantic coast of Honduras. It is the main port of the country and is the one of greater traffic between the Honduran and is one of Central America´s most important ports. The port handles 85% of shipment to Honduras, 10 % to El Salvador and 5% to Nicaragua.

It has the advantage of being in a well-protected natural bay of deep waters where the variation of the tides is insignificant, with a maximum fluctuation of 0.3 m. Northeast winds and shifting currents.

Puerto Cortes is located 40 minutes from the highway to the industrial city *San Pedro Sula* and 2 hours with the border of Guatemala, towards Puerto Barrios and Santo Tomas de Castilla. It has one of the most complete terminals of containers in the region.

It has six dock berths, of which docks 4, 5 and 6 have been concessioned to the Philippine ICTSI (International Container Terminal Services Inc.), which formed a partnership with *Operadora Portuaria Centroamericana S.A. de C.V.*

The facility is completely fenced. Access to the port is only possible via a security gate. Security cameras are used throughout the facility and the port is manned 24 hours per day. The port maintains a management system that conforms to ISO 14001and maintains an International Ship and Port Security (ISPS) certification.

During the on-site assessment in 2017, interviews were held with port personnel, procedures were assessed, storage and handling practices were observed, and records were reviewed. Confirmation was also made that Cyanco has not had any negative experiences with the port. Cyanco has concluded that the port is suitable for cyanide storage and shipments.

Detailed Due Diligence Findings

The results of the on-site Due Diligence Assessments are listed in the following table and are arranged by topic: Port Security, Safety & Training, Material Handling & Storage (including environmental considerations), and Emergency Response.

Topic	Assessment Results
Port Security	• All ports in this supply chain are completely surrounded with walls or fences and access to the ports is strictly controlled. Security at the ports was found to be consistent with ICMC requirements. • Confirmation was made that the following practices are in place: 24/7 manned security; complete fence line; no public access; sealed (locked storage containers); security cameras.
Safety & Training	• The ports all currently handle sodium cyanide. • Port personnel receive Dangerous Goods training. • Confirmation was made during the audits that no eating, smoking, or open flames are allowed in areas where cargo is handled and stored.
Material Handling & Storage	• Dangerous Goods cargo is stored using standard chemical compatibility management practices at each port.
Emergency Response	• A written Emergency Response Plan (ERP) was available at each port. • The roles and responsibilities of the Emergency Response Team are defined in the Emergency Response Plan (ERP). The information in the ERP was found to be acceptable. • Appropriate emergency response equipment was available at each of the Ports.