ICMI Cyanide Code Consigner Supply Chain
Summary Audit Report

Cyanco Re-Certification Audit –
Cyanco North American Rail & Truck Supply Chain

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

2018 Audit Cycle

Cyanco North American Rail and Truck Supply Chain Summary

Company Information:

Name of Operations Audited:	1. Cyanco Supply Chain Management (Pearland, Texas) – Management of individually certified operations and Signatory companies 2. Transport Nord-Ouest, Inc. (TNO) Trucking Operations and Interim Storage Operations (Rouyn-Noranda, Quebec, Canada) 3. Watco Companies LLC – Watco Texas Terminals – Interim Storage of ISO Tanks and Sea Containers including transload of closed containers from Truck to Rail (Houston/Greensport, Texas) 4. IsoChem Logistics LLC - Interim Storage Operations 5. Rail Partners – Union Pacific Railroad (UP) and Canadian National Railway (CN) (Due Diligence assessments)
Name and contact information for Supply Chain:	Cyanco Max Jones Director – EHSS & ICMC 1920 Country Place Pkwy, Suite 400 Pearland, TX 77584 T: (832) 590-3644 F: (713) 436-5202 E: max.jones@cyanco.com W: www.cyanco.com

Cyanco North American Rail and Truck 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.

The scope of this re-certification audit was the Cyanco Rail and Truck Supply Chain in the United States and Canada. Cyanco's rail partners at the time of this re-certification audit were: Union Pacific Railroad (UP) and Canadian National Railway (CN). Due Diligence assessments of these two rail partners were conducted as part of this re-certification activity. Cyanco also maintains a separate "Western U.S." certified supply chain that specifically addresses movements shipped from the U.S. West Coast to Alaska.

In addition to the two certified supply chains noted above, Cyanco also maintains Mexico and Global Ocean certified supply chains. Of the four supply chains mentioned, only the North American Rail and Truck Supply Chain was included in this audit.

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 these locations is shipped by truck, rail, barge, and ocean carrier. Rail and truck shipments shipped from the Winnemucca and Alvin production facilities are within the scope of this North American Rail and Truck Supply Chain. The product is shipped in tank trailers (solution), 20-foot intermodal sea containers, or ISO containers using ICMC-certified trucking companies or by rail. At the time of the audit, TransWood, Quality Carriers, TNO, and Action Resources were transporting sodium cyanide from the production facilities to either the Port of Houston, rail heads, transloading terminals, or customers. Interim storage activities are performed by Watco, IsoChem, and TNO. All three of these interim storage locations were audited on-site as part of this re-certification audit.

Rail deliveries of sodium cyanide solution are made using 20,000-gallon rail tank cars. The 30% sodium cyanide solution is transported on the Union Pacific Railroad (UP) and the Canadian National Railway (CN) in the U.S. and Canada. The Due Diligence evaluation of these two rail

carriers is included in the scope of this evaluation and report. The Cyanco Mexico Supply Chain certification addresses the rail transport of cyanide starting at the U.S./Mexico border.

Many parts of the overall supply chain were audited and certified separately from this recertification audit. They are referenced here, but were not directly audited during this recertification activity:

- Cyanco Production and Transload Terminals in U.S. and Canada – Alvin Production (Houston, Texas Area), Winnemucca (Nevada) Production, Cadillac (Quebec, Canada) Transload Terminal, Cheyenne (Wyoming) Transload Facility
- TransWood Carriers, Inc.
- Action Reources
- Quality Carriers Carriers, Inc.

Audit Information – Cyanco North American Rail and Truck Supply Chain

The ICMC audit of the Cyanco North American Rail and Truck Supply Chain was performed by an independent 3rd-party audit team that is approved by the ICMI for all types of ICMC audits.

The ICMC certification audit of Cyanco as a Consignor/Transporter was conducted in May 2018. Cyanco's management of the supply chain including rail and truck loading, tracking, and emergency response preparedness was audited in Houston in May 2018. On-site auditing was also done of the TNO trucking and Watco, IsoChem, and TNO interim storage operations. Due diligence assessments of the UP and CN rail carriers were also conducted in May 2018.

Cyanco's procedures, policies and planned transportation management practices for its Rail and Truck 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 observations of operations in the U.S. and Canada, a review of records and documentation, and discussions and interviews with multiple individuals in cross-functional roles at Cyanco and its supply chain partners. The detailed results contained in this report are limited to the results from the Cyanco, Watco, IsoChem, and TNO audits. The Due Diligence information for the UP and CN railroads is also included in this report.
The results of this ICMC certification audit and the related due diligence reviews indicate that Cyanco and its North American Rail and Truck Supply Chain are in FULL COMPLIANCE with ICMC transportation requirements.

Cyanco North American Rail and Truck Supply chain - Auditor's Finding

The Cyanco North American Rail and Truck 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 significant cyanide incidents, releases, or exposures since the supply chain was originally certified in 2011.

All operations in this Supply Chain were found to have been in compliance with the ICMI Cyanide Code since the previous ICMC certification in 2015.

Audit Company:	MSS Code Certification Service www.mss-team.com
Lead / Technical Auditor: Auditor:	Bruno Pizzorni Ralf Jurczyk E-mail: CodeAudits@mss-team.com
Date(s) of Audit:	Cyanco HQ, Watco, and IsoChem audit dates: May 1-3, 2018; TNO audit dates: May 15-16, 2018; Due Diligence of UP and CN Rail: May 2018

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 ICMC Transportation Operations and using standard and accepted practices for health, safety and environmental audits.

Cyanco NA Rail and Truck Supply Chain		July 20, 2018
Name of Supply Chain	Signature of Lead Auditor	Date

Transportation Protocol Results

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 Transport Practice 1.1
- ☐ not in compliance with

Summarize the basis for this Finding:

Cyanco Audit Results

Cyanco has implemented processes to select and evaluate transport routes that minimize the potential for accidents and releases and take the necessary measures to manage the risks identified. 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 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. Cyanco periodically re-evaluate routes used for cyanide deliveries. The mitigation measures taken to address the risks identified with the selected routes area documented.

Although Cyanco does not control the routing of shipments via rail, they do choose the shipping locations, receiving locations, and rail carriers.

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.

Where routes present special safety or security concerns, Cyanco uses convoys, escorts or other additional safety or security measures to address concerns. Weather conditions are constantly monitored, and deliveries are postponed if a route is considered to be unsafe. Drivers are empowered to stop a delivery if the conditions are considered to be unsafe.

Cyanco advises external responders, medical facilities and communities of their roles and/or mutual aid during an emergency response. Cyanco regularly meets with its transportation partners to advise them of their role in an emergency.

TNO Audit Results

Cyanco maintains a documented route selection process for TNO transportation routes that takes into account population density, infrastructure, pitch & grade, proximity to water bodies, and the prevalence and likelihood of poor weather and resulting poor driving conditions. Cyanco and TNO personnel work together with mining customers to determine the safest and best route for transport. Procedures call for driver feedback and routes are re-evaluated when driving conditions change, or when driver feedback suggests that this is necessary. Records were available to demonstrate that all current routes were re-assessed and re-approved during the re-certification period.

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 Audit Results

Cyanco uses only trained, qualified and licensed operators and companies to transport its products. Also, all personnel operating cyanide handling and transport equipment been trained to perform their jobs in a manner that minimizes the potential for cyanide releases and exposures. Cyanco ensures that its transportation partners in its NA Rail and Truck 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 Rail and Truck Supply Chain carriers).

Cyanco uses formal policies, procedures, and contracts with safety, health, environmental, and security terms and conditions to ensure that cyanide is appropriately handled and transported by its transportation partners

TNO Audit Results

TNO maintains a policies and procedures manual for the transportation of sodium cyanide. In this manual the requirement to only use qualified "Class 1" drivers who have received appropriate operational and safety training. Records were available for all current cyanide drivers to demonstrate that qualification and training requirements were met.

Interviews with drivers, dispatch, management, and maintenance personnel were used to confirm that personnel operating cyanide transportation equipment can perform their jobs safely and appropriately. Training related to cyanide and the delivery of cyanide is given by Cyanco and TNO Management personnel. Records from the re-certification period were available for review.

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 Cyanco ICMC Manual states that Cyanco reviews all transportation partners to ensure that ICMC transportation requirements are fulfilled.

Shipment records were reviewed during the audit to confirm that standard weights within the capacity of the intermodal containers, tractors, trailers, ISO tanks, rail tank cars and chassis were being shipped. ISO weight capacities and the fulfillment of ISO tank inspection requirements were reviewed during the audit and were found to be compliant.

To ensure the adequacy of the equipment for the load it must bear, Cyanco uses only authorized packaging for its sodium cyanide shipments. Intermodal containers, and ISO tanks are loaded with standard weights. 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 of their vehicles does not occur.

TNO Audit Results

TNO equipment was found to be in very good condition and was deemed suitable for delivering bulk liquid cyanide solution. The tractors and trailers are enhanced with upgraded equipment and heavy duty frames to ensure safe travel over rough terrain to the mine sites. Tires are replaced on a frequent basis and regular maintenance activities and inspections are conducted. Safety and emergency shut-off systems are designed into the delivery equipment and were found to be appropriate for mitigating the risk of chemical spill. Loading of the trucks is done by Cyanco personnel. Records were available from the recertification period to demonstrate that equipment is not being overloaded.

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:

Cyanco Audit Results

Formal procedures are used by all loading operations at the three Cyanco production/transload facilities. According to interviews with Cyanco personnel, standard blocking and bracing configurations are used for van trailers and intermodal containers.

Placards and signage are used to identify the shipment as cyanide, as required by local regulations or international standards. The number UN 3414 for liquid sodium cyanide or UN 1689 for solid sodium cyanide is displayed on all packaging and rail cars, intermodal containers and ISO tanks. Records were available to demonstrate that the applicable requirements of the ICMC Safety Program had been fulfilled.

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 are in compliance with all ICMC requirements. Records were available to demonstrate that the applicable requirements of each of the ICMC Safety Program had been fulfilled. Rail cars, trucks, and trailers are inspected prior to shipment.

Cyanco does not perform maintenance of rail cars; this is done by authorized maintenance shops. Cyanco does, however, track the need for maintenance to be performed and ensures that necessary

maintenance and inspections of rail cars, ISO tanks, and tanker trailers is performed. Maintenance tracking records were reviewed for the recertification period and were found to be acceptable

Limitations on worker hours in the U.S. / Canadian rail and trucking industry are strictly regulated and enforced by the respective governments. Cyanco also has these requirements as part of its contractual standard terms and conditions. These were reviewed during the audit and were found to be acceptable.

According to interviews with Cyanco personnel, to prevent loads from shifting, personnel who load the van trailers, intermodal containers and ISO tanks, standard weights are loaded, and standard blocking and bracing configurations are used for van trailers and intermodal containers.

Transportation can be modified or suspended if conditions such as severe weather or any unsecure conditions are encountered. Weather conditions are constantly monitored, and deliveries are postponed if a route is considered to be unsafe. Drivers are empowered to stop a delivery if the conditions are considered to be unsafe.

U.S. and Canadian federal regulations require that railroads and trucking companies conduct random drug and alcohol testing and that drug abuse prevention programs are maintained. Cyanco also has these requirements as part of its contractual standard terms and conditions.

Records documenting that the above activities have been conducted are retained.

TNO Audit Results

TNO has a formal safety program that clearly addresses all ICMC safety program requirements. Formal procedures and training programs are used to ensure that cyanide is transported in a manner that is safe and protective of the transportation equipment. Liquid cyanide solution is transported in bulk tanker trailers using UN 3414 shipping placards for sodium cyanide solution on all sides of the truck. Vehicle inspections are done prior to every shipment and maintenance is performed approximately every 30-90 days, depending on equipment type. Maintenance records were found to be complete. Driver hours are limited by Canadian transportation regulations. TNO monitors driver hours to ensure compliance.

Interviews were conducted with drivers and procedures were reviewed during the audit to confirm that drivers are empowered to modify or suspend a shipment if unsafe conditions exist. Such a change in delivery plans would be done in close coordination with the TNO dispatcher, Cyanco personnel, and with the mining customer. Random drug and alcohol testing is done in accordance with Canadian regulations. Records were available to show that all parts of the TNO safety program are effectively being implemented.

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 ☐ not in compliance with	Transport Practice 1.5

Summarize the basis for this Finding:
No shipments are made via air or sea in this supply chain. All audit results pertaining to sea shipments can be found in the Cyanco Global Ocean Supply Chain audit report which was most recently posted on the ICMI web-site in 2018.

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 Audit Results
Cyanco personnel maintain communications with truck drivers making cyanide deliveries. Depending on the location, this communication is either direct through a communication system or indirect through the dispatcher of the trucking partner. All drivers have communication equipment consisting of at least cell or satellite phones, and most drivers have multiple communication systems available to them at all times. All communication equipment is confirmed to be operational at the start of each trip. Interviews were used to confirm this practice.

Cell phone black-out areas during the different routes from the Cyanco terminal to the mine sites are defined by Cyanco in their cyanide transportation route description

Cyanco has systems and procedures to track the progress of cyanide shipments. The Logistics Coordinator has designated responsibilities for tracking shipments on a daily basis. Daily tracking reports were reviewed during the audit and confirmation was made that shipments are being tracked continuously from the point at which they are put into service and enter the fleet. Cyanco tracks all ISO tanks, sea containers and tank truck trailers using GPS and other tracking equipment.

TNO Audit Results

Communication with TNO vehicles during the cyanide transportation is done using mobile phones and satellite phones. Trucks are in contact at all times with dispatch by cell phone, satellite phone, or an onboard communication system in addition to being tracked by a Global Positioning System (GPS). A waybill accompanies the transportation which includes chain of custody data such as container numbers, waybill numbers, shipping documentation, SDS, packing list, bill of lading, customs declarations, producer invoice, copy of lease agreement etc.

Cyanco and TNO have controls and documentation to prevent loss of cyanide during shipment **s**hipping. Paperwork was found to be conformant to ICMC requirements, including chain of custody requirements. A waybill accompanies the transportation which includes chain of custody data such as container numbers, waybill numbers, shipping documentation, SDS, packing list, bill of lading, customs declarations, producer invoice, copy of lease agreement, among others.
Shipping records indicating the amount of cyanide in transit and cyanide Safety Data Sheets are available during transport.

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, take place at IsoChem Logistics, LLC in Houston Texas, Watco Companies LLC in Houston/Greensport, and at the TNO interim storage facility in Rouyn-Noranda, Quebec, Canada. Each of these interim storage facilities was audited on-site during this recertification audit.

Each of the interim storage areas is a fenced truck and/or rail yard that is designated for in-transit management of cyanide transportation containers.

In Houston, intermodal containers and ISO tanks are transported to Watco and IsoChem from the Cyanco Houston-area production plant for interim storage if they are not being sent directly to the

port, customer, or rail head. Cyanide solution loaded into tank trailers is stored temporarily during transit at the TNO secure yard.

Intermodal shipping containers and ISO tank shipping containers are stored at each facility in segregated parts of the facilities. Personnel at each location showed excellent awareness of the need to segregate cyanide from incompatible materials such as acids, strong oxidizers, and explosives. Placards and warning signs were posted at each facility notifying workers that cyanide is present, and that open flames, smoking, eating and drinking are not allowed in the area. At Watco and IsoChem there is no handling of the intermodal and ISO tank containers other than with industrial-sized forklift movements. At the TNO truck yard, tanker trailers are parked in a secured segregated part of the truck yard. There are no containers to handle. Personal protective equipment requirements for the material storage and handling activities are posted outside the cyanide storage area at each location. All ICMC requirements were fulfilled by each operation.

Each facility is secured by a fence and locked gate. Access to the secure area requires job-specific authorization at each location. Security at the facilities was deemed to be acceptable. The cyanide is stored in the intermodal and ISO shipping containers. Containers are not opened at any of the locations.

Cyanide is stored to minimize the potential for contact of solid cyanide with water. Sodium Cyanide packages within the intermodal shipping containers are comprised of a bag-in-box construction that offers additional protection against water intrusion. ISO tanks are sealed and are constructed to be water-tight.

No intermodal containers, ISO tanks, or tank trailers are opened during transit in this supply chain.

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 Audit Results

Cyanco has developed and implemented a Global Transportation Emergency Response Plan (GTERP) that is appropriate for its Global cyanide supply chains. 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.

The plans were found to be appropriate for rail, truck, and interim storage emergencies. Cyanco's emergency response plans are global in scope and also include information specific to responding to emergencies within the rail and truck supply chain.

The GTERP considers the physical and chemical form of the cyanide. Both liquid and solid sodium cyanide are shipped using this supply chain.

The emergency response plans reviewed consider the method of transport, rail or trucking to the final destination, are applicable to all types of emergencies and also specifically consider all aspects of responses that may be needed for emergency situations in the rail/truck supply chain.

The GTERP includes an appendix showing engineering design drawings for their top unloading Isotanks, rail tanks and IBS box, among others. The plan considers the cyanide transport by rail, trucks, trailers and sea containers. All plans were found to be appropriate for the mode of transportation involved.

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.

All of the plans and emergency response information clearly outline the roles and responsibilities of internal and external responders. Cyanco has enhanced its emergency response procedures to further detail the roles of outside responders that may be needed for emergency situations in the rail/truck supply chain.

TNO Audit Results

TNO maintains a cyanide manual and procedures document that includes a section on emergency response for cyanide incidents. The emergency response section of the document specifically states what actions are to be taken in the event of a cyanide incident, either on the road or at the TNO interim storage facility. The document is reviewed and updated, as necessary. The last revisions were made in 2018. The document was found to be up-to-date and appropriate for this liquid sodium cyanide transportation operation.

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 ☐ not in compliance with	Transport Practice 3.2

Summarize the basis for this Finding:

Cyanco Audit Results

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

The roles and responsibilities of relevant internal and external personnel are clearly described in the Cyanco emergency response plans. 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 vehicle operators receive initial and periodic refresher training in emergency response procedures including implementation of the Emergency Response Plan. According to the emergency plan, all emergency response personnel must complete initial and annual training commonly referred to as 40-hour or "HAZWOPER" training. Cyanco personnel also receive annual training in emergency response. Formal emergency response training is refreshed annually.

Cyanco ensures through contractual terms and periodic review to his partners that the emergency response equipment is inpected and maintained by its emergency response provider is available at all times. No sub-contractors are used in this supply chain.

In accordance with Canadian regulations, additional information regarding emergency response resources and their qualifications in contained in the Cyanco's ERAP, an emergency response planning document maintained on file with the Canadian government.

TNO Audit Results

The roles and responsibilities of relevant internal and external personnel are clearly described in the emergency plan. TNO drivers, managers, and maintenance shop personnel receive an appropriate level of training to enable them to fulfill their role in emergency response. Formal emergency response training is refreshed annually.

Drivers were interviewed and awareness of emergency procedures was appropriate. The emergency plan defines what equipment must be available in each truck and extra personal protective equipment is available in each bag. Equipment is checked as part of the pre-trip inspection process.

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 Audit Results

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 and the ERAP (for Canadian shipments) were reviewed during the audit and were 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.

TNO Audit Results

The notification procedures, including telephone numbers, are described in the Emergency Response plans. Cyanco and TNO information and other emergency contact information is contained in the emergency plans. The information in the emergency plans are reviewed as necessary, but at least on an annual basis.

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:

Cyanco Audit Results

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 Cyanco´s ICMC Manual specifically bans the use of treatment chemicals for spills into surface water.

TNO Audit Results

The TNO emergency response plan includes text that addresses the remediation and neutralization of cyanide solutions. General information is given and the hazards associated with using cyanide treatment chemicals are recognized. Neutralization chemicals are not allowed to be used in or near surface water bodies. There are no water bodies near the TNO interim storage facility.

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 Audit Results

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 during this recertification period.

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.

IsoChem interim storage and Watco transloading operations in Houston, Texas were found to be in compliance with all ICMC requirements during the on-site audits for this recertification period.

TNO Audit Results

TNO performs mock simulation drills together with Cyanco and table top emergency response reviews on a regular basis. The most recent mock simulations took place in 2016. Driver reviews of these emergency policies and procedures occur yearly. TNO's health & safety program manual is also reviewed and updated yearly. Procedures and emergency plans are updated as necessary after drills and actual emergencies. Records were available to confirm this practice.

Rail Carriers & Rail Yards – Summary of Due Diligence Investigations

Operational and Audit Information for Rail Carriers and Rail Yards

This report addresses rail and truck transport of sodium cyanide solution from the Cyanco Winnemucca Plant and the Cyanco Cadillac Terminal and the rail and truck transport of solid sodium cyanide from the Cyanco Houston Plant. The two rail transportation partners that are covered under this due diligence investigation are:

1) Union Pacific Railroad (UP)
2) Canadian National Railway (CN)

The Due Diligence Investigations concluded that the rail carriers and rail yards in the supply chain have appropriate measures in place for safe management and transport of cyanide.

The railway that services Cyanco out of the Winnemucca, Nevada and Houston, Texas – USA locations is the Union Pacific Railroad (UP). The Canadian Railway (CN) services the Cadillac Terminal in Quebec, Canada. Security and safety risks are minimized through the use of the shortest possible transit time for the shipments. There are no other choices of rail partners for this rail move as the railroad companies own the track that is used.

The Due Diligence portion of this evaluation included a review of information available for the Union Pacific (UP) and Canadian National (CN) railroads, the two railroads used in this supply chain. The railroads maintain control over routing and employ specific safety measures to ensure the safest transit of hazardous materials possible. The railroads have been certified Responsible Care® Partner companies for more than ten years. As such, their rail management system, including rail yards and interchange point safety and security, has been audited by a 3rd-party auditing firm and has been found to be suitable and effective on a tri-annual basis.

Both the CN and UP have extensive information about their safety and security programs on their web-sites. Both companies have strong safety records and are continually improving their ability to monitor hazardous material shipments to ensure that they arrive safely and securely at their destination.

The CN and UP are also both part of the TRANSCAER® *(*Trans*portation* C*ommunity* A*wareness and* E*mergency* R*esponse)* organization. Information regarding safety performance and the commitment to safe transportation through communities were reviewed and found to be consistent

with Cyanide Code requirements. Rail transport is generally understood to be safer than truck transport. For this and other reasons, Cyanco has chosen to ship via rail for this segment of its supply chain.

The point of loading the rail cars into the rail system is within the Cyanco Winnemucca and Houston plant sites. These facilities were found to be compliant with ICMC requirements during their respective recertification audits. The rail sidings are within the secure fence-line of the facilities and there is no storage of loaded rail cars outside the secure points of loading. The railroads maintain control over routing and employ specific safety measures to ensure the safest transit of hazardous materials possible.

Description of Due Diligence Information Reviewed for Rail Carriers and Rail Yards

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 Bulk Rail Transport using UP & CN is:	☑ consistent with Transport Practice 1.1 ☐ substantially consistent ☐ not consistent

Summary of the basis for this finding:

The Cyanco rail cars are shipped from Winnemucca and Houston on the Union Pacific Railroad (UP). Those cars that are headed for Cadillac are switched to the Canadian National Railway (CN) in the Proviso, Illinois yard in Chicago. Security and safety risks are minimized through the use of the shortest possible transit time for the shipments. There are no other choices of rail partners for this rail move as the railroad companies own the track that is used.

The railroads maintain control over routing and employ specific safety measures to ensure the safest transit of hazardous materials possible. The railroads have been certified Responsible Care® Partner companies for more than ten years. As such, their rail management system, including rail yards and interchange point safety and security, has been audited by a 3rd–party auditing firm and has been found to be suitable and effective on a tri-annual basis. According to information that is publicly available, the rail yard where the rail cars cross the U.S./Canada border has undergone

3rd–party environmental, health, safety, and security evaluations through the CN Responsible Care® certified management system certification program.

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 Bulk Rail Transport using UP & CN is:

☑ consistent with Transport Practice 1.2
☐ substantially consistent
☐ not consistent

Summary of the basis for this finding:

During this Due Diligence Review it was confirmed that the CN and UP railroads have continued to be certified Responsible Care® Partner companies for more than ten years. As such, their training programs and employee qualification processes have been audited by a 3rd–party auditing firm and have been found to be suitable and effective. The fulfillment of required training is a specific requirement of the Responsible Care Management System (RCMS). Although no railroad training files are maintained by Cyanco, information regarding the safety practices of the CN and UP railroads was available and was reviewed during the audit.

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

The management of Bulk Rail Transport using UP & CN is:

☑ consistent with Transport Practice 1.3
☐ substantially consistent
☐ not consistent

Summary of the basis for this finding:

The CN & UP railroads maintain Responsible Care Management System® certifications and undergo a full management system audit at least every three years which includes a review that the preventive maintenance program for transportation equipment is suitable, adequate and effective. The proper maintenance of rail equipment is heavily regulated and inspected by the U.S. Federal government, which also helps to ensure fulfillment of rail equipment preventive maintenance and inspection requirements.

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

The management of Bulk Rail Transport using UP & CN is:	☑ consistent with Transport Practice 1.4 ☐ substantially consistent ☐ not consistent

Summary of the basis for this finding:

Both the UP and CN are Responsible Care® certified for their safety, health, environmental and security management programs. Adherence to governmental safety regulations such as limits on operator hours and drug testing are evaluated at least every three years by a 3rd–party auditing firm. Limitations on worker hours and drug testing in the U.S. and Canadian rail industry are also strictly regulated and enforced by governmental agencies. The safety programs, including preventive maintenance programs for both companies have been found to be suitable and effective, year after year.

Transport Practice 1.5:

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

Not applicable.

Summary of the basis for this finding:

No shipments are made via air or sea on this transportation segment.

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

The management of Bulk Rail Transport using UP & CN is:	☑ consistent with Transport Practice 1.6 ☐ substantially consistent ☐ not consistent

Summary of the basis for this finding:

Both the UP and CN railroads use Data Electronic Interchange (EDI) tracking technology to manage shipments for their customers. Rail shipping paperwork was reviewed during this audit. Accurate descriptions were available showing the type of material, the weight of the shipment, and the shipping and arrival information.

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.

Not applicable.

Summary of the basis for this finding:

There is no interim storage in this supply chain.

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 Bulk Rail Transport using UP & CN is:

- ☑ consistent with Transport Practice 3.1
- ☐ substantially consistent
- ☐ not consistent

Summary of the basis for this finding:

Information for both rail carriers was reviewed to confirm 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.

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

The management of Bulk Rail Transport using UP & CN is:	☑ consistent with Transport Practice 3.2 ☐ substantially consistent ☐ not consistent

Summary of the basis for this finding:

Cyanco offers immediate technical assistance through its contracted emergency response service providers for any cyanide spill, and offers emergency resources for spills that might occur near a Cyanco site. Cyanco contracts with CHEMTREC 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 Bulk Rail Transport using UP & CN is:	☑ consistent with Transport Practice 3.3 ☐ substantially consistent ☐ not consistent

Summary of the basis for this finding:

The CN and UP are both part of the TRANSCAER® *(*Trans*portation* C*ommunity* A*wareness and* E*mergency* R*esponse)* organization which helps with notifications requirements. Cyanco contracts with appropriate organizations to ensure that appropriate notifications and emergency response is initiated if there is an incident on any rail or truck movement.

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

Not applicable.

Summary of the basis for this finding:

Cyanco and its emergency response service providers would lead any remediation efforts involving cyanide. No information regarding this requirement was investigated for CN and UP.

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

The management of Bulk Rail Transport using UP & CN is:	☑ consistent with Transport Practice 3.5 ☐ substantially consistent ☐ not consistent

Summary of the basis for this finding:

As part of the rail carrier safety programs such as TRANSCAER® *(*Trans*portation Community Awareness and Emergency Response)*, drills and exercises (not necessarily cyanide specific) are conducted to test response capabilities. Additionally, both railroads have been certified Responsible Care® Partner companies for more than ten years. As such, their emergency response systems have been audited by an independent 3rd-party auditing firm and found to be effective on a tri-annual basis. One requirement of any certified Responsible Care Management System ® is that the emergency response plans be up-to-date and that emergency response plans be tested periodically.