## Cyanide Transportation Summary Audit Report

# For The International Cyanide Management Institute and Transporte Vesprini S.A/ Argentina

## Prepared by: NCABrasil Expert Auditors Ltd. www.globalsheq.com

www.cyanidecode.org

#### **June 2021**

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.

This report contains 13 pages.

#### 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.

Name of Cyanide Transportation Facility: Transporte Vesprini S.A

Name of Facility Owner: Transporte Vesprini S.A. Name of Facility Operator: Transporte Vesprini S.A. Name of Responsible Manager: Diego Juarez.

Address: Calle General Madariaga, 3531, San Justo.

State/Province: Buenos Aires.

Country: Argentina.

Telephone: (11) 15 3174 0242

Fax: n.a

E-Mail: djuarez@transportevesprini.com.ar

Location detail and description of operation:

The Transporte Vesprini S.A. operation is focused on the road transportation, by truck, of solid cyanide in bigbags, inside wooden boxes or in metallic drums with 50kg of solid cyanide, , inside 20'or 40'sea containers, without interim storage. The operation is located at Buenos Aires town, in Argentina, and transports solid cyanide from Argentinian ports (e.g -Puerto Deseado) and from cyanide distributors, to clients in Argentina.



#### Auditor's Finding

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X 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: Celso Sandt Pessoa (ICMI qualified lead auditor and transportation

qualified TEA (technical expert auditor)), since 2006.

E-mail: celsopessoa@ncabrasil.com.br and celso@globalsheq.com

Website: www.globalsheg.com

Names and Signatures of Other Auditors: not applicable

Date(s) of Audit: 09/ August/ 2022 ~ 11/ August/ 2022 (on-site) and 12~13/

September/2022 (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 certification audit. I further attest that the certification audit was conducted in a professional manner in accordance with the International Cyanide Management Code Verification Protocol for Cyanide Transportation Operations and using standard and accepted practices for health, safety and environmental audits.

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.

	X 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/Deficiencies Identified:

The operation designed, documented, implemented and maintains a management procedure for routes identification, evaluation and definition. It was evidenced that the organization performed a risk evaluation for road transportation of solid cyanide, in accordance with the procedure "Hoja de Riesgos de Ruta", related to route evaluation system, which includes periodic re-evaluation of the routes, according to drivers' feedback.

Reviewed the route definition and risk evaluation for the following routes:

- Puerto Deseado/ Minera Don Nicolás (Província de Santa Cruz/ Patagonia).

The approved route considers population density, road infrastructure, fauna and flora, surface waters, pitch and grade, weather conditions (e.g. rain, wind, snow, ice). The selected route includes the transportation through a national route (Ruta Nacional 281), all asphalted, and a small part of uncovered road to mine operation.

It was evidenced that the operation identified and evaluated all the risks related to the selected route mentioned in "TP 1.1.1". Examples are: Population density along the route, the infrastructure (asphalt, double or single speedway, gas stations, policy stations, emergency stations, communication infrastructure, shadow areas for communication), the condition of the route (under maintenance, holes, without asphalt), weather conditions (such as fog, snow, rain) and surface waters (rivers, creeks, lakes), ice formation trend, were clearly identified in the route record (hoja de ruta). Several controls such as speed limit, driver qualification and training, truck maintenance, pre-traveling brief with the driver, planned transport observations, full time monitoring of the truck from a remote station, limited traveling time, chains in the wheels (snowing conditions) were implemented by the operation in order to mitigate the risks related to the selected route. It was evidenced that the operation constantly evaluates the condition of the selected route. In the end of each travel, the driver records on the traveling plan (hoja de ruta) his perceptions about the route condition. This travel report is reviewed by the operations officer and, when necessary, the route plan is updated, and the risks re-evaluated.

Track traffic 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, police 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, weather conditions, communication shadows are considered to select pertinent route. Reviewed travel reports dated 04/04/2022 and 07/06/2022. As previously mentioned, it was evidenced that the organization performed a risk evaluation for road transportation of solid cyanide, which includes initial and periodic re-evaluation of the routes. All transportation documentation (hoja de ruta) addresses the hazards and related risks and defines the operational control measures to be taken by the qualified drivers and escort drivers/ supervisors also. All permits related to transportation routes were updated in 2022. According to the Argentinian legislation the transporter must interact with public authorities, in other to obtain official permits, to transport solid cyanide in the proposed route using a specific truck and platform. The operation uses escorts cars when the risk analysis indicates that this should be an operational control during the transport (safety and security). In the selected route, it was identified that two escort cars are used (supervisor car) and emergency response car (Hazmat Argentina S.A. supplier). The operation uses truck convoys (at least two trucks) to transport cyanide when transporting cyanide from Puerto Deseado port to mining operations in Patagonia. Transporte Vesprini does not contracts any other transporter to transport solid NaCN.

<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.

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The operation is: 

in substantial compliance with Transport Practice 1.2

□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

It was evidenced that Transporte Vesprini only uses trained and licensed drivers as required by the applicable legislation for the transport of dangerous products including solid sodium cyanide. The driver must have a specific driving license type "E/E1" and la LINTI (Licencia Nacional de Transporte Inter-Jurisdicional). The driver licence and the LINTI have the same number. Reviewed the driver license for:

- Mauro Arameda (26633394).
- César Montenegro (26607711).
- Miguel Gimenez (21346437).

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It was evidenced that the operation defined, documented, implemented and maintains a training program for the operational team (truck and escort drivers and support personnel). To obtain the LINTI license, the driver must pass through a specific training which includes topics such as defensive driving and emergencies with hazardous chemicals products. The operation designed, documented and implemented an induction training related to solid NaCN properties and management, first aid protocols, environmental impacts, emergency response. Records of such induction trainings are retained by the operation and were reviewed during this opportunity. It is important to note that the operation drivers do not operate any other type of equipment such as forklifters or cranes. It was evidenced that the operation drivers and convoy supervisors received a specific training provided by Porto Deseado technical team, related to safe cyanide container unload from ship and load to the platform+truck.

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

**X** 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/Deficiencies Identified:

The operation operates Scania (model R410, 6x2 configuration, load limit 24 ton) and Volvo (model 460, 6x2 configuration, load limit 26 ton) trucks. The operation has platforms/trolleys (3 axis, load limit 32 ton) fabricated by Bonano or Salto. The operation only transports 20'sea containers with 20 solid NaCN boxes within (or less). According to the Argentinian laws, trucks and platforms must go through an annual independent technical inspection (RTO- Revisión Técnica Obligatória). Reviewed technical inspection records for trucks and platforms AE224SL (Scania 410A), AE413UC (Bonano platform), AC089HS (Volvo 460) and AC089HW (Salto platform), among others. The operation only transports 20'sea containers containing 20 NaCN boxes/ 1 ton each, or less (e.g. 50 kg cyanide drums). The cargo to be transported is also recorded in the transportation documentation, demanded by the Argentinian laws. The cargo weight is verified at the Deseado port scale, before leaving the port and during the reception of the cargo at the mining operation. Reviewed the following cargo documentation: RANA (Registro Nacional de Aduanas Argentinas dated 30/03/2022 (containers MSKV-773194-9, SUDU-746840-9, SUDU-749472-7) and 06/06/2022 (containers HASU-105709-6, MRKV-902899-6, SUDU-180800-8, SUDU-764165-9, TCLV-231892-0 and TLLV-250551-2). The RANA is stamped by Minera Don Nicolás receiving inspector, confirming the received weight.

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

**X** 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/Deficiencies Identified:

All solid cyanide boxes or steel drums are transported inside a 20'sea container, that is sealed before deporting from the cyanide seller premises. The sea container is unloaded from the ship and loaded on the operation platforms+truck. According to the Argentinian law, safety placards (UNO # 1609 and toxic (6) pictogram) must be placed in the front of the truck and in the three sides of the sea container. Evidenced full compliance during the field audit. Before each departure the operation performs a general inspection, which includes the safety briefing, documentation inspection, cargo weight, emergency response resources, protective personal equipment, sea container, truck and platform, twist lockers, communication resources, traceability system, safety signage, among other aspects. Reviewed inspection records dated 29/03/2022, 04/04/2022 and 06/06/2022. The predeparture inspection is performed by Puerto Deseado inspectors and Vesprini inspector (convoy supervisor). Trucks and platforms are maintained in accordance with a preventive maintenance program defined by the trucks and platforms producers (OEM/ Original Equipment Manufacturer) and performed at authorized dealers. Reviewed preventive maintenance records for trucks LJQ-000, MJR128, LEV233, LQA185 and MJJ613, all performed in 2022. Records were issued by OEM dealer and for platforms MVA906, HBV959, OBQ122, FQD338 and NUV732. Such equipments were used to transport cyanide. All trucks and platforms must pass through an independent (third party) technical inspection in order to receive a permit to be used in road transportation of solid cyanide, as previously mentioned. According to the Argentinian law and the operation policy, the daily work hours is ten hours/day, with a 15 minutes rest every 2 (two) hours driving. The drivers must have a 45'for lunch. Night travels are not allowed. Minimum rest time is 11 hours. Twist lockers are installed in all platforms. Beyond that, the sea container is also handled by tapes, in the front and in the rear part. Evidenced during the field audit. Also evidenced that suck twist-lockers systems are included in the preventive maintenance plan. The operation designed, documented, implemented and maintains documented procedures addressing the aspects that may result in transportation suspension or to be modified. Social turbulences (piqueteros), snow, ice, storm wind and rain, are aspects that could impact the transportation plan, that could be modified or suspended. The transportation may be suspended or modified by the convoy coordinator, that is in touch with the operation headquarter. The operation policy related to drug and alcohol use/ abuse is clear and accepted by all internal stakeholders.

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Monitoring are randomly performed and annually performed during the occupational health control. Reviewed records of monitoring performed 2022. All results were negative. The operation retains records of all above mentioned activities.

<u>Transport Practice 1.5</u> : Follow	international	standards	for	transportation	of
cyanide					
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☐ in full compliance with

The operation is: 

in substantial compliance with Transport Practice 1.5

□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

This transport practice is not applicable to the operation's scope. The operation scope is road transportation, by truck, of solid cyanide.

## <u>Transport Practice 1.6</u>:Track cyanide shipments to prevent losses during transport.

**X** 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/Deficiencies Identified:

The trucks are provided with tracking systems (Chapelco system), using online GPS signal. The driver/ convoy supervisor is also equipped with mobile phone. Safety/ security car is equipped with satellital phone. The tracking system was evidenced and tested during the field audit at San Justo site. All communication resources are tested before departure from the operation base, from the port, time to time with the operation headquarter, with tracker system supplier. Evidenced and tested communication resources during the field audit. Before entering such areas, the convoy communicates with the operation headquarter and with the tracker base. After leaving such areas, the convoy communicate with them again. As previously mentioned, all trucks are provided with online GPS trackers, which was tested during the audit. The cyanide cargo documentation (Carta de Porte) addresses the amount of solid cyanide being transported. The amount of solid cyanide being transported is controlled at the seller premise, in the port, during transportation (randomly by public authorities) and in the reception at the mining operation. The cargo documentation includes the following documents: Bill of Lading (seller), Carta de Porte (transporter), weight control records, tax control records and the evidenced (stamp) that the cyanide cargo was received by the cyanide buyer. The MSDS (Material Safety Data Sheet) is part of the transportation documentation, but it is left at the mining operation or at the cyanide buyer.

All reviewed transportation documentation clearly indicates the amount of cyanide being transported. Typical amount is 20 ton (20 cyanide wooden boxes). Did not evidence any cargo weight above this value.

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

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

☐ in full compliance with	
☐ in substantial compliance with	Transport Practice 2.1

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

□ not in compliance with

The operation is:

This principle is not applicable to the operation scope because the cyanide cargo is transported straight from the port or distributors to its final destination, the cyanide buyer. During the transport, the truck is monitored 100% of the time (online GPS) and stops, at night, only at pre-evaluated and approved stations along the route. It is possible to send/receive text messages from the truck and escort car. Evidenced/tested (tracking system) during the audit at organization central office, at San Justo.

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.

**X** 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/Deficiencies Identified:

The operation contracted the emergency response expert company Hazmat Argentina S.A, which provides a safety/ security car to escort all cyanide shipments or transportation between the loading and unloading cyanide point. The emergency supplier developed, documented and implemented a specific emergency response plan for the cyanide transportation (Plan de Respuesta a Emergencias dated 31/05/2022).

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It was evidenced that the Hazmat Emergency Response Plan (specific for Transporte Vesprini) was developed for the specific route circumstances and was verified that the emergency plan is appropriate to the specific cyanide transportation route, and transport practices. The risks associated to the selected route were identified and evaluated, and the emergency response plan is focused on the identified and evaluated risks, also considering the available infrastructure and resources available in the selected route. The operation emergency response plan is specific for solid NaCN transportation by road. The emergency response plan is specific for solid cyanide transportation by road (truck + platform). The emergency response plan is specific to the routes (roads) defined to be used from the port or cyanide seller to the buyer. The emergency response plan is specific for the transportation resources (truck+ platform+ escort car) used to transport solid cyanide from the port/seller to the buyer. It was evidenced that the emergency response plan describe the specific response actions that shall be applied to each emergency situation/ scenario, such as accident with fire, fall into a river, cyanide leakage on a rainy day, cyanide intoxication, among other specific emergency scenarios. It was evidenced that the emergency response plans describe the roles of several external stakeholders that should be involved in the emergency response, such as road policy, reference hospitals, and environmental authorities. Such stakeholders where communicated about their roles through formal distribution of the emergency response plan, specific meetings (e.g – Puerto Deseado Hospital) and during emergency response drills.

## <u>Transport Practice 3.2</u>: Designate appropriate response personnel and commit necessary resources for emergency response.

**X** 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/Deficiencies Identified:

It was evidenced that the operation and Hazmat professionals provided initial emergency training (safety, health and environmental induction) for drivers and convoy supervisors, emergency response members/ escort team. The Hazmat operational team receives theoretical training related to emergencies and practical ones during planned emergency drill, usually performed in conjunction with a mining operation. All duties and responsibilities, for each identified emergency scenarios, are addressed in the operational & emergency management procedures, that are part of the approved emergency response plan. The required emergency response resources master list is part of the traveling documentation and checked before each travel.

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Usual emergency hardware to be available at the convoy is: autonomous breather, HCN detectors (which are calibrated annually by an OEM (Original Equipment Manufacturer) representative. Records of such calibrations are retained by the operation and were reviewed in this opportunity), safety glasses, helmets, leather gloves, ear protectors, masks for powder, overall types A, B and C, fire extinguishers (dry chemical powder/ 5 kg), canvas panels, CaO powder (calcium oxide/ 20kg), plastic shovel and plastic brush. Emergency response resources are transported by the Hazmat escort car. As previously mentioned, there is an emergency kit for the truck driver (which includes the PPEs) and the emergency response resources, transported by the Hazmat escort car. All emergency response resources are inspected before each departure, as well as the driver's emergency kit. Records of such pre-departure inspections are retained by the operation and were reviewed during this opportunity.

## <u>Transport Practice 3.3</u>: Develop procedures for internal and external emergency notification and reporting.

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The operation is: 

in substantial compliance with Transport Practice 3.3

□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

All the contact information is addressed at the Hazmat Emergency Response Plan. Beyond that, in the transportation documentation, the contact information from the involved stakeholders is available for the driver and the convoy supervisor. All protocols related to emergency notification and reporting are kept updated and the critical stakeholders to be notified are clearly identified. Contact information of critical stakeholders are kept current, at the moment, through the Commercial process (Don Nicolas mining operation and Puerto Deseado Hospital). Public authorities contacts (road police and firefighters) are not changed. There were no emergencies related to cyanide transportation during 2022. ICMI is one external stakeholder addressed at the contact master list that will be promptly communicated in the event of a cyanide related emergency.

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

	X in full compliance with	
The operation is:	☐ in substantial compliance with	Transport Practice 3.4
	□ not in compliance with	

Summarize the basis for this Finding/Deficiencies Identified:

Two of emergency scenarios are the impact of solid NaCN on soil (dry and wet) and on the surface waters. Emergency protocols for these situations clearly defines the neutralization process to be used in the event of NaCN impact on the soil, using CaO powder, removal of neutralized soil (into plastic bags) and disposition at the mining operation. Monitoring soil samples will be taken to confirm the neutralization process effectiveness. For surface water, in the event of any impact caused by solid NaCN briquettes, these shall be removed (if possible), neutralized with CaO powder, collected in plastic bags and disposed at the mining operation. An emergency environmental monitoring plan will be implemented to collect and analyze the extent of the contamination plume. No chemical products are allowed to be used to neutralize cyanide in surface water. Suck kinds of products are not included in the convoy emergency resources.

## <u>Transport Practice 3.5</u>: Periodically evaluate response procedures and capabilities and revise them as needed.

X 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/Deficiencies Identified:

The Emergency Response Plan is kept updated by the operation through the feedback of real emergencies (did not occur during 2022), emergencies occurred with other transporters in Argentina, after the realization of mock emergency drills. Last updated was performed in May 2022. The operation plans and performs mock drills annually, in conjunction with the solid NaCN buyer and/ or the seller (producer/ distributor). One mock drill was performed in 2022. The report (Hazmat # PG-CA-10-FS, dated 05/08/2022) related to the mentioned mock drill was reviewed in this opportunity. The mock drill scope was focused on solid cyanide release with HCN generation and one-person intoxication. Every mock drill has defined planned objectives to be achieved. After the drill, it is reviewed, and conclusions are defined in order to confirm (or not) if the planned objectives were reached or not. Improvement actions plans are defined and implemented, resulting in the update of the Emergency Response Plan, when necessary.

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One of the mock drill conclusions is that the emergency response plan must be updated or not. The Emergency Response Plan was found at revision dated 31/ May/ 2022. The emergency mock drill performed in August 2022 did not result in the emergency plan update, but if an improvement action demands the update of the emergency response plan, this will be automatically done.

#### Audit team conclusions:

Based on the sampled evidences, the physical conditions of the site (installations) and the trucks/ trailers, in the interviewed personnel and in the reviewed documentation, the audit team concludes that the SHEQ (Safety, Health, Environmental and Quality) management system is FULLY implemented and maintained in accordance with the International Cyanide Management Protocol for Transporters (June 2021) for cyanide transport operations (principles 1.5 and 2.1 are not applicable to the operation transport scope). The operation does not subcontract transporters to transport the cyanide.