Cyanide Transportation

Summary Audit Report

For The
International Cyanide Management Code and
CONFINS Transportes Ltda /Brazil

www.cyanidecode.org

March 2015

The International Cyanide Management Code (hereinafter "the Code"), this document, and other documents or information sources referenced at www.cyanidecode.org are believed to be reliable and were prepared in good faith from information reasonably available to the drafters. However, no guarantee is made as to the accuracy or completeness of any of these other documents or information sources. No guarantee is made in connection with the application of the Code, the additional documents available or the referenced materials to prevent hazards, accidents, incidents, or injury to employees and/or members of the public at any specific site where gold is extracted from ore by the cyanidation process. Compliance with this Code is not intended to and does not replace, contravene or otherwise alter the requirements of any specific national, state or local governmental statutes, laws, regulations, ordinances, or other requirements regarding the matters included herein. Compliance with this Code is entirely voluntary and is neither intended nor does it create, establish, or recognize any legally enforceable obligations or rights on the part of its signatories, supporters or any other parties.
SUMMARY AUDIT REPORT
FOR CYANIDE TRANSPORTATION OPERATIONS

Instructions

1. The basis for the finding and/or statement of deficiencies for each Transport Practice should be summarized in this Summary Audit Report. This should be done in a few sentences or a paragraph.

2. The name of the cyanide transportation operation, lead auditor signature and date of the audit must be inserted on the bottom of each page of this Summary Audit Report.

3. An operation undergoing a Code Verification Audit that is in substantial compliance must submit a Corrective Action Plan with the Summary Audit Report.

4. The Summary Audit Report and Corrective Action Plan, if appropriate, for a cyanide transportation operation undergoing a Code Verification Audit with all required signatures must be submitted in hard copy to:

   International Cyanide Management Institute (ICMI)
   1400 I Street, NW, Suite 550.
   Washington, DC 20005, USA
   Tel: +1-202-495-4020

5. The submittal must be accompanied by 1) a letter from the owner or authorized representative which grants the ICMI permission to post the Summary Audit Report and Corrective Action Plan, if necessary, on the Code Website, and 2) a completed Auditor Credentials Form. The lead auditor’s signature on the Auditor Credentials Form must be certified by notarization or equivalent.

6. Action will not be taken on certification based on the Summary Audit Report until the application form for a Code signatory and the required fees are received by ICMI from the applicable cyanide transportation company.

7. The description of the cyanide transport company should include sufficient information to describe the scope and complexity of its operation.
SUMMARY AUDIT REPORT

Name of Cyanide Transportation Facility: CONFINS Transportes Ltda.
Name of Facility Owner: CONFINS Transportes Ltda.
Name of Facility Operator: CONFINS Transportes Ltda.
Name of Responsible Manager: Henrique Siqueira Almeida
Address: Rua Palmeiras 101, bairro Santo Antonio, Betim
State/Province: Minas Gerais
Country: Brazil
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E-Mail: henrique@confins.com.br

Location detail and description of operation:

The CONFINS Transportes is focused on the road transportation of dangerous products operations, without interim storage. The operation is located at Betim town, Minas Gerais State, southeast of Brazil) and intends to transport cyanide. The operation trucks, specifically designed and bought to transport dangerous products containers, are remotely monitored (100% during the travel between the seller and the final client) and equipped with on board computer. The operation drivers are qualified, based on the Brazilian legislation, to transport hazardous chemical products.

Luiz Eduardo Ferreira
2016

Confins Transportes Ltd./ January
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Auditor's Finding

This operation is:

☑ in full compliance
☐ in substantial compliance *(see below)
☐ not in compliance

with the International Cyanide Management Code.

* For cyanide transportation operations seeking Code certification, the Corrective Action Plan to bring an operation in substantial compliance into full compliance must be enclosed with this Summary Audit Report. The plan must be fully implemented within one year of the date of this audit.

Auditing Company: NCABrasil Expert Auditors Ltd.
Audit Team Leader: Luiz Eduardo Ferreira (ICMI qualified lead auditor and transportation qualified TEA (technical expert auditor)).
E-mail: luizeferreira2015@gmail.com
Names and Signatures of Other Auditors: not applicable
Date(s) of Audit: 14.10.2015 ~ 16.10.2015 (on-site) and 17.10.2015 (off-site).

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

I attest that this Summary Audit Report accurately describes the findings of the verification audit. I further attest that the verification audit was conducted in a professional manner in accordance with the International Cyanide Management Code Verification Protocol for Pre Operational Cyanide Transportation Operations and using standard and accepted practices for health, safety and environmental audits.

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2016

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SUMMARY AUDIT REPORT

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

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

X ☐ in full compliance with
☐ in substantial compliance with Transport Practice 1.1
☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Confins defined an internal documented procedure IT-OPR-002 – "Transporte terrestre de Cianeto de sódio", which provides methodology to identify and select appropriate and safer routes to transport dangerous products from the ports of entrance until the operation. Confins Transportes selects the route process considering the population density along the route, the infrastructure (asphalt, double or single speedway, gas stations, police stations, emergency stations, communication, shadow areas for communication), the condition of the route (under maintenance, holes, without asphalt), weather conditions (such as fog, fire, rain) and surface waters (rivers, creeks, lakes). Records of used routes were available. Evidenced a travel plan that identifies the existing risks at the routes used for transportation of dangerous products. The operation constantly evaluates the condition of the used routes for dangerous products transportation. The drivers provide feedback of the conditions of selected used after each travel of dangerous products through the use of specific check list. Confins Transportes uses escorts previously evaluated, selected and qualified when contract review indicates that this should be a control during the transport (safety and security) as defined in internal documented procedure P0-GCO-001 – "Contract review of proposal". Conditions, points allowed to stop and overnight, authorized supply points, places with sharp curves, places with winding track uphill and steep slopes, bridges and rivers risk of accidents, checkpoints, locations requiring special permits for transit, allowed speed for trucks, pedestrian crossing sites, local animal risk on track, emergency telephones of the places, population data were not evidenced be considered to select pertinent routes. Confins Transportes has a methodology to communicate the Brazilian Federal Road Police, the road administration authorities (CONSER and VIA 040), the insurance company (Tokyo Marine) and the emergency responders (Suatrans) their roles in an emergency involving the dangerous products transportation. All the dangerous products transport activity is performed by the operation own drivers and trucks. Confins contacts the Brazilian Federal Road Policy, the tracking contractor (named SASCAR), the road administration contact (named CONSER from Rio de Janeiro to Juiz de Fora and VIA 040 (from Juiz de Fora to Belo Horizonte) in order to define the route and avoid potential problems along the selected route.
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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.

X □ in full compliance with
☐ in substantial compliance with Transport Practice 1.2
☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Evidenced that Confins Transportes only uses trained and licensed drivers as required by the applicable Brazilian legislation for the transport of dangerous products. Evidenced that all drivers have “CNH - Carteira Nacional de Habilitação” and special license named “MOPP – Movimentação Operacional de Produtos Perigosos” – which drivers must have in order to transport dangerous products. Confins Transportes is committed to train all personnel operating cyanide handling and transport equipment to perform their jobs in a manner that minimizes the potential for cyanide releases and exposures. Interviewed personnel showed to be aware of cyanide characteristics. Several trainings were performed about cyanide. Evidenced training plans for drivers and others functions about cyanide. The occupational health certificates, named ASO, were reviewed and found duly established.

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

X in full compliance with
☐ in substantial compliance with Transport Practice 1.3
☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

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Evidenced that Confins Transportes uses appropriate equipment to transport dangerous products. The trucks are Volvo and Scania. According to the Brazilian legislation, a public authority shall inspect all trucks used to transport dangerous products in order to be approved to transport such kind of products. Evidenced that all trucks are licensed as required which means that they have CIV - "Certificado de Inspeção Veicular" and CIPP - "Certificado de Inspeção para Transporte de Produto Perigoso" when applicable.

Evidenced that Confins Transportes established internal documented procedure POMAN-001 - "Manutenção corretiva e preventiva dos veículos" which defines the methodology for preventive maintenance.

Confins defined and implemented a methodology in which before loading the cargo container, the driver reviews the transportation documentation in order to verify the cargo weight and confirm that the truck is capable to transport. According to Brazilian transport legislation, there is a maximum load capacity allowed per truck to transit in the roads. There are control points along the route to verify the cargo weight (weight stations) and to review the cargo documentation. Control points along the roads issue a weight record that is brought to the company with the transport documentation. Evidenced that the operation uses its own drivers and equipments and does not subcontract any transportation of dangerous goods.

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

- X in full compliance with
- □ in substantial compliance with Transport Practice 1.4
- □ not in compliance with

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

Confins Transportes defined handling and inspection procedures – PO-OPR-002 - as necessary to ensure that the cyanide is handled and transported in a manner that maintains the integrity of the producer's packaging. The above mentioned procedure establishes the use of a check list FOR-OPR-012 identified as "Check list integrado de inspeção para transporte". Evidenced duly implemented. Interviewed personnel showed to be aware of requirements to maintain the integrity of the cyanide or chemical hazardous products producer’s packaging. All evidenced inspections (hazardous chemicals) have been performed as stated and in accordance with defined procedures.

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According to the Brazilian legislation, the trucks shall have, in four sides, standard placards indicating the nature of the chemical product being transported. Confins Transportes defined that the presence of such placards are verified before each travel and the results are recorded in a specific checklist, which were properly maintained. Confins Transportes defined and documented a vehicle inspection program of the truck before each journey, including the inspection of the truck/platform, the inspection of the emergency resources, the inspection of the communication and tracking system, the inspection of the tachographs, the inspections of the PPE—personnel protective equipment, the verification of the driver and cargo documentation. Evidenced inspection records duly implemented for the transportation of dangerous chemical products. Verified that Confins Transportes defined and implemented a effective preventive maintenance program for its trucks/platforms in accordance with Scania and Volvo (truck OEM) requirements. A qualified Scania dealer as well as a qualified Volvo dealer perform the preventive maintenance. Evidenced maintenance records duly maintained. Confins Transportes defined and implemented limitations on operator or drivers' hours in accordance Brazilian regulations. The working hours is controlled through the remote tracking station named SASCAR, which has several certifications such as ISO 9001, NCC (Brazilian Regulation Resolução DENATRAN 245) and CESVI – "Centro de Experimentação e Segurança Viária". Evidenced that this procedure is properly implemented.

The truck platform is specifically designed to transport containers and it has pin lockers that are inspected by the driver before each journey, and prevent the containers from shifting. Evidenced inspection records duly maintained.

In accordance to the operation safety policies and the driver's operation manual, in the event of stormy or hard rain, wind conditions, ice rain, the transport activity shall be stopped or even not allowed to begin.

Confins Transportes designed and implemented a drug & alcohol policy (PO-SSMA-006), accepted by all drivers, in which all the drivers before the beginning of a journey pass through an alcohol detection test and annually, during the occupational health monitoring program, the drivers pass through a drug detection test. Evidenced records of alcohol and drug test duly implemented as required. Confins Transportes defined and implemented a process to manage all records related to its activities. All requested records were promptly retrievable and are adequately maintained by the operation. Confins Transportes does not subcontract any handling or transport activities.
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Transport Practice 1.5: Follow international standards for transportation of cyanide by sea and air.

X □ in full compliance with
□ in substantial compliance with Transport Practice 1.5
□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

This transport practice is not applicable to the operation scope. The operation scope is road transportation.

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

X □ in full compliance with
□ in substantial compliance with Transport Practice 1.6
□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified: (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).

The transport vehicle is provided with radio, cell phone and tracking systems (on board computer), using GPS signal (supplied and managed by SASCAR which has several certifications such as ISO 9001, NCC (Brazilian Regulation Resolução DENATRAN 245) and CESVI – “Centro de Experimentação e Segurança Viária”. Evidenced properly implemented.

The communication system (radio, cell phone and tracking system) is tested before each travel, and periodically checked during the trip. Evidenced duly implemented.

Confins Transportes is committed to identify communication blackout areas along its transport routes and implement special procedures for these areas as required by operational procedures.

Confins Transportes is committed to implement systems or procedures to track the progress of cyanide shipments. As previously mentioned, all trucks are monitored 100% of the time, by a remote control station, by the operation headquarters and the tracker provider.

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The transport vehicle is provided with tracking systems (on board computer), using GPS signal (supplied by SASCAR) Evidenced duly implemented. Confins Transportes defined and implemented a chain of custody records management, according to the Brazilian law. The documentation is verified prior the transportation and before the unloading at final operation. Confins Transportes clearly identifies the amount of dangerous products being transported and the product MSDS is part of this documentation.

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.

X □ 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/Deficiencies Identified:

This principle is not applicable to the operation scope because the dangerous products is transported straight from the entrance Port to its final destination. During the transport, the truck is monitored 100% of the time and stops, at night, only allowed at pre-evaluated and approved stations along the route. The tracking system also blocks (remote turn-off) the truck engine if something different from the planned script (travel plan) occurs. Verified the track system records as well as the tachographs records.

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.

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X ☐ in full compliance with
☐ in substantial compliance with Transport Practice 3.1
☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Confins Transportes has an Emergency Response Plan PAE – Plano de Atendimento a Emergência that was prepared by Suatrans COTEC named as “Plano de Atendimento Emergencial para o Transporte Nacional de Produtos Perigosos” as well as other one IT-OPR-001 – “Procedimento em incidente no transporte de cianeto) which is a specific emergency plan related to cyanide. Interviewed personnel showed to be aware of cyanide characteristics and what the matters related to cyanide emergency plan.

Confins Transportes developed Emergency Response Plans (IT-OPR -001) for the specific circumstances for the used route to transport dangerous products. The risks associated to the used routes were identified and evaluated and the emergency response plans are focused on the previously identified and evaluated risks, as well as consider the available infrastructure and resources available in the used routes.

Confins Transportes is committed that the Plan considers the physical and chemical form of the cyanide. Interviewed personnel showed to be aware about solid and liquid properties of cyanide. The plans are specific for the road transportation of dangerous products including cyanide, by truck (flat platform truck, with pin lockers, specifically designed to transport metallic sea containers). Plans consider the specific conditions of the used routes. Evidenced the risk analysis performed for the used routes. As previously mentioned, the risks associated to the selected routes were identified and evaluated. The emergency response plan is focused on the identified and evaluated risks and consider the available infrastructure and resources available in the used routes. The plans describe the specific response actions that shall be applied to each emergency situation, such as accident with fire, fall into a river, cyanide leakage on a rainy day, among other specific emergency scenarios. Reviewed emergency plans describe the roles of several stakeholders (internal/ external) that should be involved in the emergency response, such as road policy, emergency responders and rescuers, first aid stations along the route, reference hospitals, and environmental authorities.

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

- X ☐ in full compliance with
- ☐ in substantial compliance with Transport Practice 3.2
- ☐ not in compliance with

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

Confinns Transportes is committed to provide emergency response training of appropriate personnel. Confinns Transportes already provided emergency training for drivers, emergency coordinators, and emergency response members related to cyanide emergency response. Evidenced records of training in cyanide emergency response plan.

Interviewed personnel showed to be aware of the specific emergency response duties and responsibilities of personnel related to cyanide.

Emergency related materials are listed in the Annex I of IT-OPR-001 which available during transport or along the transportation route.

Confinns Transportes defined what are the necessary emergency response and health and safety equipment. Including personal protective equipment during transport.

Interviewed personnel showed to be aware of the necessary emergency response and health and safety equipment, including personal protective equipment during transport.

Confinns Transportes provided initial and refresh training, related to cyanide Emergency Response Plan and general emergency response respectively. Interviewed personnel showed to be aware of cyanide Emergency Response Plan. The operation does not subcontracts any handling or transport activities.


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

- X ☐ in full compliance with
- ☐ in substantial compliance with Transport Practice 3.3
- ☐ not in compliance with

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


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Confins Transportes defined in documented procedure IT-OPR-001 methodology for notification of appropriate parties/stakeholders in the event of a cyanide release or exposure during transport. The entities requiring notification are clearly identified. Confins Transportes defined how information is kept updated.

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
☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Evidenced that internal documented procedure IT – OPR-001 defines the remediation procedures that shall be applied in the event of cyanide related emergencies.

Evidenced that the internal documented procedure IT – OPR-001 defines that chemical products, such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide, are prohibited to be used in the event of solid cyanide releases in surface waters along the route.

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

☐ in full compliance with
☐ in substantial compliance with Transport Practice 3.5
☐ not in compliance with

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Summarize the basis for this Finding/Deficiencies Identified:

Confins Transportes defined frequency for reviews and revise (if necessary) Suatrans Plan as well as IT – OPR – 001 Confins Transportes which is an Emergency Plan specific for cyanide transportation and planned simulation activities related to their emergency plans and included one specific exercise in conjunction with the emergency responder expert, SUATRANS.

Evidenced that Confins Transportes conducted mock emergency drills. Sampled example was: Mock emergency Drill report dated on October 14, 2015. Evidenced that the simulated was properly performed in accordance the previously planning. The results conclusions provided evidences that in the present moment it is not necessary to revise neither Suatrans Plan nor IT – OPR – 001.

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