

ICMI Cyanide Code Consigner Supply Chain Summary Audit Report

Cyanco Consignor Pre-Operational Certification Audit – Ocean Shipments from the Port of Houston to International Destinations

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

usa USA

2012 Audit Cycle



www.mss-team.com



Table of Contents

Cyanco Ocean Supply Chain Summary	. 2
Consignor Name & Contact Information	
Pre-Operational Information – Cyanco Ocean Supply Chain	
Audit Information – Cyanco Ocean Supply Chain	
Cyanco Ocean Supply Chain - Auditor's Finding	
Consignor Summary	
Operational & Audit Information for Consignor	. 5
Description of Consignor's role in ensuring compliance of its carriers	
Ocean Carriers & Ports – Pre-Operational Due Diligence Investigations	



Cyanco Ocean Supply Chain Summary

Consignor Name & Contact Information

Name of Cyanco

9450 Double R Blvd. Suite 2, Reno, Nevada 89445 USA **Operation:**

Name and contact Max Jones

information for Director - EHSS & ICMC

11233 Shadow Creek Parkway, Suite 125 **Cyanco Contact:**

Pearland, TX 77584

T: (832) 590-3644 F: (713) 436-5202

E: max.jones@cyanco.com W: www.cyanco.com

Pre-Operational Information – Cyanco Ocean Supply Chain

Cyanco maintains a corporate office in Reno, Nevada, a liquid sodium cyanide production facility near Winnemucca, Nevada, terminal operations in Cadillac, Quebec - Canada, an office outside of Montreal, Quebec, and is now building a solid sodium cyanide plant in Texas.

Cyanco is constructing the new plant at the industrial park of the Chocolate Bayou Plant of Ascend Performance Materials at Alvin/Texas. The plant will produce solid sodium cyanide briquettes and is expected to be operational in the fourth quarter of 2012. The plant will have the capability of shipping product in hopper cars, ISO containers, and one metric ton bag/boxes.

Product manufactured at this location will be shipped domestically by truck, rail, and barge, and internationally via ocean carrier. International shipments will be brought to the Port of Houston by an ICMC-certified truck transporter (Quality Carriers, Inc.), and will then be shipped via ocean carrier to Africa and South America.

This pre-operational ocean supply chain includes the US Port of Houston as the departure port and the ocean carriers Hamburg Sued, Maersk, Mediterranean Shipping Co. (MSC), CMA-CGM, Compañía Sud Americana de Vapores (CSAV), Hapag-Lloyd, and Zim Lines. Ports used in this supply chain are listed in the following table:

Cyanco Pre-Operational Ocean Supply Chain

Nivol June August 27, 2012
Signature of Lead Auditor Date

Name of Operation

Page 2 of 16



Ports of Export	Ports of Import	Destination Countries
Houston, Texas - USA	Rio De Janerio	Brazil
	Santos	
	Sepetiba (Itaguai)	
	Vitoria	
	Angamos San Antonio	Chile
	Tema Takarati	Ghana
	Nouakchott	Mauritania
	Callao	Peru

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.

Interim storage activities in this supply chain, as defined by ICMI, are limited to those that take place at ocean ports. Cyanco has committed to conducting Due Diligence Reviews of its transportation partners that will include evaluations of all instances of interim storage along this supply chain.

This pre-operational audit was used to evaluate Cyanco's plans for managing the transportation of its solid sodium cyanide from the Port of Houston to international ports.

Audit Information - Cyanco Ocean Supply Chain

The pre-operational 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 pre-operational certification audit of Cyanco as a Transporter / Consignor was conducted on May 17, 2012 with Due Diligence evaluations of the supply chain conducted from May 9 through August 10, 2012.

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 Pre-operational Verification

Cyanco Pre-Operational Ocean Supply Chain
Name of Operation

Page 3 of 16



Protocol (2011). The audit was conducted through discussions and interviews with multiple individuals in cross-functional roles at Cyanco and its supply chain partners.

The results of this pre-operational certification audit and the related due diligence reviews indicate that Cyanco and its ocean transport management practices are in FULL COMPLIANCE with ICMI pre-operational 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 pre-operational requirements of the International Cyanide Management Code.

Audit Company:	MSS Code Certification Service
	www.mss-team.com
Lead / Technical Auditor:	Nicole Jurczyk
	E-mail: CodeAudits@mss-team.com
Date(s) of Audit:	May 17, 2012 (on-site); Due Diligence Evaluations: May 9 –
	August 10, 2012

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 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 Pre-Operational Transportation Operations and using standard and accepted practices for health, safety and environmental audits.

Cyanco Pre-Operational Ocean Supply Chain

Name of Operation

Signature of Lead Auditor

Date

Cyanco Pre-Operational Ocean Supply Chain

Ninol June August 27, 2012
Signature of Lead Auditor Date

Name of Operation

Page 4 of 16



Consignor Summary

Operational & Audit Information for Consignor

Supply change management activities and processes included in this audit included the selection of ocean carriers and ports, the processes used to track ocean shipments, and the emergency response processes in place to respond to any accident or incident involving cyanide.

Interim storage activities in this supply chain, as defined by ICMI, are limited to those that take place at ocean ports. Cyanco has committed to conducting Due Diligence Reviews of its transportation partners that will include evaluations of all instances of interim storage along this supply chain.

Plans and procedures were reviewed and personnel at Cyanco and transportation partners were interviewed during this pre-operational certification audit. All plans, procedures, and Due Diligence actions taken to ensure that ocean shipments are made in compliance with ICMI requirements were found to be acceptable.

The results of this certification audit demonstrate that Cyanco's management practices used to ensure fulfillment of International Cyanide Management Code requirements during ocean shipments are in FULL COMPLIANCE with pre-operational ICMI Cyanide Management Code requirements.

Cyanco Pre-Operational Ocean Supply Chain

Nivol June August 27, 2012
Signature of Lead Auditor Date Name of Operation

Page 5 of 16



Cyanco Consignor / Transporter - Auditor's Finding

Cyanco Consignor / Transporter operations are

☑ in full compliance

in substantial compliance not in compliance

with the pre-operational requirements of the International Cyanide Management Code.

Audit Company:	MSS Code Certification Service
	www.mss-team.com
Lead / Technical Auditor:	Nicole Jurczyk
	E-mail: CodeAudits@mss-team.com
Date(s) of Audit:	May 17, 2012 (on-site); Due Diligence Evaluations: May 9 –
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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 Pre-Operational Transportation Operations and using standard and accepted practices for health, safety and environmental audits.

Cyanco Pre-Operational Ocean Supply Chain

Name of Operation

Signature of Lead Auditor

Date Name of Operation

Cyanco Pre-Operational Ocean Supply Chain

Nish June August 27, 2012
Signature of Lead Auditor Date Name of Operation

Page 6 of 16



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.

<u>Transport Practice 1.1:</u> Select cyanide transport routes to minimize the potential for

accidents and releases.

☑ in full compliance with

The operation is in substantial compliance with Transport Practice 1.1

not in compliance with

Summarize the basis for this Finding:

Cyanco has committed to implementing 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.

The Cyanco ICMC Manual states appropriate risk considerations are to be made for each type of mode used. In preparation for the start of shipments using the Ocean Supply Chain, risk mitigation measures that have been taken are 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 Pre-Operational Ocean Supply Chain

Signature of Lead Auditor



Cyanco has committed to seeking input from communities, other stakeholders and applicable governmental agencies as necessary in the selection of routes and 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 to seek input into the planning for their global supply chains.

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

<u>Transport Practice 1.2</u> 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 has committed to using only trained, qualified and licensed (where required) operators and companies to transport its products. Cyanco 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. These requirements are stated in the ICMC Manual.

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

Cyanco Pre-Operational Ocean Supply Chain

Signature of Lead Auditor



<u>Transport Practice 1.3:</u> Ensure that transport equipment is suitable for the cyanide

shipment.

☑ in full compliance with

The operation is in substantial compliance with Transport Practice 1.3

not in compliance with

Summarize the basis for this Finding:

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

Inter-modal containers used for international shipments are owned and controlled by the ocean carriers that will carry the containers to international destinations. Cyanco uses only authorized packaging for its solid sodium cyanide shipments.

According to interviews with Cyanco personnel, the shipments of bulk and semi-bulk packages will be standard weights with standard blocking and bracing configurations used. Shipping paperwork will indicate the number of packages shipped and the weight of the cargo. This information is to be 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.

Cyanco Pre-Operational Ocean Supply Chain

Signature of Lead Auditor



<u>Transport Practice 1.4:</u> Develop and implement a safety program for transport of cyanide.

☑ in full compliance with

The operation is in substantial compliance with Transport Practice 1.4

not in compliance with

Summarize the basis for this Finding:

Cyanco has committed to ensuring that cyanide is transported in a manner that maintains the integrity of its packaging. Transportation of cyanide by sea will be done in compliance with the International Maritime Organization Dangerous Goods Code. Cyanide shipments will be 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 will be 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 has committed to using placards or other signage to identify the shipment as cyanide, as required by local regulations or international standards. Section 3.1 of the ICMC Manual addresses this requirement.

Cyanco has committed to implementing a safety program for cyanide transport that includes all ICMC required considerations. The Cyanco ICMC Manual states that Cyanco confirms that its transportation partners are in compliance with all ICMC requirements.

<u>Transport Practice 1.5:</u> 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:

Cyanco has committed to transporting shipments of cyanide by sea in compliance with the Dangerous Goods Code of the International Maritime Organization. Cyanco plans to ship its sodium cyanide on main line ocean carriers that have demonstrated safety programs and safe performance. The ocean carriers will 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.

Cyanco Pre-Operational Ocean Supply Chain

Signature of Lead Auditor

Date

Name of Operation

Page 10 of 16



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

☑ in full compliance with

The operation is in substantial compliance with Transport Practice 1.6

not in compliance with

Summarize the basis for this Finding:

Cyanco has committed to implementing systems and procedures to track the progress of cyanide 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 planned online tracking capabilities through ocean carrier information portals were confirmed through computer demonstration and interview. Cyanco plans to use 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.

Design, construct and operate cyanide trans-shipping depots and 2. INTERIM STORAGE:

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

The operation is in substantial compliance with **Transport Practice 2.1**

not in compliance with

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 ocean ports. Cyanco has committed to conducting Due Diligence Reviews of its transportation partners that will include evaluations of all instances of interim storage along this supply chain.

Cyanco Pre-Operational Ocean Supply Chain

Nivol June August 27, 2012
Signature of Lead Auditor Date



3. EMERGENCY RESPONSE: Protect communities and the environment through the

development of emergency response strategies and

capabilities

<u>Transport Practice 3.1:</u> Prepare detailed emergency response plans for potential cyanide

releases.

☑ in full compliance with

The operation is in substantial compliance with Transport Practice 3.1

not in compliance with

Summarize the basis for this Finding:

Cyanco has committed to developing and implementing an Emergency Response Plan that is appropriate for its global ocean supply chain. Details regarding the response procedures to be used in each region of the world, mode of transportation, and type of incident were being revised at the time of the audit. Existing emergency response plans were also reviewed during this preoperational audit.

Current emergency response plans do consider the physical and chemical form of the cyanide. The only form of cyanide to be shipped on this supply chain is solid. Emergency response procedures address actions to be taken in response to a solid cyanide spill.

Cyanco has committed that its emergency response plans will consider the method of transport. This requirement is reflected in the Cyanco ICMC Manual. Cyanco has committed that the emergency response plans will include descriptions of response actions, as appropriate for the anticipated emergency situation. The Cyanco plans are universally applicable to all types of emergencies. At the time of the audit, emergency procedures were being further enhanced to specifically consider all aspects of responses that may be needed for emergency situations in the ocean supply chain.

All of the plans and emergency response information clearly outline the roles and responsibilities of internal and external responders. Cyanco is committed to enhancing its emergency response procedures to further detail the roles of outside responders in the ocean supply chain, namely the roles and responsibilities of ocean carrier personnel and port personnel.

Cyanco Pre-Operational Ocean Supply Chain

Signature of Lead Auditor



<u>Transport Practice 3.2:</u> Designate appropriate response personnel and commit

necessary resources for emergency response.

☑ in full compliance with

The operation is in substantial compliance with Transport Practice 3.2

not in compliance with

Summarize the basis for this Finding:

Cyanco has committed to providing emergency response training of Cyanco personnel and to ensuring that its transportation partners are also providing emergency response training to their personnel. This confirmation is being done using the Due Diligence review process.

The roles and responsibilities of relevant internal and external personnel are clearly described in the Cyanco emergency response plans and Cyanco is committed to enhancing its procedures to more specifically address roles and responsibilities of internal and external personnel involved in the ocean supply chain.

Although it is highly unlikely that Cyanco would be called in to respond to an emergency on an ocean carrier, 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 an emergency response contractor. 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 is committed to 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.

Cyanco Pre-Operational Ocean Supply Chain

Signature of Lead Auditor



Transport Practice 3.3: Develop procedures for internal and external emergency

notification and reporting.

☑ in full compliance with

in substantial compliance with The operation is Transport Practice 3.3

not in compliance with

Summarize the basis for this Finding:

Cyanco has committed to developing procedures and maintaining current contact information for notifying regulatory agencies, outside response providers, medical facilities and potentially affected communities of an emergency. Current emergency response plans include this information and the plans are being enhanced to include international 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.

☑ in full compliance with

in substantial compliance with **Transport Practice 3.4** The operation is

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.

Cyanco Pre-Operational Ocean Supply Chain

Nivol June August 27, 2012
Signature of Lead Auditor Date



<u>Transport Practice 3.5:</u> Periodically evaluate response procedures and

capabilities and revise them as needed.

☑ in full compliance with

The operation is in substantial compliance with Transport Practice 3.5

not in compliance with

Summarize the basis for this Finding:

Cyanco is committed to periodically reviewing its emergency response plans and evaluating 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. Interviews during the audit indicated that an emergency response drill is planned to occur at least once in each region of the world during the first five years after shipping commences. This is in addition to the annual tabletop simulations that are planned.

Records were available to demonstrate that Cyanco regularly participates in emergency response drills with its mine site customers.

Cyanco is committed to reviewing and revising its emergency response plans as necessary after responding to an actual emergency and after emergency response drills.

Ocean Carriers & Ports – Pre-Operational Due Diligence Investigations

Cyanco plans to ship its 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 are to undergo a Due Diligence review of their ability to fulfill ICMI Code requirements.

Interim storage activities in this supply chain, as defined by ICMI, are limited to those that take place at ocean ports. Cyanco has committed to conducting Due Diligence Reviews of its transportation partners that will include evaluations of all instances of interim storage along this supply chain.

Cyanco has performed a Due Diligence evaluation of the Port of Houston and formal on-site ICMI Code Due Diligence evaluations are being performed for all ports. Although many of the ports had already undergone a full Due Diligence evaluation at the time of this audit, some Due

Cyanco Pre-Operational Ocean Supply Chain

Ninol June Au
Signature of Lead Auditor

Date

Name of Operation

Page 15 of 16



Diligence reviews had been performed by customer mines and the information was not available for inclusion in this pre-operational report. The detailed results of the Due Diligence reviews for each of the ports will be reviewed and included in the operational certification audit that will be conducted within six months after shipping commences.

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 Cyanide Code 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 cooperation, 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.

Cyanco Pre-Operational Ocean Supply Chain

Nivol June August 27, 2012
Signature of Lead Auditor Date

INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE

Cyanide Pre-Operational Transportation Summary Audit Report

Action Resources, Inc.

Prepared For

Cyanco International, LLC

As an addendum to its certified

Global Ocean Supply Chain

By

Environmental Technology & Management

SUMMARY AUDIT REPORT

Name of Cyanide Transportation Facility: Cyanco Global Ocean Supply Chain

Name of Facility Owner: **Cyanco International, LLC**Name of Facility Operator: **Cyanco International, LLC**

Name of Responsible Manager: George Easterling, Director – Logistics and Transportation

Address: 11233 Shadow Creek Parkway, Suite 125

City: **Houston** State/Province: **TX** Country: **USA**

Telephone: (832) 590-3643 Fax: (713) 436-5202 E-Mail: george.easterling@cyanco.com

Location detail and description of operations:

On December 21, 2012 Environmental Technology & Management conducted an audit of Action Resources, Inc.'s planned cyanide transportation activities against the Transport Practices of the International Cyanide Management Code. Verification activities were performed at the request of Cyanco International, LLC (Cyanco), the Consignor Signatory to the Code. Cyanco wishes to use Action Resources, Inc. as an alternate truck transporter of sodium cyanide briquettes from its Alvin, TX manufacturing plant to the Port of Houston for export to customers overseas. This is the first transportation segment in Cyanco's Global Ocean Supply Chain, which was preoperationally certified on March 6, 2013. The purpose of this addendum to the Global Ocean Supply Chain is to add Action Resources, Inc. as an alternative truck transportation company.

In the Summary Audit Report for its Global Ocean Supply Chain, Cyanco has committed to perform, by contracting with auditors meeting the ICMI requirements for transport experts, due diligence on port facilities as well as ocean-going transporters and all other organizations along the supply routes to its customers. Cyanco used contractor selection procedures referenced in its supply chain verification audit to select Action Resources, Inc. as an alternate truck transportation company. Because Action Resources, Inc. is not a Code Signatory, it must undergo a Code Verification Audit. That audit is being reported herein.

Action Resources, Inc., founded in 1995, provides transportation services of Specialty Chemicals and Hazardous Waste throughout the U.S. and Canada. All of its tractors are satellite equipped to provide up to the minute communication and tracking of shipments from pick up to delivery. Action Resources, Inc.'s cyanide transportation activities will be based at its **Pasadena Terminal**, and will include transporting sodium cyanide (NaCN) briquettes in Sea Containers and ISO Tanks from the Cyanco manufacturing facility, in Alvin, TX to Port of Houston container terminals at Barbours Cut, Bayport and Industrial Road. Cyanco will load the briquettes into specially designed FIBC boxes, securely packed into 20' Sea Containers, and in bulk into ISO Tanks. Cyanco personnel, as well as Action Resources, Inc. drivers, will perform inspections on the container exteriors before leaving the production site.

Action Resources, Inc.
Name of Facility

Signature of Lead Auditor

Good Milaugh

Action Resources, Inc. has selected and evaluated primary and alternate routes to all three container terminals, subject to approval by Cyanco. All routes follow major two lane roads and divided freeways and toll-ways, well travelled by chemical transporters, over relatively flat terrain. Routes are less than 90 miles in length.

Cyanco has committed to provide initial cyanide handling and emergency preparedness and response training to Action Resources, Inc. drivers selected for cyanide service. Thereafter, Cyanco will provide materials, oversight and support for refresher and new driver training delivered by Action Resources, Inc. personnel. Upon the recommendation of Cyanco, Action Resources, Inc. has contracted with Garner Environmental Services to provide emergency response and cleanup in the event of a cyanide release. Because of Cyanco's strong product stewardship ethic and its expertise in the area, Cyanco will take the lead on advising and training external responders, medical facilities and communities along this leg of the supply chain.

The remainder of this report summarizes Action Resources, Inc.'s conformance to the requirements of the Cyanide Transportation Pre-Operational Verification Protocol.

Action Resources, Inc.
Name of Facility

Signature of Lead Auditor

Goel Milaugh

SUMMARY AUDIT REPORT

Auditor's Finding

This operation is
 in full compliance in substantial compliance with the International Cyanide Management Code. □ not in compliance
Audit Company: Environmental Technology & Management
Audit Team Leader: John B. (Jack) McVaugh, PE, RCMS/EMS-LA
E-mail: jbkm.etm@att.net
Names and Signatures of Other Auditors: NA
Date(s) of Audit: December 21, 2012
attest that I meet the criteria for knowledge, experience and conflict of interest for Code Verification Audit Team Leader, established by the International Cyanide Management Institute and that all members of the audit team meet the applicable criteria established by the International Cyanide Management Institute for Code Verification Auditors.
attest that this Summary Audit Report accurately describes the findings of the verification audit. I further attest that the verification audit was conducted in a professional manner in accordance with the International Cyanide Management Code Verification Protocol for Cyanide Transportation Operations and using standard and accepted practices for health, safety and environmental audits.
Action Resources, Inc. Name of Facility Signature of Lead Auditor June 19, 2013 Date

Action Resources, Inc.
Name of Facility

Signature of Lead Auditor

God Milaugh

SUMMARY AUDIT REPORT

1. TRANSPORT:		Transport cyanide in a manner that minimizes the potential for accidents and releases.			
<u>Transport Practice</u>	<u>1.1</u> :	Select cyanide transport rou accidents and releases.	tes to minimize the potential for		
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/Deficiencies Identified:

If Action Resources, Inc. implements the commitments it has made the auditor expects the Cyanco Global Ocean Supply Chain to be in full compliance with Transport Practice 1.1. The organization has policies, practices and procedures in place to fully evaluate and select transportation routes for the two subject destinations as well as all cyanide destinations in the future. Action Resources, Inc. is committed to utilize PC Miler® software from ALK Technologies, route inspection by Action Resources, Inc. management, GPS data and driver feedback to select transport routes that minimize the potential for accidents and releases as well as the potential impacts of accidents and releases, should they occur. The process also considers infrastructure, pitch and grade, and prevalence of water bodies and fog. Action Resources, Inc.'s Cyanide Transportation Procedures call for Action Resources, Inc. to take and document measures to manage the risks, and to re-evaluate cyanide routes through driver feedback as well as re-inspections and re-evaluations performed by management. Action Resources, Inc. has contracted with Garner Environmental Services to supply all emergency response and remedial services. Action Resources, Inc. is committed to seeking input to the route selection process from communities and governmental agencies along the route, and together with the manufacturer, Action Resources, Inc. will seek other stakeholder input, as well. Although Action Resources, Inc. has plans to address safety and security concerns, if either Action Resources, Inc. or Cyanco determines, or is advised by law enforcement, that special safety or security concerns have developed, Action Resources, Inc.'s Cyanide Transportation Procedures call for consideration of additional safety and/or security measures, such as escort services, convoys or route re-assignment. Because of Cyanco's strong product stewardship ethic and its expertise in the area, Cyanco will take the lead on advising and training external responders, medical facilities and communities. Lastly, Action Resources, Inc.'s only subcontracting for cyanide transport is with drivers who are Owner/Operators, and all of these drivers are subject to the same high standards in hiring, training and qualification as company drivers.

Action Resources, Inc. Name of Facility

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•	onnel operating cyanide handling and transport rform their jobs with minimum risk to the environment.
The operation is in full compliance with in substantial compliance with not in compliance with	nce with Transport Practice 1.2
Summarize the basis for this Finding/Deficienci	es Identified:
the Cyanco Global Ocean Supply Chain 1.2. All Action Resources, Inc. drivers, and licensed to operate its vehicles. All Carrier Safety Regulations, be at lea Commercial Drivers License with Tank and have a good driving record. All driv and Alcohol Plan and background Transportation Worker Identification receive training required by OSHA regulations, during their initial orientatio provided by means of Quarterly Safety computer-based training (CBT) and necessary. For drivers selected to transp initially by Cyanco and subsequently I	he commitments it has made the auditor expects to be in full compliance with Transport Practice including Owner/Operators, are trained, qualified drivers must meet all applicable Federal Motor st 23 years of age, possess a valid Class A Truck and Hazardous Materials endorsements, were are subject to Action Resources, Inc.'s Drug investigations, including that required for Credential (TWIC) identification. All drivers (29CFR), DOT (49CFR) and EPA (40CFR) on after hiring. Refresher and on-going training is Meetings at each terminal, interactive monthly individual remedial training sessions, when cort cyanide, additional training will be provided by an Action Resources, Inc. Safety Trainer or content identical to that of Cyanco. This training
Transport Practice 1.3: Ensure that transport shipment.	port equipment is suitable for the cyanide
The operation is in full compliance with in substantial compliance with not in compliance with	nce with Transport Practice 1.3

Summarize the basis for this Finding/Deficiencies Identified:

If Action Resources, Inc. implements the commitments it has made the auditor expects the Cyanco Global Ocean Supply Chain to be in full compliance with Transport Practice 1.3. Action Resources, Inc. has committed to a tractor specification process and

Action Resources, Inc.

Name of Facility

Signature of Lead Auditor

Goel Milaugh

maintenance program that ensures that its transport equipment retains a load-bearing capacity adequate for the anticipated load. This includes periodic inspections and testing as well as appropriate specifications for equipment and parts that may be replaced during maintenance. Tractors owned by Owner/Operators are required to meet the same standards of design and maintenance as company power units. Cyanco will provide the intermodal chassis, ISO Tanks, Sea Containers and IBC's, and will provide verification that equipment for which they are responsible meets appropriate construction and performance standards. Action Resources, Inc. employs a systematic preventive maintenance program for each piece of company owned or leased equipment, using a schedule based on factory recommendations or accepted industry standards. Tractors owned by Owner/Operators are required to meet the same maintenance schedule as company units, but are not required to have the work performed in an Action Resources, Inc. shop. Cyanco performs all cyanide loading according to its own procedures. Product weights are specified on shipping papers, and Cyanco uses its own scales to weigh empty and loaded ISO Tanks and Sea Containers, including chassis. Because Cyanco expects some loads to be slightly over the maximum weight limit for vehicles on the routes selected, Action Resources, Inc. has committed to provide state-issued Overweight Permits whenever necessary to accommodate such loads.

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 not in compliance with	Transport Practice 1.4	

Summarize the basis for this Finding/Deficiencies Identified:

If Action Resources, Inc. implements the commitments it has made the auditor expects the Cyanco Global Ocean Supply Chain to be in full compliance with Transport Practice 1.4. Action Resources, Inc. and Cyanco have procedures in place to ensure packaging integrity during transport. Cyanco loads ISO Tanks and IBC's with briquetted product and in turn, loads IBC's into Sea Containers, blocking and bracing each load. Action Resources, Inc. addresses placarding in its procedures. Placards are installed by Cyanco personnel and are checked by Action Resources, Inc. drivers. Action Resources, Inc. drivers inspect loads before shipment by completing Driver Vehicle Inspection Reports (DVIR's) and Cyanco personnel and Action Resources, Inc. drivers will inspect each load as part of the Load Pick-Up Process. Preventive maintenance on tractors is conducted at the Pasadena Terminal shop. Action Resources, Inc. complies with Part 395 of the Motor Carrier Safety Regulations which places strict limitations on driving and on-duty hours. These are monitored automatically through a Qualcomm Electronic Logging System.

Action Resources, Inc.
Name of Facility

Signature of Lead Auditor

Jack Milaugh

Drivers will be empowered to make decisions about suspending cyanide transportation for road or weather conditions or civil unrest. When travel on the approved route becomes difficult, Action Resources, Inc. drivers contact their dispatcher by an on-board communication system. The Action Resources, Inc. Alcohol & Controlled Substance Testing Program includes Pre-employment, Random, Post-Accident, Post-Incident and Reasonable Suspicion drug screening. The auditor found all records reviewed to be complete and well managed.

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/Deficiencies Identified:
(See Cyanco Since Action	Global Ocean Supply Chain is in full compliance with Transport Practice 1.5 Global Ocean Supply Chain Summary Audit Report on the ICMI website). Resources, Inc. does not transport cyanide by sea and air, this addendum impact on the supply chain's compliance with this transport practice.
Transport Practice	1.6: Track cyanide shipments to prevent losses during transport.
The operation is	 in full compliance with in substantial compliance with Transport Practice 1.6 not in compliance with
Summarize the basis	for this Finding/Deficiencies Identified:

If Action Resources, Inc. implements the commitments it has made the auditor expects the Cyanco Global Ocean Supply Chain to be in full compliance with Transport Practice 1.6. Each tractor will be equipped with satellite communications (Qualcomm[®]) and Electronic On-Board Recorders (EOBR's) that allow for two-way communication between drivers and dispatcher while accurately tracking truck location, driver hours of service (H-O-S) and other data. In addition, each driver carries a cell phone. (Note that cell phone use is subject to the Action Resources, Inc. Distracted Driving Policy, which strictly prohibits the use of hand-held cellular devices while the vehicle is under way).

Action Resources, Inc.

Name of Facility

Signature of Lead Auditor

Good Milaugh

Drivers are furnished with a list of phone numbers for Cyanco, the terminal manager, etc. and emergency phone numbers such as Chemtrec and others. Action Resources, Inc.'s Qualcomm® sets and EOBR's are in daily use, and if a failure occurs, electronic error messages are sent to Dispatchers and Operations personnel. Dispatchers have the cell phone numbers of each driver to ensure two-way communication if there is a system failure. Since Qualcomm[®] devices are essential for dispatch and H-O-S record keeping, Action Resources, Inc. is committed to repairing them as soon as they are returned to the Terminal. Because of the proximity of Producer and Port, and based on proposed primary and alternative routes, no blackout areas for either cellular or satellite communications are anticipated. The auditor verified that Qualcomm[®] tracks routes in real time, as well as location, direction, speed and position history of transport vehicles. Action Resources, Inc. will pick up Sea Containers and ISO Tanks fully loaded and sealed at the Producer's location and deliver them to the Port of Houston directly, for loading on container ships. Seal Numbers will be recorded on shipping papers and drivers will verify that the seals are intact at the point they relinquish control at the Port. The Shipping Document or Manifest will serve as a chain of custody document. Action Resources, Inc. has committed to indicate the amount of cyanide in transit on the Straight Bill of Lading, and that the shipping papers will include a Transportation Emergency Notification Sheet and MSDS. Action Resources, Inc. is committed to transport cyanide, but will not otherwise handle it. Action Resources, Inc. will not broker or subcontract loads to any other transport company.

(Due to the sensitivity of security issues regarding storage of cyanide, no descriptions of substantial or non-compliance with this aspect of the Transport Practice should be provided.)

Action Resources, Inc.
Name of Facility

Signature of Lead Auditor

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2. INTERIM STO	RAGE:	Design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent releases and exposures.	
Transport Practice	2.1:		
Transport Practice	<u>2.1</u> :	Store cyanide in a manner that accidental releases.	nat minimizes the potential for
The operation is	in	full compliance with substantial compliance with t in compliance with	Transport Practice 2.1
Summarize the basi	is for this	s Finding/Deficiencies Identifie	ed:

The Cyanco Global Ocean Supply Chain is in full compliance with Transport Practice 2.1 (See Cyanco Global Ocean Supply Chain Summary Audit Report on the ICMI website). Since Action Resources, Inc. will not operate any cyanide trans-shipping depots or interim storage sites, this addendum will have no impact on the supply chain's compliance with this transport practice.

Action Resources, Inc.
Name of Facility

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3. EMERGENCY RESPONSE:		development of emergency response strategies and capabilities		
Transport Practice	<u>e 3.1</u> :	Prepa releas	O	cy response plans for potential cyanide
The operation is		in substan	npliance with tial compliance with appliance with	Transport Practice 3.1

Summarize the basis for this Finding/Deficiencies Identified:

If Action Resources, Inc. implements the commitments it has made the auditor expects the Cyanco Global Ocean Supply Chain to be in full compliance with Transport Practice 3.1. Action Resources has written, and has committed to implement, a Cyanide Contingency Plan to notify Local Authorities, Emergency Response Providers, and Company Operations and Safety Management in the event of a release of sodium cyanide briquettes in transit. Drivers selected for transportation of sodium cyanide will be instructed in the Cyanide Contingency Plan, and the Plan will be in the first section of the drivers' Permit Binder. The Plan will be reviewed no less than annually and amended as needed. The Plan specifies the use of Garner Environmental Services whose capabilities extend to the entire area encompassed in the present Scope of Work. The Plan also specifies emergency contact information appropriate for the primary and alternate transportation routes. No interim storage facilities will be used. The Cyanide Contingency Plan specifies that the product is sodium cyanide and the physical form is solid briquettes, and furthermore that the method of transportation is by truck, using chassis and ISO Tanks or Sea Containers. The Cyanide Contingency Plan considers highway transportation over the approved primary and alternate routes. Action Resources, Inc. will not transport by rail or water, and its involvement at the Port of Houston will be to position the trailer for off-loading by port employees or contractors. The Plan considers that the transport vehicle will consist of a power unit, chassis, and ISO-Tank or Sea Container (dry, water-tight, wind-tight steel container). ISO-Tanks load through three 24 inch man-way openings on their top. Sea Containers load through two center-opening doors that open outward from the interior. The Cyanide Contingency Plan specifies response actions to be taken by Action Resources, Inc. personnel in the event of a release of sodium cyanide in transit, and further stipulates that Law Enforcement provide traffic control and restrict access to the area, Fire and Emergency Medical Personnel provide triage and transport for injured individuals (if necessary), and Emergency Response and Clean-Up Services defer to Garner Environmental Services for instructions.

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Name of Facility

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<u>Transport Practice 3.2</u> :		Designate appropriate response personnel and commit necessary resources for emergency response.		
The operation is	_	in full compliance with in substantial compliance with not in compliance with	Transport Practice 3.2	

Summarize the basis for this Finding/Deficiencies Identified:

If Action Resources, Inc. implements the commitments it has made the auditor expects the Cyanco Global Ocean Supply Chain to be in full compliance with Transport Practice 3.2. Action Resources, Inc. has committed to provide emergency response training to the drivers selected for transportation of sodium cyanide, particularly with regard to implementation of the Cyanide Contingency Plan. Garner Environmental Services provides Emergency Response Training to its own personnel. The Cyanide Contingency Plan clearly delineates the specific emergency response duties of drivers as well as emergency response personnel, including Garner Environmental Services. The auditor reviewed the Response Equipment Listing provided to Action Resources, Inc. by Garner Environmental Services dated December, 2011 and found it to be comprehensive. Action resources, Inc. and Garner Environmental Services have committed to providing all necessary emergency response, health and safety equipment including PPE in the event of a release during transport. Action Resources, Inc. has committed to provide initial driver training conducted by its Safety Director and Cyanco's Safety Training Staff. Furthermore, Action Resources, Inc. is committed to re-evaluate its Cyanide Contingency Plan no less than annually, and after the plan is either deemed adequate or amended, all drivers in Cyanide Service will receive updated refresher training. Action Resources, Inc. and Garner Environmental Services have committed to inspection of all their respective emergency response equipment in conformance with the manufacturers recommended schedule, OSHA requirements, NIOSH, and/or ANSI recommendations. Action Resources, Inc. is committed to transport cyanide, but will not otherwise handle it. The transport company will not broker or subcontract loads to any other transport company.

Action Resources, Inc.
Name of Facility

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<u>Transport Practice</u>	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 basi	is for this Finding/Deficiencies Identified:
the Cyanco 3.3. Action of CHEMT Texas Com other agence committed Operating F their last re	esources, Inc. implements the commitments it has made the auditor expects Global Ocean Supply Chain to be in full compliance with Transport Practice Resources, Inc.'s Cyanide Contingency Plan clearly provides for notification REC, the shipper, 911 Emergency Services, the National Response Center mission on Environmental Quality, Garner Environmental Services and any cies necessary to mount an effective response. Action Resources, Inc. is to maintaining the Cyanide Contingency Plan as part of its' Standard Procedures. SOP's are dated with the date of their Origination and the date of evision or review. Review dates are noted in a task calendar database with lerts to affected management personnel.
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 basi	is for this Finding/Deficiencies Identified:

If Action Resources, Inc. implements the commitments it has made the auditor expects the Cyanco Global Ocean Supply Chain to be in full compliance with Transport Practice 3.4. In the event of a release during transportation, Action Resources, Inc. will be the Generator of a Hazardous Waste with EPA Waste Code P106. Based on the methods employed by Garner Environmental to recover and re-contain the product, every effort will be made to find a responsible user who will use the material in its' intended commercial application. Failing that, Action Resources, Inc. will arrange for destruction of the product by EPA approved methods. The auditor noted that Action Resources, Inc. is a licensed Hazardous Waste Transporter. Garner Environmental Services is aware that the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide

Action Resources, Inc. Name of Facility

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will liberate toxic hydrogen cyanide gas. Garner Environmental Services' Emergency Response Plan clearly states that such chemical treatment methods are forbidden.

Transport Practice 3.5	Periodically evaluate resports revise them as needed.	nse procedures and capabilities and
The operation is	in full compliance with in substantial compliance with not in compliance with	Transport Practice 3.5

Summarize the basis for this Finding/Deficiencies Identified:

If Action Resources, Inc. implements the commitments it has made the auditor expects the Cyanco Global Ocean Supply Chain to be in full compliance with Transport Practice 3.5. Action Resources, Inc. is committed to maintaining the Cyanide Contingency Plan as part of its' Standard Operating Procedures (SOP's). SOP's are dated with the date of their Origination and the date of their last revision or review. Action Resources, Inc. has committed to conducting Mock Emergency Drills and table-top drills annually with Garner Environmental Services in conjunction with Cyanco's EH&S staff. Verbal commitments have been received by members of the Texas City HazMat Response Team to participate fully in any such drills. The Cyanide Contingency Plan will be reviewed at least once every 12 months beginning in the 11th month following its' last review and within one month of each table-top Emergency Response Drill or Mock Emergency Drill, to be conducted jointly with the Producer and Garner Environmental Services. In the event the Cyanide Contingency Plan is implemented, Action Resources, Inc. is committed to using Root Cause Analysis, Incident Investigation, and After-Action Reports as evaluation tools for the efficacy of the Plan. Revisions will be made as necessary. Any modifications to the Plan will trigger re-training for all Action Resources, Inc. personnel affected.

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Name of Facility

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